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# EDITORIAL NOTE

The Southeast-European Association for Ancient Philosophy (SEAAP) organised a conference *Topics in Plato's 'Timaeus'* which took place at the Inter-University Centre in Dubrovnik from 30 March to 3 April 2005. Eight papers were given by academics from seven different countries, and each paper was followed by a long and lively discussion, thanks to a friendly and knowledgeable audience. Selected papers from the conference will be published in the next issue of *Rhizai*.

The conference was followed by a meeting on which a number of vital points related to the future of SEAAP and *Rhizai* were discussed. It was agreed that it is necessary to include *Rhizai* in various academic databases. We are very pleased to announce that *Rhizai* is now indexed in *The Philosopher's Index*, and we shall try to include it in some other prominent databases. Also, SEAAP's official web-site has been set up (http://www.seaap.org) soon after the meeting, and steps are being taken to provide on-line access to all contents of *Rhizai* which will be available to subscribers.

Some conclusions from the meeting will be immediately evident to the readers. To wit, numbering of issues has changed from the simple consecutive format to the standard volume/number format. From this issue on, abstracts of articles will be assembled at the end of each issue and all contributions will be followed by postal and, if available, e-mail addresses of contributors. Minor parts of the journal are redesigned, and the Advisory Board is slightly expanded. We hope that these improvements will meet the readers' approval.

The conference and the meeting in Dubrovnik was sponsored by the Ministry of Science, Education and Sport of Croatia, the Inter-University Centre in Dubrovnik, and the Greek Embassy in Croatia. The organisers would like to express their gratitude to the former Director-General of the IUC, Dr Ivo Banac, to the Executive Secretary of the IUC, Ms Berta Dragičević, and to Mr Ioannis Tzortzis of the Press Office of the Greek Embassy. We would also like to thank the staff of the IUC in Dubrovnik, Mr Srećko Krzić and Ms Nada Bruer, for their hospitality.

# TELEOLOGY ACROSS NATURES

*István Bodnár*

*To Kornél Steiger,*
*sexagenarian,*
*on whose account things in ancient philosophy*
*here in Hungary fall into place*

Aristotle defines the nature of an entity as an internal source, or internal origin, or internal principle of motion and rest of the entity in question. These internal principles are responsible for the goal-directed behaviour of natural entities, indeed, in a number of cases they constitute the goal of the behaviour that the entity in question pursues.[1] Clearly, such natures can give a rich and meaningful account of what is often called internal teleology. What such natures cannot account for, on their own, are cases where an entity, due to its nature, furthers the goals of another entity: in short, cases where there is teleology across natures. But, as most notably *Politics* I.8 1256b15-20 claims, plants are for the sake of animals, and animals[2] are for the sake of humans. Such cases call for some further explanation, because if the nature of an entity, the principle of the entity's motion and rest, tracks as its goal something else's, or someone else's ends, then either the entity in question can be said to contain its own principle of motion and rest with some restrictions or reservations only, or there has to be some sort of co-ordination, even some sort of pre-established harmony across the natures of different natural entities.

In what follows first I will scrutinize two recent attempts at such an explanation. The fundamental move these proposals make is that they

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[1] Aristotle invokes here a further distinction, between those goals which – like the nature of an entity – are goals as beneficiaries and the goals for the sake of which something happens or is, but which nevertheless are not benefitting from the outcome (*Physics* II.2 194a35-36; cf. *De anima* II.4 415b1-3, b15-21).

[2] Or, as Aristotle puts it, the *other* animals, because he takes mankind to be one species among the other animals.

embed the natural entities which are in interaction with each other in an encompassing entity endowed with its own nature or form. If such a move is admissible, the problems I have just charted about teleology across natures will get a straightforward explanation. In each instance of teleological interaction between different entities, it is not just the natures of these different entities which control the interaction. Rather there is the overall nature, of the encompassing entity, of which both of the interacting parties are internal parts, and it is this overall nature which controls at least the coordination among the operations of the embedded entities. Accordingly, on these two accounts any case of teleology across natures can be subsumed under the standard Aristotelian explanatory device, and teleology is founded on the operation of a single nature. As against these two attempts, I will first argue that they do not establish the existence of such a universal nature. Then I go on to point out that such a hierarchy of embedded natures will also contravene some fundamental strictures of Aristotelian natural philosophy. Accordingly, I think these suggestions have to be resisted. But rejecting these proposals still is no solution for the original difficulty. Hence I will also need to formulate a proposal of my own – indeed, a fairly conservative proposal, that the teleological interaction across different natures is underpinned by the fact that the different entities, at an ultimate remove, all strive after the same unmoved mover.

## 1

First I need to turn to Mohan Matthen's proposal.[3] The major claims of this interpretation are

> *first,* that the corporeal cosmos is a single substance with a motion proprietary to itself, directed towards an end which is good;
>
> *second,* that this corporeal substance constitutes, together with its Prime Mover, a composite whole that can be regarded as a self-mover. (p. 171)

Matthen's argumentation for both of these propositions will rest crucially on the introduction of a cosmic nature, the nature of the whole in *De caelo* book I. As David Sedley remarks, not all of the claims in this book which are framed in terms of the nature of the universe or the nature of the totality (ἡ τοῦ παντὸς φύσις) are about such an overarching cosmic nature. When Aristotle

[3] Matthen (Summer 2001). In this section I will refer to this paper with page numbers only.

asks at *De caelo* I.2 268b11-13 whether the nature of the universe is finite or infinite, 'the context [...] leaves no doubt that this is purely a question about dimensions', as Sedley puts it.[4]

Matthen suggests that there is a reference to such a universal nature nevertheless. This reference is couched in the phrase of the lines marking the transition from the discussion of the universe to its parts at the beginning of *De caelo* I.2, where Aristotle says that before returning to the larger scale picture he needs to discourse περὶ τῶν κατ᾽ εἶδος αὐτοῦ μορίων. I left the phrase untranslated, because any translation needs to take a stand on how to parse the dependency relations within this nominal phrase, more specifically, what the pronoun αὐτοῦ (its) attaches to: should we read 'its parts', and then the phrase will mean its parts according to the form these parts have, or should we rather read 'its form', and then Aristotle intends to turn to the parts which are according to the form the totality has.

Matthen adduces two kinds of considerations for taking the phrase in the latter sense, a grammatical consideration, followed by an array of philosophical considerations. The grammatical point is that if Aristotle spoke about the parts which are according to the form these parts have, it would be apposite to talk about εἴδη, the forms, in the plural, rather than about a unique form, εἶδος, in the singular. These parts do not possess the same form after all. This argument, however, cannot settle the issue in a decisive manner. This is so, because, as Matthen also admits (in n. 15 on p. 178), the expression κατ᾽ εἴδη occurs in the Aristotelian corpus only three times, as opposed to 31 occurrences of κατ᾽ εἶδος. As among these occurrences of κατ᾽ εἶδος there are quite a few which refer to several forms (or to several species) and not to a unique one,[5]

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[4] Sedley (2000), 329.

[5] The force of the singular in these cases is that for each of the several cases one form or one species is involved. See e.g. *De caelo* I.8 277a3-4 ὁμοίως γὰρ ἅπαντα κατ᾽ εἶδος ἀδιάφορα ἀλλήλων, ἀριθμῷ δ᾽ ἕτερον ὁτιοῦν ὁτουοῦν. *De caelo* III.1 299a20-22 τὰ δὲ πάθη διαιρετὰ πάντα διχῶς· ἢ γὰρ κατ᾽ εἶδος ἢ κατὰ συμβεβηκός, κατ᾽ εἶδος μὲν οἷον χρώματος τὸ λευκὸν ἢ τὸ μέλαν. *Physics* I.4 187b7-11 εἰ δὴ τὸ μὲν ἄπειρον ᾗ ἄπειρον ἄγνωστον, τὸ μὲν κατὰ πλῆθος ἢ κατὰ μέγεθος ἄπειρον ἄγνωστον πόσον τι, τὸ δὲ κατ᾽ εἶδος ἄπειρον ἄγνωστον ποιόν τι. τῶν δ᾽ ἀρχῶν ἀπείρων οὐσῶν καὶ κατὰ πλῆθος καὶ κατ᾽ εἶδος, ἀδύνατον εἰδέναι τὰ ἐκ τούτων. *Nicomachean ethics* X.5 1175a26-28 Διαφέρουσι δ᾽ αἱ τῆς διανοίας τῶν κατὰ τὰς αἰσθήσεις καὶ αὐταὶ ἀλλήλων κατ᾽ εἶδος. *Metaphysics* α.2 994a1-2 Ἀλλὰ μὴν ὅτι γ᾽ ἔστιν ἀρχή τις καὶ οὐκ ἄπειρα τὰ αἴτια τῶν ὄντων οὔτ᾽ εἰς εὐθυωρίαν οὔτε κατ᾽ εἶδος, δῆλον. *De partibus animalium* I.1 639a29-b3 ἕτερα δὲ ἴσως ἐστὶν οἷς συμβαίνει τὴν μὲν

the grammatical argument is not compelling. As far as grammar goes both readings are available.[6] If in the end it turns out 'that it is attractive to read the

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κατηγορίαν ἔχειν τὴν αὐτήν, διαφέρειν δὲ τῇ κατ᾽ εἶδος διαφορᾷ, οἷον ἡ τῶν ζῴων πορεία· οὐ γὰρ φαίνεται μία τῷ εἴδει· διαφέρει γὰρ πτῆσις καὶ νεῦσις καὶ βάδισις καὶ ἕρψις. (Cf. *Nicomachean ethics* X.3 1174a29-31 εἰ γάρ ἐστιν ἡ φορὰ κίνησις πόθεν ποῖ, καὶ ταύτης διαφοραὶ κατ᾽ εἴδη, πτῆσις βάδισις ἅλσις καὶ τὰ τοιαῦτα – Incidentally, if Matthen were right in claiming that out of the three occurrences of κατ᾽ εἴδη, the one at *Topics* II.2 109b13-14 is not relevant in this context, this would also exclude the other occurrence of the phrase in the *Topics*, at III.6 120a32-35, a passage which refers explicitly to the previous one. This, then, would leave us with this single relevant occurrence of κατ᾽ εἴδη in the whole corpus, for which, however, the preceding *De partibus animalium* quote provides definitive textual evidence that it cannot constitute the intended contrast to a sentence employing κατ᾽ εἶδος instead of κατ᾽ εἴδη. Let me stress, however, that I find unfounded Matthen's claim that the two occurrences of κατ᾽ εἴδη in the *Topics* are not relevant in this context.)

Further examples, where the expression κατὰ τὸ εἶδος refers to the different forms involved in the different cases: *De generatione et corruptione* II.9 335b13 καὶ ὅτι εἶναι μὲν ἕκαστον λέγεται κατὰ τὸ εἶδος, *Metaphysics* Δ.16 1021b16-17 τέλειος ἰατρὸς καὶ τέλειος αὐλητὴς ὅταν κατὰ τὸ εἶδος τῆς οἰκείας ἀρετῆς μηθὲν ἐλλείπωσιν.

[6] Once grammatical considerations do not preclude the traditional reading, Aristotle can be taken to speak here about the parts of the universe which are parts according to the forms they have, or according to the species they belong to. It should be stressed that εἶδος can be taken either way: the form these entities have is directly correlated to what species they belong to.

The contrast introduced by this phrase on the traditional reading will be threefold, similar to the contrast the phrase introduces on Matthen's reading. On the one hand the universe is contrasted to the parts which are the parts they are in accordance with their forms, and on the other hand these parts, standing in this intimate relationship to the whole, are contrasted to all the other internal configurations which might arise within the universe. The crucial difference between Matthen's understanding of the phrase and the traditional one is what the ground for the intimate relationship between the universe and its proper parts is: does this intimate relationship issue from the form of these proper parts (as on the traditional reading), or – perhaps additionally – from the form of the whole (as on Matthen's reading).

One advantage which could be adduced in favour of the traditional understanding of the phrase is that on this reading the wording Aristotle uses to introduce his threefold contrast situtates it in relation to the internal articulation of the universe which Plato presents in similar terms in the *Timaeus* at 30c4-6. In these lines Plato asserts that the cosmos was not fashioned after any of the living beings that are

phrase thus: 'its parts in virtue of [its] form', as Matthen submits on p. 179, this attraction has to come from a different source.

Matthen adduces several philosophical considerations. Let me address two of these here. One of these rests on the two subsidiary propositions

> (1) The elements would not be able to perform the activities in terms of which they are defined if their natural places did not exist.
>
> (2) The natural places of the elements are defined by reference to the whole. (p. 180)

I think there is much to be said for these propositions, indeed in a modified form I also share them. The fundamental conviction is that the elements, even if they have a nature of their own which fully determines their elemental thrust, this nature also needs to be in conformity with the overall features of the lay-out of the universe. It is not enough to claim that, e.g. earth has a tendency to collect together in a single lump, whereas fire has a tendency to disperse: both of these tendencies need to specify where the collection of earth takes place, and where fire will end up as the result of this process of dispersion.[7] Cosmic down – the centre of the universe –, and cosmic up – the periphery of the sublunary universe – have to be specified as the locations which these tendencies aim to reach.

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in the form of a part (*τῶν μὲν οὖν ἐν μέρους εἴδει πεφυκότων μηδενί* – this phrase should be contrasted to Aristotle's reference to non-holistic bodies at the end of *De caelo* I.1 as the bodies which are in the form of a part [*τὰ ἐν μορίου εἴδει σώματα*, 268b5-6]), but it is modeled on that – universal – living being, of which the other living beings are one by one and according to their genera parts (*οὗ δ' ἔστιν τἆλλα ζῷα καθ' ἓν καὶ κατὰ γένη μόρια*). There are several points to be noted here. First of all, in the *Timaeus* the universe is fashioned after the paradigm of the universal living being, and hence only more specific living beings will be parts of this universal living being. In contrast, the most specific parts of Aristotle's cosmos are the elements. Note, furthermore, that the articulation introduced in the *Timaeus* is only twofold, whereas Aristotle's contrast is threefold, regardless of the fact whether the phrase 'the bodies which are in the form of a part' (*τὰ ἐν μορίου εἴδει σώματα*) at 268b5-6 refers to the elements only, or to any three-dimensionally extended body within the universe.

[7] Note that Aristotle at *De caelo* IV.3 310b2-5 submits that even if the Earth were in the sphere of the Moon, single lumps of earth would nevertheless not proceed to the bulk of similar material in the sky, but to the centre of the universe as on the normal setup. Cf. also the argument at *De caelo* I.8 276a30-277a12 to the effect that the existence of other worlds is impossible because the 'sublunary' elements in the other cosmoi would also proceed to the centre of our cosmos.

But it is important to add that the location which is specified in the direction of thrust for fire need not be given in terms of the universe as a whole. The place, which fire strives to reach is the upper region of the sublunary universe, delimited by the celestial realm. It is sufficient to specify the natural tendency of each of the sublunary elements in terms of the topological relations within this sublunary realm. One might be tempted to retort that this is a mere quibble on my part, and ask if the structural, topological characteristics of the sublunary domain are fixed by reference to the celestial domain, what will fix the structural, topological characteristics of the celestial realm in turn. But this move will not necessarily lead to the introduction of a cosmic nature. Granted, Aristotle's account of place cannot apply to the outermost entity in the celestial realm. But neither does an account of the locomotion of the celestial spheres need an explicit reference to such a location. The celestial spheres perform their revolutions exactly where they are.[8] The element they are composed of does not possess a tendency to proceed to this region from elsewhere:[9] presumably it cannot exist anywhere else in the first place. But then the nature of this material component is self-referential: it exists, and it performs its circular motions, where it is. There is no way to specify this location in relation to what is outside the heavens: there is no there there. When Aristotle submits that beyond the heavens is the place of the divinity (*De caelo* I.9 279a11-30), this location is clearly non-spatial, indeed, these very considerations start by submitting that there is no time and place and void beyond the heavenly realm. This 'location' of the divine, then, is not meant to be taken in a literal sense of place, and it cannot constitute the spatial frame of reference for the corporeal cosmos. [10]

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[8] See e.g. *De caelo* I.9 279b1-3, II.6 288b18-22.

[9] This is so because otherwise the contrast between the circular motion of the celestial element and the rectilinear motions of the sublunary ones would break down in this counter-factual instance, in which the celestial element would need to exhibit a natural rectilinear component motion as well. See furthermore the thought experiment of *De caelo* at II.8 289b17-21, where Aristotle submits that in the counter-factual case where the individual celestial bodies occupied a different position within the celestial domain, they would perform the revolution characteristic of that region, which implies that they would not have a tendency to proceed to the location they occupy in the present setup.

[10] Cf. the considerations for the location of the Unmoved mover at the end of *Physics* VIII.10. There again, the Unmoved mover cannot provide the frame of reference in a literal sense for the localisation of the corporeal cosmos, since Aristotle submits that the Unmoved mover is an unextended entity (see *Physics* VIII.10 267b17-26), whereas the location which its effect on the world indicates – that it is where the

Hence, the structural relations specified in the natures of the different elements need not refer to something beyond, or something over and above the elements. The encircling celestial region is able to provide the general terms of reference for each and every constituent of the world.[11]

The other consideration which might suggest that the elements need to refer to the nature of an encompassing entity is that otherwise the motion they perform could not be natural by Aristotle's lights. This is so, Matthen submits, because the elements according to *Physics* VIII.4 do not possess an active capacity or potentiality for motion: they have only a passive potentiality for being moved. Besides this passive potentiality, Aristotle attibutes an active potentiality to the mover these elements have, which turns out to be the entity responsible for their generation. But in case the active potentiality is what is causally responsible for the motion of the elements, one can ask, with Matthen '[i]f an artefact [e.g. an axe] is one that lacks the innate principle of movement (or rest), and if the elements too are moved by another, why are the elements natural?'[12] The answer Matthen submits is that these elements are natural only because they are organic parts of a thing that contains the active principle of their own motion (p. 187). In Matthen's example: 'an arm is natural because though it is moved by something outside itself – [....] – this mover is part of the same animal as the arm itself.'

There are several problems with this interpretation. First, and most importantly it does not address why Aristotle thinks it important to chart his doctrine of two potentialities and two actualities at this point.[13] Furthermore,

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motion induced by it is the swiftest, hence it has to be on the orbit of the revolution – is an extended configuration (see 267b6-8). Note, furthermore, that the location in a circle, even if it were taken in a completely literal sense, is not capable of serving as the place – by Aristotle's definition, the inner boundary of the containing body – of the corporeal cosmos.

[11] Note that through this I do not mean to dismiss the problem of the place of the cosmos: since Aristotle defines place at *Physics* IV.4 211b5-212a30 as the internal boundary of the containing body, the totality of corporeal existence cannot be assigned such a location. Nevertheless, it provides some relief that the circular motion of the celestial element does not need to mention such a location in an explicit manner, cf. also *Physics* IV.5 212b7-14.

[12] See p. 383 – note, however, that presumably the question to ask instead would be why the motion of the elements is natural.

[13] The traditional account, a version of which I have defended in Bodnár (1997), relies on this very distinction: the generator of the element is causally responsible for the ensuing locomotion of the element, even though after the element has been

the account Matthen gives is certainly too slack. I am certain that if I twist my earlobes, or nose, these surely should not qualify as natural motions of the earlobes or of my nose on Aristotle's account. Nevertheless, they do so according to Matthen's proposal. Indeed, Matthen acknowledges this very difficulty in the case of the elements themselves: as 'both [when fire ascends and when it descends] are also a part of a larger motion, namely the everlasting cyclical transmutation of the elements. We can now see that when we ask about the naturalness of this larger motion it is irrelevant whether fire is ascending or descending: the agent of the larger motion has responsibilities for both.' (p. 190) This, however, suggests that Matthen's explanation for the naturalness of the natural motions of the elements does away with the distinction among the different motions the elements may undergo in their untutored natural interactions, where they are not exposed to the causal influence of crafts.[14]

Finally, on Matthen's account it is unclear what the form of the cosmos should be, indeed what should be included in the entity that has this form. Undoubtedly, the entirety of corporeal existence is part of the universe. But then it is rather dubious whether the prime mover should also be included in this entity. Aristotle never says so, and the reason why Matthen is forced to include the Unmoved mover in this totality is that he needs to integrate the

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generated it is only the element's inner, passive potentiality for being moved which is causally operative through the motion of the element. The motion, on this account, is natural, because at this stage it does not need any further outside influence. This consideration can be further corroborated by calling attention to the fact that it is this internal passive principle of motion which Aristotle calls the nature of the elements, whereas the passive principles of motions which rely for their efficiency on the simultaneous operation of active principles of motion are not natures, and the motion issuing from them is not natural.

[14] Note that the distinction Matthen tries to give – between the cases when a limb of an animal is controlled by the soul of the animal, and when it is controlled by the whole – may not be transferable to the case of large scale cosmic convective motions: at an ultimate remove the Unmoved mover is responsible (through the causal intermediary of the revolutions of the celestial bodies, and then through that of the heat generated by these celestial revolutions) for *every* phase of the sublunary convective motions. One might try to make the distinction in terms of the nature a particular element has, and consider what change does and what change does not realise this nature (see p. 190 for such a distinction). In order to maintain this distinction, however, Matthen has to discard his claim that entities and their motions are natural by forming an organic part of a single entity which contains their movers.

moving cause, with the active capacity for motion in the complex, otherwise by his definition it cannot be established that the motion of the elements, and most specifically, the motion of the sublunary elements, is natural.[15]

Moreover, even if the universe could include both the entirety of corporeal nature and the incorporeal Unmoved mover, or unmoved movers,[16] the status of the form of this entity will be doubtful. This is so, because Matthen does not submit that the Unmoved mover could be the form of this universe – indeed, the suggestion is that the form of this composite entity is different from both the corporeal cosmos and from the Unmoved mover which is pure actuality, a form without matter. This will then in turn lead to the paradoxical status of this form: it will be the form of a composite entity, and its correlate, in Aristotelian parlance the matter of this entity, will be made up of the disparate collection of a pure actuality and all the corporeal entities. But this is inadmissible, because the form of the composite entity will have a relation to the prime mover which is analogous to that of a form to a material part of the matter-form composite.[17]

## 2

Let me turn after this to David Sedley's account of *Metaphysics* Λ.10, where he argues that we find an explicit reference to the universal nature in which all the other interacting natures are embedded. The beginning of chapter 10 runs:

> [1] We must consider also in which way the nature of the whole (ἡ τοῦ ὅλου φύσις) possesses the good and the best – whether as something separated and by itself, or as its arrangement. [2] Or is it both ways, like an army? For an army's goodness is in its ordering, and is also the general. And more the general, since

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[15] For Matthen's argumentation for the inclusion of the prime mover in the totality, see pp. 187-89.

[16] For the sake of brevity in the rest of this paragraph I am going to refer to the unmoved mover in the singular.

[17] At some places the form of the totality is specified in terms of its containing all the corporeal existence there is, and accordingly Matthen submits that 'the universe [....] made out of the entirety of body [....] has the same form as the totality of fire, but in different matter' (n. 4, on p. 174). Arguably, this characterisation of the form of the whole is different from the one Matthen submits elsewhere (see e.g. p. 196), otherwise the same form could be at the same time the form of the totality of corporeal existence, and also that of the totality of the unmoved mover(s) and all the corporeal existence there is.

> he is not due to the arrangement, but the arrangement is due to him. [3] All the things are in some joint-arrangement, but not in the same way – even in creatures which swim, creatures which fly, and plants. [4] And the arrangement is not such that one thing has no relation to another. They do have a relation: for all things are jointly arranged in relation to one thing (πρὸς μὲν γὰρ ἓν ἅπαντα συντέτακται). [5] But it is as in a household, where the free have least license to act as they chance to, but all or most of what they do is arranged, while the slaves and beasts can do little towards what is communal, but act as they chance to. [6] For that is the kind of principle that nature is of each of them. (τοιαύτη γὰρ ἑκάστου ἀρχὴ αὐτῶν ἡ φύσις ἐστίν) [7] I mean, for example, that at least each of them must necessarily come to be dissolved; and there are likewise other things in which all share towards the whole.[18]

The matter of contention is how to understand the expression 'the nature of the whole' in [1], whether that refers to an additional nature, in the strict, technical sense of the word, which the universe as a single entity possesses, and furthermore, whether *that* entity can have some salient role in the account Aristotle gives here. As Sedley also remarks, a deflationary reading of this phrase cannot be ruled out: elsewhere Aristotle can talk about the nature of the universe as a periphrastic expression for the universe.[19] But the fact that sentence [6] refers to the same entity, a common nature across the different entities, which is responsible for the coordination of their activities, makes it according to Sedley inevitable that here such a universal nature is being referred to.

Sedley rests his case for this second claim on philological considerations. These are that Zeller and Jaeger apparently felt some unease with this clause, and accordingly proposed some reshuffling of the words here, the point of which was to make sure that the word ἀρχή is not spliced in between ἑκάστου and αὐτῶν.[20] The position of ἀρχή, Sedley submits, was an embarrassment, because

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[18] Sedley (2000), 328f, where in conformity with the quote on p. 332, I removed the indefinite article before the word 'little' in the penultimate clause of [5]. Note that Sedley translates the Greek τάξις with the words 'ordering' and 'arrangement', 'joint-arrangement' translates σύνταξις.
For reasons of convenience I will use the numbers of Sedley's articulation for referring to parts of this passage in the rest of this paper, and in this section I am going to refer to Sedley's paper by page numbers only.

[19] See Sedley's characterisation of *De caelo* I.2 268b11-13 on page 11 (at note 4) above.

[20] Jaeger simply inverted the order of ἑκάστου and ἀρχή, whereas Zeller moved the word ἀρχή even further away, just before the predicate ἐστίν at the end of the sentence.

it precluded a translation like Ross', which renders the sentence as '[f]or the nature of each of them is such a principle'. In this Sedley may well be right – after the words are reshuffled, the semantic unit ἑκάστου ἀρχὴ αὐτῶν is disentangled, and on Jaeger's version, the expression 'of each of them' can go either with the word 'principle' or with 'nature' in the sentence. But even if Sedley is right about the considerations he imputes to Jaeger and Zeller, this does not mean that the unemended text has necessarily to be taken the way he takes it: the sentence '[f]or nature' or '[f]or the nature is such kind of principle of each of them' may refer to a single nature, which is a principle of a certain kind for each of the entities in question collectively, but it can also refer to the nature which is a principle of a certain kind for each of the entities in question – i.e. it can refer to the nature of each and every of these entities distributively.[21]

This means then that a deflationary reading of the passage cannot be ruled out by philological considerations. Even if we retain the reading of the codices, the interpretation of the passage has to rest on considerations which assess the merits of the introduction of a collective nature of the whole in the course of the argumentation of this passage.

Interestingly, however, the collective nature Sedley introduces will not be on a par with other natures, which are natures in the strict sense of the word, in that they are the internal principles of motion and rest for these entities. To show this let me chart Sedley's account about what such a universal nature can be. First, after submitting (on p. 331) that 'we might expect the nature in question to correspond more or less to nature as defined there ([*Physics*] II.1), that is a thing's own principle of change and rest' Sedley continues with the rhetorical question '[i]s there any reason why the prime mover should not serve as this principle?'[22] Later, this suggestion is refined into the safer one, that

> it [the cosmic nature] is located not just in the object of love, the prime mover, but throughout the hierarchy of beings over which that love's influence extends, i.e. throughout the world. [....] the cosmic nature itself should be expected to be expressed by the entire interaction of the cosmic hierarchy, albeit with its principal focus in the prime mover. This, I take it, is more or less what Aristotle means at

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[21] Note, furthermore, the word order of the Greek text of the codices. There – unlike in the English translation above – the phrase ἡ φύσις is preceded by all the other nominal phrases of the sentence. This enhances the feasibility of the distributive reading of the sentence further: the nature the sentence speaks about can be identified in the context in which we speak about what kind of principle of each of them this nature is.

[22] Sedley acknowledges here the similarity of this proposal to that of Mohan Matthen, discussed in the previous section.

> 1075a22-3 [i.e. sentence [6] above] when he declares the single cosmic nature to serve as the organisational principle of each individual thing. (pp. 334-35)

But there is something awkward in this proposal, if we read the sections comprising of sentences [1] and [2] and of sentences [4] to [6] with this cosmic nature in mind. The initial question in [1] will mean how the interaction of the cosmic hiearchy, including the prime mover, or indeed the nature which is expressed in this interaction, contains the good, whether it is something structural or some separate entity in relation to this nature. This is not impossible, although I would think that it makes better sense to ask, about the whole (that is the cosmos and its prime mover[s]) whether the good it has is a structural feature of this whole, or a separate entity.[23] Although the two questions are almost identical to each other, Sedley's version has the minor inconcinnity that it asks how this universal nature – an entity which is at the same time valuable, if it *is* a nature – *has* the good, and not how, in what respect, in which of its part, in what exact way it *is* good.

But perhaps this inconcinnity can be brushed over. The more serious difficulty comes from the passage comprising of sentences [4] to [6]. There Sedley's reading will suggest that the entire interaction of the cosmic hierarchy, or something which is expressed in this hierarchy, regulates the behaviour of the individual entities in this hierarchy. In this case, however, sentences [4] to [6] will submit that the very fact that every single entity is related to the same entity – and from [1] and [2] we may add, to the same entity of utmost excellence – is the reason why there is a joint-arrangement among the entities of the cosmos. This, then, will mean that – unlike on the army—ordering—general model of sentences [1] and [2], where the relationship of the individual soldiers to the general and the general's activity constitute the order –, here the cosmic hierarchy, or something which is expressed in this hierarchy directs each entity toward the single focal point, and then this common focal point forges the joint-arrangement among the entities. The crucial difference, then, is that unlike in [1] and [2], it is not the interaction of the individual components of the universe and of the single excellent entity which gives rise to ordering, but first, as a prerequisite, the hierarchy (or the principle which is expressed in this hierarchy) needs to direct the individual entities towards the single excellent entity, and only after this will the individual entities produce the joint-arrangement among themselves. But then the explanation propounded in [4] to [6] will be almost completely vacuous. On Sedley's reading Aristotle would propound that cosmic nature – this hierarchy, or the principle which is

[23] As this whole is all encompassing, the separate entity will be within this whole.

expressed in this hierarchy – is such a principle of the entities of the universe that they acquire through its operation some joint-arrangement, which should have been a facet of this hierarchy in the first place.

In view of this I submit that the traditional understanding should be clearly preferable to Sedley's understanding of the passage. This is so, because that avoids the circularity inherent in the hierarchy being responsible for the joint-arrangement of the cosmos, and it provides a strict parallelism between the example of the army and the explanatory pattern of the cosmos, where each element of the triplets of army—general—ordering and individual entities—excellent entity serving as the focal point—joint-arrangement have the same function respectively.

In sum, I would claim that contrary to Sedley's suggestion, the distributive reading of natures in sentence [6] is available, and once it is available, it is also preferable. Once we take this reading, we do not need to identify the nature of each of the many entities – referred to in this sentence –, and the 'nature of the whole' in sentence [1], which can stand as a periphrastic expression for 'the whole'. Once we take these sentences in this, traditional way, the further claims of the section will much more naturally be read as stating that the common object of striving generates a web of mutual interrelationships, the joint-arrangement among these entities, with the single goal as the focal point of this web. A common object of striving will then be able to provide the necessary cohesion for the activities of the different entities, and thereby it gives rise to the hierarchical structures among the entities.

With this we are back to an understanding of Aristotle's cosmos, where, as Sedley – dismissively – puts it, the inclination towards everlasting recurrence is an aspiration of the individual natures of cabbages, flames or drops of water (p. 334). And there should be nothing wrong with that: each of these entities has a nature which is responsible for three meshing aspects of these entities: the drive to perform the motions and rests which correspond to this nature, the tendency with which this entity sustains its own existence, and the causally efficacious power to generate entities of the same kind, which sees to it that even after the extinction of an individual cabbage, or of an individual tongue of flame, or of an individual drop of water, there will be individuals of the same kind in the universe.[24]

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[24] Note that in this last claim I subsumed under the same generic explanatory framework the case of the generation of living beings, and of the elemental masses. Although Aristotle is committed to an analogous claim when he submits that actuality generates actuality, and so only what is actually hot can be causally

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But certainly it is not sufficient to reject these attempts to introduce an encompassing nature which could control and regulate the way the different parts of the world mesh in their activities. We should also provide an account how teleology across natures, in the plural, is possible without such an overarching nature.

For such an account we should return to the beginnning of *Metaphysics* Λ.10. In sentences [3] and [4] Aristotle submits that there is a joint-arrangement, that every single entity is jointly arranged in relation to all the others, and that this joint-arrangement arises due to the fact that each of these entities is related to the single entity at the pinnacle of this arrangement. Clearly, such a proposal needs some further presuppositions. Surely, if members of a well organised band of bank robbers are each related, in different ways, to the booty, this will create a web of interrelationships among them. And in a similar manner, the clerks of the financial institution, the clientele which comes to the bank are all in some relationship to the money in the vaults of the bank. This, however, will not guarantee that the interactions arising among the different parties to a bank robbing are teleologically arranged. To begin with, it can be (extremely bad) luck on my part that I deposited money with an institution which goes down after it has been robbed. I certainly did not deposit the money in order that someone else may appropriate it. Furthermore, it would be quite dubious to claim that banks are there so as to provide an opportunity for the bank robbers to prey on. And finally, once the booty has been carried off, the fact that every single member of the gang is after the same goal does not guarantee that the robbers will not fall out and that they will enjoy the benefits of their goal directed efforts with due serenity. A common purpose, as in this example, may all too often lead to conflicts and chaos, and not to the orderliness and beauty which we experience in the world.[25]

One can have several reactions to the example of bank robbing. One – the agonistic or pugnacious – approach would be to submit that the contrast I tried to suggest with this example is misguided. As long as we can be certain that the

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responsible for the emergence of some other actually hot entity out of something which previously was hot only potentially, in some discussions he restricts this principle of synonymous causation.

[25] Cf. Aristotle's characterisation of the precarious nature of the attachment arising out of coniderations of utility or expediency (ἡ κατὰ [or: διὰ] τὸ χρήσιμον φιλία) in *Nicomachean ethics* VIII.15 1162b16ff.

world is always populated by the same kinds of entities, these will fight it out among themselves, each of them striving after its own goal, and they will reach a dynamic equilibrium in and through this struggle. Whichever type is able to gain the upper hand on a regular basis, on this account can claim that in the emerging arrangement whatever was actually attained by the other parties was indeed the real objective of these entities, and these goals were subservient to furthering the ends of the eventual winner.

But even though might and excellence may go hand in hand on Aristotle's account, mere prevalence by brute force would qualify neither as might nor as excellence. The fact that the joint-arrangement arises out of each of the entities striving after the very same end should also be regarded as a fundamental requirement of the Aristotelian account. Furthermore, the common object of striving for all the entities is good in an unqualified manner, and every entity is kept in existence through its proper activity by means of which it imitates this unqualified excellence. Such an arrangement, then, might be expected to provide a level ground for interactions where excellence matches excellence. Moreover, in some cases where excellent entities control and provide arrangement for the less excellent ones, these latter can be claimed to attain a state which is more excellent than the one they could attain on their own, unaided by the controlling entities.[26]

Even when the emerging hierarchical structures are beneficial for the different parties to the interaction, Aristotle can maintain, on the grounds that it is the aims and objectives of the more excellent entities which determine the course of events, that it is the entities of lesser worth that are there for the sake of the controlling entity. Accordingly, Aristotle never asserts that people would be there for the sake of the cultivated plants, or for the sake of the domesticated animals, whereas he can submit that these animals – indeed, even most of the wild ones –, and the plants are there for the sake of people.[27] Furthermore, if

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[26] Domesticated animals are superior to the wild ones, and for these domesticated animals it is better to be under the control of humans, for the sake of their own survival (*Politics* I.5 1254b10-13). Cultivated plants are problematic though. This is so, because cultivated plants can revert to their wild state if they are not tended by farmers, and these wild varieties are more apt to fulfil the natural goals of these species than the cultivated ones. On the issue of the problematic status of cultivated plants see Wardy (2005).

[27] *Politics* I.8 1256b10-20. Note that the passage submits that wild animals are for the sake of people because they provide for humans not only food, but also material for clothing and for implements. If this were also part of the grand scheme of things, that would also include at least a rudimentary account of the crafts, and

the natural processes of entities of lesser worth, furthering the goals of more excellent entities within the framework of the interaction of hierarchically arranged natural entities can be said to be for the sake of these more excellent entities, even the natural processes of the elements – e.g. the seasonal rains of *Physics* II.8 – can be said to be for the sake of the human activity which they are the necessary conditions for, and through these human activities they can be for the sake of humans.[28] All in all, natures are able to appropriate to their ends the entities they rely on in their interactions.

One could claim, though, that there is a crucial difference: meteorological regularity is exploited, and consequently it is subservient to human goals, but it is not controlled the way the behaviour of cultivated plants, domesticated animals, or well-kempt slaves is. Meteorological processes are such that human activity is situated among, and is dependent on these processes, but they are not fashioned at all by humans to this end. This, however, can be looked upon as a limiting case: the behaviour of slaves, animals and plants can be kept under control because they have a suitable, controllable nature. Wild animals, most of which are also claimed to be for the sake of human nourishment and for the sake of the human crafts which use their carcasses, are not controlled the same way. They are – like meteorological processes – necessary prerequisites for, and accordingly, they are for the sake of, these human activities, whereas up until the bitter end when they fall prey to humans, they are not under the control of human activities.

Two further points should be stressed here. One is that these considerations can apply only to one type of teleology, where the goal is the beneficiary of the teleological structure. In cases where the goal of some processes or entities is not a beneficiary of these processes or entities, no such subsumption or appropriation can take place. In these cases the nature of the entity which tracks the goal does this tracking on its own, it does not need subsumption by being enmeshed in a structure which is used by the goal for its own purposes. This means that the teleological relationships where the goal is not a beneficiary are always straightforward, and the locus of the teleology is as much the nature of the entity

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whatever raw material is required for the rudimentary exercise of crafts. (The claim of I.8 is recapitulated at I.10 1258a34-38, in a form which submits that it is ἡ χρηματιστική, the procurement [of nourishment] from vegetables and animals – the activity of the humans, and not just the availability of nourishment – that is natural to all. Note, furthermore that the claim of 1256b10-20 is preceded by the lines 1256b7-10, framing the teleology within the context of human activity.)

[28] Nor is such a claim alien to what the *Politics* asserts: at I.10 1258a23-24 Aristotle submits that nature has to provide the land and the sea or something else for the purpose of nutrition.

which does the striving as the goal itself,[29] whereas in the cases where an entity uses to its own advantage the teleological structures arising out of the interaction of entities, the locus of teleology is the nature and activity of the beneficiary.[30] On the interpretation suggested here, the behaviour of the subservient entities need not be in any substantive sense directed, by their own nature, independent of the operation of the beneficiary, at the benefit of the entity which uses these subservient entities to its own advantage. They can follow the patterns of behaviour arising out of their own nature, all they need to do is pursue their very own ends.

Moreover, these teleological structures usually arise as a result of the interaction among the different entities, through which the beneficiary fashions the course of events to its own advantage. We have already seen, however, that as a limiting case, such processes and entities can also stand in this relation to the beneficiary which are not under its causal control, but provide some necessary prerequisites for this interaction. Indeed, there are some beneficiaries which benefit from the activity of other entities, but do not exert moving or efficient causation over any of the entities which perform these advantageous activities. We should stress, however, that this is an exceptional case: teleological structures, which are not underpinned by interaction, are found in the celestial realm only – notably the stars, borne by the composite motions emerging from the revolutions of interlocking celestial spheres, are the beneficiaries of the revolutions of these celestial spheres.[31] In this case the locomotive activity of the star is completely constituted by these component revolutions, provided by the spheres. Even if the star performs some further intellectual activity of

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[29] I need to use this cautionary wording, because the locus of teleology in the case of the prime unmoved mover, which moves by being an object of striving and emulation for the celestial spheres, is just as much the excellence of the unmoved mover as the celestial spheres. Nevertheless, as the prime mover is in no sense a beneficiary of the emulation it is causally responsible for, the spheres have to be also loci of self-interested, goal-directed activity, which is beneficial for them, in so far as through this activity they strive to imitate his excellency the Unmoved mover.

[30] I do not intend to presume that the beneficiary is in each case, without exception, also an efficient or moving cause in the interaction. What Aristotle submits at *Metaphysics* Λ.7 1072b1-3 is that beneficiaries need to be entities in motion: they are susceptible to advantageous and disadvantageous influences from those factors which they are the beneficiaries to, and this presupposes their changeability.

[31] *Metaphysics* Λ.8 1074a14-31, esp. a25-31. The passage clearly uses the distinction of the two kinds of goals, without mentioning it (for more detail, see the next note). Note, however, that the distinction has been introduced in the preceding chapter at 1072b1-3.

its own, that certainly does not control the activity of the spheres: each of the spheres is under the causal sway of its own unmoved mover, whose excellence it strives to imitate through its incessant revolution. One may wonder what the locus and source of this teleological structure is, as the beneficiary is only passively enjoying, and not actively shaping the outcome in this case.[32] But even this special teleological relationship among the carrying spheres and the carried stars is operative in a context where the spheres themselves are actively pursuing their own end, to their own perfection and well-being, hence where they are beneficiaries of the activity they perform themselves.[33] So in this instance, too, the locus of the teleological structure is an entity which operates with an eye to its own good and perfection.

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[32] Two caveats should be registered here. The first one is that the concerns of the beneficiary may shape the outcome, provided the causal influence of the unmoved movers takes the concerns of the beneficiary into account. Such a concern may be suggested both in *Metaphysics* Λ.8 and in *De caelo* II.12. The account in *Metaphysics* Λ.8 attributes the revolution of the celestial spheres to their pursuing their unmoved movers as goals (see e.g. 1074a19-20), and then submits that these revolutions are for the sake of the celestial bodies – i.e. the celestial bodies are goals as beneficiaries of these revolutions (1074a25-31). A similar concern can be detected in the interplay of the two difficulties canvassed in *De caelo* II.12. There the solution to the first difficulty submits that the number of the motions the individual celestial bodies have can be explained by recourse to the fact that these celestial bodies are living beings, in pursuit of the highest possible excellence they can attain (292b1-25), whereas the other difficulty is solved by suggesting that the motion each of these entities has is communicated to them exclusively through the system of spheres they are attached to (292b25-293a11). If both proposals have to be accepted as Aristotle's considered opinion, the singular motions communicated to the celestial body through the spheres have to track what is beneficial to the celestial body attached to them.
Note, furthermore, as a second caveat that the description contrasting the stars and the spheres which carry them may be misleading, as a star can also be regarded as a part of the last carrying sphere which it is attached to. Taken in this way the composite motion of this last carrying sphere, composed of the motion it takes over from the previous spheres, and of its own activity, performed under the causal influence of its unmoved mover, has no separate external goal as beneficiary.

[33] Aristotle's description does not mention that the spheres would be beneficiaries of the actions they perform. But this, I submit, should be a consequence of the way they are under the causal sway of the unmoved mover. These spheres are moved by the unmoved mover as lovers are drawn to their beloved: the activity they perform is of value to them, which means that they are the beneficiaries of the activity. (Note that the argumentation for the analogous thesis in the sublunary domain can be significantly more straightforward, as there the goal tracked by the

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The considerations of the previous section suggest that Aristotle could hold, or at least hope that his dual theses, about the Unmoved mover, as at the last remove the universal goal of everything there is, and about the distinction between the two kinds of goals, can underpin his conviction that the Unmoved mover is causally responsible for the emergence of teleological structures, the explanatory locus of which, nevertheless, will remain to be the natures of the individual beneficiaries, and not some overarching cosmic or universal nature.

If such an account of teleological structures among natures is correct, this can help to explain why the biological works contain precious little mention of 'cross-nature' teleology. If the locus of such teleological structures is the nature and activity of the beneficiary, and the scientific investigation of animals extends to describing the way of life and the characteristic activities of these creatures, such a description will also set out those elements of their habitat which contribute to the well-being of these animals. Accordingly, the description of biological natures already contains the way the animal, in a teleological manner, meshes in with its environment. This suggests then that teleological structures across natures are not absent from the biological works, they are just part of the description of biological natures, exactly the way as they belong there on the account I suggested above.[34]

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activity will be attained by the sublunary entity. Attaining the goal makes then this entity the beneficiary of the activity. No such attaining of the goal is possible in the case of the celestial spheres' striving for the excellence of the unmoved mover.)

[34] For a detailed discussion of the use of natures in the biological works, and a sustained argument to show that passages which mention an 'Apparently Demiurgic Nature' or an 'Apparently Cosmic Nature' do not introduce a cosmic nature, see Lennox (2001b). One example which is often mentioned as an instance of teleology across natures is Aristotle's remark at *De partibus animalium* IV.13 696b27-32, that nature placed the mouth of dolphins and selachians on the downside of their snout so that they are not too quick at catching their prey, for the sake of the preservation of other animals, and also for their own sake so that they do not overeat themselves. Comments on this passage ranged from claims that Aristotle is being dismissive and sarcastic in the first suggestion (Balme 1987, 278-79), to a deflationary reading, suggesting that 'Aristotle means only that *A* is for the sake of *B* in the sense that *B* cannot happen without *A*. [.... T]he successful existence of smaller fishes implies that [dolphins] cannot take them too easily.' (Balme 1992, 96), and to a suggestion that the two clauses submit two different kinds of 'for the sake of which', the beneficiary and the goal (Lennox 2001a, 341). Accordingly, Lennox claims that 'the rolling of selachians to eat may *benefit* other fish while having

One should also stress, however, that even though Aristotle gave a detailed and robust account of the workings of internal teleology, which he furthermore supplemented with a number of important and pithy remarks, suggesting how the goal-directed operations of individual natures can give rise to teleological structures across different entities, he had very little success with this outlook. Before him Plato, and after him the Stoics submitted that if there are beneficiaries to natural processes across different natures, the whole setup where these processes take place has to be providentially devised and maintained by some overarching entity which takes the concerns of the beneficiaries into consideration. This is a straightforward answer to an obvious question. And it should be clear that Aristotle's account was at a clear disadvantage by the fact that it did not include such a straightforward answer. This way modern attempts to interpret Aristotle so that it includes an overarching, universal nature can be viewed as attempts to mend a serious defect – or to settle what is, as Robert Wardy put it,[35] a fascinating and highly significant ἀπορία – in Aristotle's account, even if they do so without clear textual warrant, and in a way which would introduce fundamental reinterpretations of Aristotle's conception of nature as the internal source of the behaviour of the entity which is endowed with this nature.[*]

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prevention of selachian gluttony as its *goal*.' Note, however, that the goal/beneficiary distinction cannot provide the whole account: *both* the fish which is able to flee unharmed, and the dolphin, which does not catch the prey, are beneficiaries of the botched attempt. Once it is acknowledged that both of them are beneficiaries, it makes sense to describe the interaction from both perspectives. This will give rise to two teleological descriptions: one internal, that the configuration of the dolphin's mouth benefits the dolphin itself, and another one, that – the other fish's escaping capacity being equal (or augmentable only to the detriment of the fish's other vital activities) – it is an indispensable environmental condition for the fish's survival that dolphins have their mouths inconveniently located. This latter claim, as I suggested above, can be legitimately couched in terms of teleology across natures, without any sarcastic overtones, or any need for a deflationary reading.

[35] Wardy (1993), 19.

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# THE RELEVANCE OF DIALECTICAL SKILLS TO PHILOSOPHICAL INQUIRY IN ARISTOTLE

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## 1.Introduction

Seeing Aristotelian dialectic as situated between casual encounters and philosophy offers an insightful perspective for investigating the extent to which the aims and the logical and epistemic tools of dialectic are shared by its two opposites.[1] As compared with everyday encounters, dialectic is obviously more formal and more sophisticated but not quite sufficient for philosophy. The usefulness of dialectical tools in daily conversations derives from the fact that, as Aristotle remarks, a dialectician does with skill what others do at random, namely, attempts to defend his own opinions, change those of others, or reveal the interlocutor's ignorance.[2] This presupposes that dialectic involves a kind of general capacity for argument,[3] but to what extent it is relevant to, or perhaps even sufficient for the cognitive goals of philosophy is more tricky issue.

One hardly needs to point out that the question of the usefulness of dialectical skills for philosophy concerns inquiry rather than explanation (ἀπόδειξις), *i.e.*, in terms that Aristotle adopts from Plato, the 'way towards the first principles' rather than the 'way from the first principles'.[4] The famous passage in *Topics* I.2 mentions two uses of the treatise for philosophical inquiry: argument both *pro* and *con* helps to distinguish the true from the false, though

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1 This alludes to the title 'Ein Problem: die Aristotelische Dialektik zwischen Gespräch und Philosophie' in Primavesi (1996), 17.

2 *Topics* I.2 101a27, 30–34, VIII.14 164a16-b4, *Sophistical Refutations* 11 172a34–36, *Rhetoric* I.1 1354a1–6.

3 *Sophistical Refutations* 9 170a31-b11, Smith (1993), (339) and (1994), 145–148; for its limitations, see Brunschwig (1986), 32–34.

4 *Analytica Posteriora* I.2 71b33–72a5, *Nicomachean Ethics* I.4 1095a28-b13, *Metaphysics* Z.3 1029a33-b12, *Physics* I.1 184a16–23.

the more interesting aspect concerns its use with respect to the first principles of science. Obviously, the first principles cannot be examined in their own terms, which leaves the possibility of scrutinizing them with the help of acceptable opinions (ἔνδοξα), a task peculiar to dialectic for Aristotle.[5] Hence the question remains of how far towards the first principles dialectical skills may bring us. While Aristotle himself offers no clear answer to this question in the *Topics* or in his other treatises, a number of suggestions have been provided by interpreters.

According to some, dialectical tools only have a negative role in criticizing prevailing views, a conception seemingly in harmony with the refutation form (ἔλεγχος) of dialectical argument.[6] The critical role of dialectic may be seen in a positive light, however, by a shift of perspective to beliefs which remain intact in the face of criticism.[7] Others argue that, in addition to the critical task, certain forms of dialectical disputation are strong enough to justify positive knowledge claims.[8] But there are also those who claim that dialectic itself involves methods adequate to guarantee the first principles of science.[9]

In spite of numerous outstanding recent contributions on Aristotle's dialectic, it seems that our picture of dialectic in the *Topics* is not yet clear enough to settle these issues in any conclusive manner. Therefore the goal of this paper is a more modest one, simply to clarify our notion of dialectic and the skills involved. The investigation allows, finally, to draw some conclusions concerning their relevance to Aristotle's philosophical inquiry. In the following, I shall delineate the main starting-points of this study.

While the traditional understanding of dialectic has emphasized some particular feature, such as argument relying on *endoxic* premisses, recent scholarship tends to take dialectic seriously as a particular social discoursive practice in question-answer form with its own characteristic rules or, rather,

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[5] *Topics* I.2 101a34-b4, see also VIII.14 163b9–16 and *Rhetoric* I.2 1355a35. Cf. *Metaphysics* α.1 993b20–30, Β.2 1004b22–26.

[6] Le Blond (1970), 41, and Beriger (1987), 57–62.

[7] Evans (1978), 52, Galston (1982), Smith (1993), 354, and Witt (1992), 170.

[8] According to Ross (1971, 1923), Bolton (1993) and (1994), dialectic yields a sufficient method for practical sciences, such as ethics. Galston (1982), 90–93 and Bolton (1990), 192–196, argue that in theoretical sciences the candidates for first principles have to be shown to have explanatory power.

[9] Owen (1986a), (1961), 244, Irwin (1978), (1981), (1987) and (1988). Cf. Bolton (1990), 186 n. 2. I shall not include here studies such as Barnes (1980) or Nussbaum (1986) Ch. 8, since they refer to dialectic merely as argument based on *endoxic* premisses.

a set of such practices.[10] Following this line of interpretation poses special challenges for a philosopher, since the logical and epistemic moves need to be understood as embedded in a social and psychological setting. The challenges are the more demanding since dialectic, unlike rhetoric, is not a lively part of the present communication culture.

The element of competition, for instance, incorporated already in the refutation form of dialectical disputations, requiring the answerer to defend a thesis and the questioner to attack it, has generated some worry about the relevance of dialectic to serious philosophical inquiry. Another source of competition, located in the rules for the questioner in Book VIII Ch. 1 of the *Topics* for the purpose of concealing his line of argument, have led some interpreters to view dialectic as reducing to eristic, hence failing to be of use for a philosophical search for truth.[11] The agonistic spirit of the participants is no less reduced by the presence of an audience following the discussion.

I shall argue that the puzzles about how to reconcile these competitive elements and inquiry after truth arise because of misconceptions concerning dialectical practice, and in particular the role of competition and the rules of concealment in it. As for the concealment rules, their proper understanding reveals most clearly a misconstrual in the traditional way of formulating the question of the relation between dialectic and philosophy. It seems to have gone unnoticed that the concealment rules are meant to apply both to fair and eristic argument[12] and that, furthermore, the answerer is provided with his own means of undermining their effect. Finally, as Aristotle himself points out when introducing the rules of concealment, they merely concern a questioner in a dialectical disputation, not a philosopher or one searching by himself, thus indicating that dialectic and philosophical inquiry are two socially and psychologically distinct fields of argument.[13] A philosopher is consequently free to adopt whatever suits his specific purposes from his dialectical skills. Therefore I fully agree with Robin Smith's insight that, instead of speaking

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[10] Bolton (1990), 188 and (1994), 110, Smith (1993), 337, and (1997). The rules of question-answer disputation are dealt with by Moraux (1968), 280–290, Stump (1978), 160–165, Schickert (1974), 4–14, Brunschwig (1986), Bolton (1990), (1991), (1993), (1994), and Smith (1997).

[11] Grote (1872), 93–106 and Cherniss (1944), 18; see Owen (1986), 221–225 and Bolton (1994), 102–103.

[12] *Sophistical Refutations* 15 174a26–29.

[13] *Topics* VIII.1 155b9–16.

about the relevance or use of *dialectic* in philosophical inquiry in the traditional manner, it is better to speak about the relevance or use of *dialectical skills* or *methods*, *dialectic* being reserved to the disputational practice in question-answer form while *dialectical skills/methods* refer to the logical and epistemic skills/methods involved.[14]

But how should the puzzle that a fair dialectical refutation is simultaneously competitive and cooperative be solved?[15] The answer lies in recognizing that competition and cooperation need not always exclude each other. To see this, we need to distinguish two possible kinds of competition in dialectical disputation. The first is referred to in Aristotle's criticism of quarrelsome answerers who, by not granting what they should, turn the disputation into an antagonistic and eristic one, and thus into merely apparent dialectic.[16] Another sense of competition is indicated in a passage in *Sophistical Refutations* 16 175a13–14, which points out that one of the goals of the participants is to show their disputational skills.

In seeking to clarify what the dialectical skills consist of, it will turn out that a good dialectician can take the role of both questioner and answerer, is capable of dealing with problems of any kind and partners with varying skills and character. I shall argue that, for Aristotle, in a proper dialectical disputation the participants contribute to the same goal which is good argument,[17] as good as possible considering the problem at hand.[18] This is, obviously, carried out best by skilful dialecticians in a social context rewarding good argument.

In promoting this shared goal, the participants have different tasks because of their complementary positions. While the questioner's role is to produce arguments, as good as the particular situation allows, the answerer's primary duty is to check that the arguments are good ones. This allows scope for a non-zero-sum type of game in which one's gain is not another's loss, both partners can simultaneously perform well or poorly, and the quality of argument is up

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[14] Smith (1993), 350–351, also Devereux (1990), 283–284.

[15] The opposition between the questioner and the answerer is expressed in *Topics* VIII.1 155b10, 26–28, 14 164b13–15, *Sophistical Refutations* 11 171b22–26, while the cooperative aspect is referred to in *Topics* VIII.11 161a19–21, 37-b1.

[16] *Topics* I.1 100b23–101a4,18 108a33–37, VIII.5 159a30–37, 11 161a23–24, 37-b10, *Sophistical Refutations* 11 171b16–34, see Owen (1986), 224.

[17] See, for instance, *Topics* VIII.5 159a35, b3, 11 161a17–19, 33, b38.

[18] *Topics* VIII.11 161b34–162a11.

to both.[19] Hence competition about dialectical skills supports good argument, instead of being a hindrance to it.

Furthermore, I shall emphasize that the few references to the truth of propositions in the *Topics* should be considered seriously. This involves a further modification to the traditional conception of dialectic while undermining the core idea of dialectic as argument with acceptable premisses (ἔνδοξα).[20] However, Aristotle's remark on truth via *pro* and *con* argument in *Topics* I.2, indicates that he does not consider a singular line of argument to be a strong means of distinguishing the true from the false, but prefers a complex of arguments with the logical structure of debate.[21] Moreover, the dialectical means for conceptual clarification and qualification of excessive generalizations form an important vehicle for qualifying the merely partial truths included in the knowledge basis for dialectical arguments.

The main purpose of the following examination of the rules for dialectical disputations in *Topics* Book I and VIII is to offer a systematization which best reveals their epistemic, logical, and psychological peculiarities.[22] I shall argue, firstly, that those I shall call *constitutive rules* offer a framework for both good and bad, fair and unfair argumentative discourse in question-answer form. The second aim is to demonstrate that those to be called *strategic rules* yield logical and epistemic moves to enhance good argument and the search for justified truth claims through debate. While the main responsibility in constructing arguments lies with the questioner, the main responsibility in guaranteeing good argument is imposed on the answerer. It will be shown, among other things, that the rules for the questioner to conceal his argument strategy form no hindrance to this goal, but merely a source of psychological complications to be counterbalanced by a set of rules for the answerer.

In explicating the disputation rules, I shall thus deviate from their order of presentation in the *Topics* by elaborating them in pairs to get an insight into how the complementary tasks of the questioner and answerer tend to enhance good

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[19] Brunschwig explicitly denies the possibility of combining competition with a common objective in spite of his emphasis on a good gymnastic discussion according to its rules (1986), 37, 39. Bolton sees gymnastic discussions as competitive in contrast to those for the sake of examination and inquiry (1994), 104.

[20] Cf. Reeve (2001), 243.

[21] By the logical structure of debate I mean a complex including arguments *pro* and *con* the premisses and inference relations of given arguments.

[22] I will sometimes refer to the *Sophistical Refutations* as well.

argument and the search for truth. I shall first lay out the constitutive rules, then the strategic rules, beginning with the notion of *topos* and certain logical requirements derived from the notion of syllogism and refutation (ἔλεγχος), continuing with the epistemic conditions of argument and then turning to the rules serving the goal of truth more directly.

Whether there was a practice of scoring the participants' performance, Aristotle does not inform us and it does not bear on my main aim. At any rate, he makes it apparent that those following exercise and examination disputations did assess the interlocutors' performance by taking into account their skills and competitive spirit as well as the difficulty of the problem. Most important of all, the criteria Aristotle offers for assessing arguments as separated from the disputation context are precisely those for good argument we find underlying the strategic rules for the answerer.

As it thus turns out that the rules for dialectical discussion offer logical and epistemic moves important for any serious pursuit of justified truth claims, participating in such discussions obviously helps to develop skills relevant to Aristotelian philosophical inquiry understood as *saving the appearances*.[23] Whether Aristotle at some point believed that his dialectic offers definite criteria for identifying the truth through debate is a complex issue not to be touched upon here, however.[24] In any case the dialectical methods as formulated in the *Topics* and *Sophistical Refutations* do not yield the highest guarantee of truth, since saving the appearances involves further forms of argument not included in them. One's dialectical skills may, however, be of great help in trying to reveal candidates for first principles as well, but they are not sufficient to distinguish the first principles of a philosophical field from its other truths conclusively. This follows chiefly from the fact that dialectical disputations focus on distinct problems, while philosophical inquiry aims at systematic knowledge, capable of saving and explaining the appearances of a whole field of research.[25]

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[23] *Nicomachean Ethics* VII.1 1145b2–7, *Eudemian Ethics* VII.2 1235b13–18, *Metaphysics* B.1 995a24–27, see Lloyd (1968), Owen (1986a), Barnes (1980), and Nussbaum (1986) Ch. 8, Witt (1992).

[24] Bolton argues for two different criteria, one on the basis of dialectic as inquiry ('dialectical irrefutability', (1990) and (1991)) and another grounded in dialectic as examination (1993) and (1994). Both appear to yield foundationalist epistemology. Irwin (1998) identifies 'pure dialectic' with coherence theory, while his 'strong dialectic' relies on particularly strong premisses.

[25] For the limitations of dialectic for philosophy, see Galston (1982), Irwin (1977), (1987), Bolton (1990), (1991), Freeland (1990), and Kakkuri-Knuuttila (1993).

## 2. Constitutive Rules of Dialectical Disputations

### a. Opening moves and goals

To attain a better grasp of the social practices Aristotle counts as belonging to dialectic, we may distinguish *constitutive*, or *definitory*, and *strategic rules* among those presented in the *Topics* and *Sophistical Refutations*. The former *define* the nature of dialectical disputations by describing how *proper* dialectical communication is carried out, while the latter offer an insight into how a dialectical interchange is carried out *well*.[26] The first explications of such a classification can be traced to the *Treatise on Obligations* by the fourteenth century logician Walter Burley, dealing with obligational disputations, closely related to dialectical conversations. The title adopted by Burley for the rules constituting the particular practices of obligational disputations is *essential rules* (*de esse*) and that for those guaranteeing that the art is practised well is *useful rules* (*utiles*).[27] But we may also find hints about such a distinction, for instance, when Aristotle speaks about 'one who syllogizes well (καλῶς)' as distinct from one simply syllogizing (drawing inferences),[28] thus guaranteeing its application to sharpening questions to be posed on the textbooks of dialectic without fear of anachronism.

While Aristotle codifies the rules of dialectic keeping in mind those already familiar with its varied practices, he naturally presupposes that his readers are acquainted with them, whereas we are not in such a favourable position.[29] Luckily, we may profit from the dialogues of Plato to nourish our imaginative capacities at critical points. To give a relatively trivial example, one

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[26] Hintikka and Bachman (1991), 32–33. Another distinction, less prominent here, is between *regulative* and *constitutive rules*. The former tell us *that* certain things ought to or may be done, and the latter tell us *how* certain acts are performed (von Wright (1971), 151, Searle (1999), 122–124). An example of a regulative rule, accepted by ancient Athenians, states that one is allowed to participate in dialectical disputations. The constitutive rules then explicate how the dialectical activity is performed.

[27] Burley (1963), see Yrjönsuuri (1994), 44.

[28] See, for instance, *Topics* VIII.4 159a17–18, 5 159a35, b3, b8, 11 161a17–19, 33, b38.

[29] Smith 1997, xii and xxi. Though 'dialectic' and 'Socratic dialogue' are popular titles in contemporary management consultation literature, for instance, the intended forms of communication are not dialectical in the limited sense of Aristotle's *Topics*, Cf. Kessels (2001).

of the most essential rules of dialectical disputation, stating that the answerer should accept a proposition implied by propositions previously conceded, is not, somewhat surprisingly, given in its general form.[30]

The task of the constitutive rules is apparently to explicate the opening moves and goals, as well as the essential means of dialectical conversations. The opening words of the *Topics* already reveal that for Aristotle dialectical interchange take the form of refutation (ἔλεγχος),[31] much discussed in connection with the Socratic dialogues of Plato.[32]

> The goal of this study is to find a method with which we shall be able to construct syllogisms from acceptable premisses concerning any problem that is proposed and – when submitting to argument ourselves – will not say anything inconsistent. (*Topics* I.1 100a18–21)[33]

The passage makes room for two different roles in the interchange, that of the questioner whose task is 'to construct syllogisms from acceptable premisses concerning any problem proposed' as the topic of disputation, and that of the answerer whose task is to avoid saying 'anything inconsistent'.

Hence the first moves will consist of the questioner laying out the initial *problem*[34] as an option for the answerer to choose a proposition or its

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[30] This is, however, discussed in connection with induction in *Topics* VIII.2 157a34-b8.

[31] 'A refutation (*elenchus*) is a syllogism to the contradictory of the given conclusion' (*Sophistical Refutations* 1 165a2–3, also 6 168a34–37, 10 171a2–7). Smith (1997, xiii-xx) distinguishes dialectic in broad and narrow sense, only the latter having the refutation form. For epistemological reasons the translation 'refutation', typically used for *elenchus*, is somewhat misleading, since no refutation needs to result.

[32] Bolton (1993) is an interesting contribution showing how a particular species of dialectical disputation parallels Socratic *elenchus* in Plato's *Gorgias*, aiming to justify his own belief concerning justice.

[33] In spite of the fact that συλλογισμός here is to be understood in a wider sense than the more familiar three-term two-premiss inference of the *Prior Analytics*, I prefer the translation 'syllogism' to 'deduction', because not each deductive inference counts as a συλλογισμός for Aristotle. Cf. *Topics* I.1 100a25–27, *Prior Analytics* I.1 24b18–20, *Sophistical Refutations* 1 164b27–165a2, and *Rhetoric* I.2 1356b15–18. See Bolton (1994), 108ff. and Section 3b.

[34] A dialectical *problem* differs from a dialectical πρότασις (premiss/question) by its form: 'For stated in this way: "Is it the case that two-footed terrestrial animal is the definition of man?" … it is a premiss; but stated in this way: "Whether a two-footed terrestrial animal is the definition of man or not", it becomes a problem[.]' (*Topics* I.4 101b28–33). A dialectical problem may concern both purely theoretical and

contradiction, and the latter choosing either one as the *thesis* he is to defend.[35] The selection of the topic for discussion thus belongs to a preparation phase.[36]

*Constitutive rules for the opening moves:*
The questioner puts forward a *problem* for the answerer, *i.e.*, an option to choose between two contradictory *propositions*.
The answerer chooses one of the contradictories as his *thesis*.

The trouble with the above passage is that it would allow the answerer not to accept a premiss whenever he anticipates a contradiction will follow, which would make eristics a proper form of dialectic, contrary to Aristotle's explicit statements.[37] As indicated in the following passage, the goals associated with the two roles, though contrary to some respect, are not fully incompatible, but can even be complementary:[38]

> Now, the job of the questioner is to lead the argument so as to make the answerer state the most unacceptable of the consequences made necessary as a result of the thesis, while the job of the answerer is to make it appear that it is not because of him that anything impossible or contrary to opinion results, but because of the thesis (for conceding at first what one should not is probably a different mistake from failing to defend that concession properly). (T*opics* VIII.4 159a18–24)

It is worth adding that in spite of the wording of this passage not all elenctic arguments are of the *reductio ad absurdum* type. Aristotle himself favours direct argument strategies to inferences through the impossible for the reason that, in the first case, the contradiction of the thesis is more obvious and the answerer cannot so easily escape accepting it.[39]

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practical matters. A point about which everyone agrees cannot form a problem, but one about which people have no opinion, or there is disagreement between the majority and the wise or within these groups, or one about which there are arguments *pro* and *con* (*Topics* I.11 104b1–17, 10 104a5–7, 14 105b19–29).

35 A *thesis* in the narrow sense of the term is a belief of a philosopher contrary to majority opinion or one for which it is possible to present an argument, while in the broad sense a thesis is either part of a problem (*Topics* I.11 104b19–105a2). Sometimes Aristotle distinguishes thesis and definition (*Topics* VIII.9 160b14).

36 *Sophistical Refutations* 12 172b10 ff. deals with how to lead a companion to suitable topics in less formal encounters.

37 *Topics* I.1 100b23–101a4, VIII.11 161a17–24, 33-b10, *Sophistical Refutations* 1 165a19–37, 2 165b7–11, 8 169b20–29, 11 171b6–172b8.

38 Smith (1997), 128.

39 *Topics* VIII.2 157b34–158a2. The impossibility typically is an obvious falsehood, and not a logical contradiction as in modern logic (Smith 1997, 119–120).

If the answerer fails to defend the chosen thesis properly, as required by the rules of dialectic, the nature of the discussion changes into merely apparent dialectic. Such mutual compatibility of the goals of the questioner and answerer is a most relevant issue for our understanding of the role of dialectical skills in philosophical inquiry and in pursuit of truth more generally. For it implies that if there is an element of competition, and Aristotle claims that there typically is,[40] genuine dialectic does not reduce to a zero-sum game about achieving or avoiding an inconsistency. We should not, however, have too narrow a notion of competition. Referring to the *Sophistical Refutations* passage already mentioned (16 175a13–14), I suggest that the proper way of competing in genuine dialectic concerns the *dialectical skills* of the partners. The questioner shows his dialectical skills by trying to secure suitable premisses from the answerer which finally imply the contradiction of the answerer's initial thesis, and the answerer shows his skills by granting such premisses as required by further rules of the disputation. This allows both the questioner and answerer to succeed in a disputation simultaneously, or for instance, the questioner to perform properly even without reaching the contradictory conclusion when the answerer is guilty of not accepting what he should. Understanding the competitive element as concerning the mastery of the art of dialectic also seems to be in harmony with Aristotle's brief remarks on the various species of dialectic including exercise (γυμναστική), examination (πειραστική), and conversations for the sake of inquiry (σκέψις), though I shall not go into the details here.[41]

Since the rules concerning the goals characterize a social communication practice rather than a system of logic, they are not to be formulated in terms of objective relations of implication.

> *Constitutive rules for the goals:*
> The goal of the questioner is to show his dialectical skills by securing from the answerer premisses which would lead the latter to state the contradiction of his thesis, and such as required by the rules of dialectic.
> The goal of the answerer is to show his dialectical skills by conceding only those premisses and conclusions which do not contradict his thesis in accordance with the rules of dialectic.

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[40] *Topics* VIII 1, 155b26–28.

[41] For characterizations of these species of dialectic see *Topics* VIII.5 159a25ff., 11 161a24–33, 14 163a29ff., *Sophistical Refutations* 2 165a38-b7, 8 169b23–27, 9 170b8–11, 11 171b3–6, 172a21-b1, 34 183a37-b1.

**b. Means**

The most important aspects concerning the means of genuine dialectical disputations involve the logical structure of questions available to the questioner and the epistemic nature of propositions the answerer should accept as premisses.[42] As for the logical structure, Aristotle points out that questions such as 'What is a human?' or 'In how many ways is "good" said?' are not dialectical premisses. This conveys a part of the questioner's responsibility in inventing the premisses, since why-questions do not count as dialectical moves, but only questions of yes-or-no form. Consequently, instead of posing questions of this kind, the questioner has to put his own proposal for a definition of 'human', or distinctions of 'good'.[43] As we shall see later, this is not all the questioner is allowed to do, nor does this imply that the answerer is reduced to a 'yes-or-no' man on the whole. The strategic rules allow both a larger set of moves and, simultaneously, more responsibility concerning the nature of reasoning, revealing that the basis for *cooperation* consists of rules advising the questioner to propose as premisses propositions with an epistemic nature such that the answerer is bound to accept them. The *competitive* element is saved in that the answerer is not the one responsible for inventing premisses against his thesis, this being left to the questioner.

As the opening words of the *Topics* suggest, one chief task of the questioner is to try to secure for his part that the premisses the answerer concedes are *acceptable* opinions, *i.e.*, in Aristotle's technical terminology, that they belong to ἔνδοξα. That Aristotle intends a dialectical disputation to rely on acceptable premisses, at least in its typical form, is seen both in the notion of dialectical syllogism and dialectical premiss. A dialectical syllogism is one with *endoxic* premisses of a certain kind.[44] Etymologically, ἔνδοξα consists of the opinions

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[42] The translation 'premiss' for πρότασις simplifies matters in this context, since in dialectic it is used for the question by which the questioner attempts to secure a premiss for the intended conclusion (*Topics* I.4 101b28–32, *Prior Analytics* I.1 24a24–25). A dialectical πρότασις is also the conclusion of previously conceded premisses posed as a question, at least in the case of induction (*Topics* VIII.2 157b31–33).

[43] *Topics* VIII.2 158a14–22, see also *Sophistical Refutations* 10 171a18–20. This rule is qualified in *Topics* VIII.2 158a22–24. By 'how many?' Aristotle means that determinations should also be given (*Topics* I.15 106a1–8).

[44] For the notion of dialectical syllogism *Topics* I.1 100a25–30, *Sophistical Refutations* 2 165b1–4, *Prior Analytics* I.1 24a22–25, *Posterior Analytics* I.19 81b18–23; see Smith (1993), 335–336.

of reputable persons. These include, according to Aristotle, things 'which seem so to everyone, or to most people, or to the wise – to all of them, or to most, or to the most famous and esteemed' (*Topics* I.1 100a29–30).[45] In a later passage, Aristotle includes as dialectical premisses opinions derived from established arts, things similar to what is acceptable, as well as negations and contraries of contraries of acceptable opinions. However, not simply any ἔνδοξον counts as a dialectical premiss but, only those which are not paradoxical, *i.e.*, not contrary to majority opinion. Clearly, a proposition accepted by no-one cannot function as a dialectical premiss.[46]

Interestingly enough, the condition that the inferences be *arguments* in the sense that the premisses are initially more acceptable than the conclusion is not a constitutive rule of dialectic.[47] Such a requirement characterizes good dialectic, as Aristotle points out himself, and hence forms one of the strategic rules. We may thus formulate the rules for the questioner and answerer concerning the means available to them as follows.

> *Constitutive rules for posing questions and accepting premisses:*
> The questioner tries to secure dialectical premisses (propositions which are acceptable, similar to what is acceptable, negations and contraries of contraries of acceptable opinions, which are not contrary to majority opinion and propositions derived from established arts) in the form of yes-or-no questions which have the contradiction of the answerer's thesis as a consequence.
> The answerer concedes dialectical premisses, as well as the consequences of propositions he has already conceded. Not conceding the proposition put by the questioner implies that the negation can be taken as a premiss.[48]

Here we may note a typical Aristotelian move, since these rules may be said to characterize dialectical disputations without qualification (ἁπλῶς). No less than four ways of qualifying them can be pointed out. For instance, if an unskilled

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[45] For the notion of ἔνδοξα Le Blond (1939), 9–19, Barnes (1981), 498ff., and Smith (1993), 343–347.

[46] *Topics* I 10 104a5–37. See note 35. Cf. Reeve 2001, 238–241.

[47] The term 'argument' is often used in the wider sense of 'inference'. See the translations of λόγος, for instance, in *Topics* I.1 100a25 by Pickard-Cambridge in *The Complete Works of Aristotle: The Revised Oxford Translation* 1984 and Smith (1997). In the narrow sense applied here an argument is an inference with the particular pragmatic aim to raise the degree of acceptability of the conclusion.

[48] *Topics* VIII.1 156b4–9, *Sophistical Refutations* 15 174a30–32.

answerer errs as to what counts as an ἔνδοξον or a proper dialectical premiss, the disputation does not turn into eristic, or what he calls 'apparent dialectic'. It just turns into poor dialectic, and the piece of reasoning is a poor one,[49] since the difference between dialectic and eristic lies in motivation.[50] Ch. 5 introduces us to subspecies of dialectical examinations where the answerer has to represent his own personal opinions, or the views of some philosopher, perhaps paradoxical ones. Strangely enough, the answerer is sometimes bound to grant unacceptable premisses as well.[51] To these issues we shall return in Section 6.

The constitutive rules of dialectical disputations hence involve a general framework for reasoning practice in question-answer form. They do not yet, however, include rules for argumentative discussions, and hence cannot be said to encourage either good or poor argument. In elaborating the strategic rules, our main task is to explore the extent to which they enhance good argument, and truth *via* good argument.

## 3. Strategic Rules for the questioner: The notion and choice of *topos*

### a. The topos

At the beginning of Book VIII Aristotle says he is taking up the matter of how to pose questions. Accordingly, Chs. 1–3 deal with strategic advice mainly

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[49] *Topics* VIII.12 162b27–30.

[50] 'For just as unfairness in a wrestling match takes a certain form – that is, it is a kind of "dirty fighting" – so the contentious art (ἐριστική) is "dirty fighting" in disputations. For in the former case, those who choose to win at all costs use every kind of hold, and so in the latter case do the contentious. Now, those who behave like this for the sake of winning itself – these seem to be the contentious fellows and the lovers of strife; but those who do it for the sake of a reputation that gets them money are sophistical (for sophistry (σοφιστική) is, as we said, a way of making money from apparent wisdom). This is why they aim at *apparent* refutation. Lovers of strife and sophists are men of the same arguments, but not for the same purposes, and the same argument will be both sophistical and contentious, but not in the same respect: insofar as it is for the sake of apparent victory it is contentious, but insofar as it is for the sake of apparent wisdom it is sophistical (for sophistry too is a kind of apparent but not real wisdom).' (*Sophistical Refutations* 11 171b22–34) See also *Topics* VIII.11 161a17–24, 33-b10, and *Rhetoric* I.1 1355b15–21.

[51] *Topics* VIII.5 159a38-b27.

for the questioner, Ch. 4 notes the tasks of the questioner and answerer cited above, while beginning from Ch. 5 the advice is mainly directed at the answerer. The questioner's task at the outset of the disputation is clarified as follows:

> First, then, the person who is going to be devising questions must find the location (*topos*) from which to attack; second, he must devise the questions, and arrange them individually, to himself; and only third and last does he ask these of someone else. Now, up to the point of finding the location, the philosopher's inquiry and the dialectician's proceed alike, but actually arranging these things and devising questions is unique to the dialectician. For all that is directed at someone else. (*Topics* VIII.1 155b4–10)

In this Section we shall concern ourselves with the notion and choice of *topos*, and in the next with the arrangement of the questions. The lists of locations which form the matter of Books II-VII of the *Topics*, include mainly *strategic rules* to help the questioner to *invent* suitable premisses for a given conclusion which, to start with, is the contradictory of the answerer's thesis or the paradoxical proposition the questioner has chosen as his aim. A location alone is evidently not sufficient for constructing an argument, because it only offers a general model of an inference. One needs, in addition, empirical and conceptual knowledge about the matter in question, for which purpose Aristotle offers the advice of memorizing lists of ἔνδοξα, and ordering them according to subject matter, and school or type of person.[52]

Aristotle seems to assume that his audience is familiar with the idea of *topos*, since he takes no steps to define it. To illustrate, let us analyse one of the typical inferential *topoi* relying on the conceptual properties of the predicables, *i.e.*, 'definition', 'genus', 'differentia', 'property', and 'accident'.[53] In the following the inference is based on the conceptual properties of 'genus' and 'species':

> If, then, a genus is suggested for something that is, first take a look at all objects which belong to the same genus as the thing mentioned, and see whether the genus suggested is not predicated of some of them, as in the case of accident: *e.g.* if good be laid down as the genus of pleasure, see whether some pleasure is not good; for, if so, clearly good is not the genus of pleasure; for the genus is predicated of all the members of the same species. (*Topics* IV.1 120b15–20)

The example given offers as a thesis to be refuted 'good' is the genus of 'pleasure', and the following is a possible argument against it with the general principle expressed as a premiss:

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[52] *Topics* I.14 105b12–15, II.4 111b12–16, VIII.14 163b20–33; see Smith (1997), xxiii-xxiv.

[53] *Topics* I.4, 101b17–25.

The genus of a species is predicated of all the members of the same species.

Excessive drinking is not good.
Excessive drinking is a pleasure.
'Good' is not the genus of 'pleasure'.[54]

Our example *topos* can thus be said to be constituted of the following three components: (1) a general form of the *intended conclusion*, understood a denial of the answerer's thesis, (2) *advice* to seek premisses of a certain kind for the given conclusion, (3) a *general principle*, which guarantees the step from the premisses to the intended conclusion.

Because Aristotle's manner of presenting the locations varies, sometimes more and sometimes fewer parts being given, the scholars have disputed whether the inferential locations consist merely of the heuristic advice for inventing arguments or rather of the general principles.[55] My suggested solution is to interpret the notion of *topos* with the help of the *Metaphysics* **A**.1 conception of the master of a *technê*, who distinguishes himself from the experienced craftsman by being able to teach, which is said to involve the capacity to offer the reason why, *i.e.*, evidently to explain why a particular measure of action brings the desired result.[56] Applied to the art of dialectic, this implies that an inferential *topos* consists of all the three components (1)-(3)

[54] This already involves a notion of logical form (Smith 1997, xxv-xxvi). To illustrate how the inferential *topoi* may have helped to develop the formal syllogistics of the *Prior Analytics*, we may reduce this piece of reasoning to the following standard three-term two-premiss syllogism by leaving out the predicable term and the general premiss:

*Excessive drinking is not good.*
*Excessive drinking is a pleasure.*
*Not every pleasure is good.*

[55] Among ancient scholars, *topos* as an advice is accepted by Alexander of Aphrodisias and *topos* as a principle by Theophrastus (Stump 1978, 167–168). Of the contemporary interpreters, Stump (1978), 170, 173–174 favours the former view, de Pater (1965), 101–117, 140–148, 1968, 165 and Slomkowski (1997), 45ff. the latter.

[56] Kakkuri-Knuuttila (1993), Chs. 2 and 3. The *Metaphysics* **A**.1 981a24-b13 model of τέχνη has close affinities with that of Plato in the *Gorgias* 465a, 500e–501a.

mentioned above.[57] An example, if one is supplied, is not part of the location itself, its task being to illustrate the use of the location.[58] The role of the general principle is to offer an account of why the instruction to seek for premisses of a certain kind is a good one: since the syllogism is what the questioner needs to lead the answerer to refute his initial thesis, the general principle explains why this is likely to be achieved by the suggested means. The general principle, often being a necessary truth, hence offers the questioner a good reason to expect the answerer to grant the desired proposition, having conceded certain other propositions. The fact that sometimes only the advice and sometimes only the principle is presented, need not cause serious problems, since the reader can always add the missing factor.[59]

**b. Topos and the syllogism**

It is important to note that the inferential locations yield inferences which satisfy the several conditions of the syllogism. This is more important, since Aristotle's definition of syllogism is not tailored with a formal logical system in mind, but to serve certain discoursive purposes. This can be seen most clearly in its characterization in the *Sophistical Refutations*:[60]

> The syllogism arises from certain things which have been set down in such a way that it is necessary to affirm (λέγειν) something different from the things laid down because of the things laid down. (1 164b27–165a2)

This brief elaboration imposes four conditions on an inference to count as a syllogism, seldom recognized. Since the necessary relation between the premisses and conclusion need not be confined to logical validity in any formal system, as illustrated by the example *topos* in the preceding sub-section, it covers valid inferences *in a broader sense* including conceptual relations.[61] However, not every general principle functions as a good reason for the questioner to expect affirmation in a dialectical exchange: no answerer can foresee all the logical

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[57] Green-Pedersen (1984), 21, Primavesi (1996), 82 ff. and Smith (1997), xxiv-xxviii also adopt the view that the *topos* includes both the advice and the general principle.

[58] This resembles the role of examples as evidence in *Rhetoric* II.20 1393a10–16.

[59] Aristotle seems to be simply following a principle similar to his notion of ἐνθύμημα as an efficient way of presenting an argument in a rhetorical context (*Rhetoric* I.2 1357a16–21, Burnyeat (1994), 21–24, (1996), 99–101).

[60] Bolton (1994), 109–110. See note 33.

[61] Sorabji (1972), 206–208, Green-Pedersen (1984), 26.

consequences of any set of propositions conceded by him. The *topoi* of dialectic, or rhetoric just as well, need to yield inference relations *obvious* to most people without intermediate steps.[62] Part of the goal of dialectical exercises is precisely to improve in the skills of quickly producing and identifying such inferences.[63]

The requirement for the conclusion to be affirmed *because of* the things laid down excludes inferences with redundant premisses not needed for the conclusion to follow. The further condition that the conclusion be *different* from the premisses excludes *petitio principii* fallacies, implying that the inference has the potential to increase one's knowledge, and may thus function as an argument or an explanation.[64]

Clearly, most of the inferential locations of the *Topics* satisfy these four conditions of syllogism, as well as the further requirement derived from the notion of *elenchus* as a refutation of a given proposition, since they are applicable both in *pro* and *con* arguments. The significance of all these five conditions in Aristotle's dialectic, though seldom recognized, is to be seen in the fact that the *Sophistical Refutations* was written mainly to offer solutions to various kinds of fallacies which follow because of breaking the definition of syllogism or *elenchus*.[65]

In addition to the four conditions characterizing the syllogism, however, sometimes Aristotle appears to have a tendency to think of inferences in epistemic terms even in a deeper sense. For, the first criterion for assessing arguments in Ch. 11 rules out as a genuine piece of reasoning one where all or most of the premisses are either false or unacceptable.[66] One important exception to these four conditions is the requirement of necessity, since not all inferences generated by the locations listed in the *Topics* are deductive. This has often been ignored, perhaps, for the reason that Aristotle himself does not mention it in the textbooks of dialectic, though he treats the issue quite sufficiently in the *Rhetoric*.[67] Examples of non-deductive locations are, among others:

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[62] Primavesi (1996), 81–82.

[63] Bolton (1994), 128. Improvement in speed is one of the chief aims of dialectical argument (*Sophistical Refutations* 16, 175a20–26, 18 177a6–8).

[64] Bolton (1994), 110–112.

[65] *Sophistical Refutations* 6 168a17–20, 34–37, 10 171a1–11, 5 167a21–27, Bolton (1994), 109.

[66] *Topics* VIII.11 161b19–22.

[67] *Rhetoric* I.2 1356b16–18 and 1357a27–28 also includes for the most part inferences as rhetorical syllogisms.

> Things the generations of which are good/bad, are themselves good/bad.
> The generations of good/bad things are good/bad.[68]
> If a predicate belongs to a subject, then it also belongs to another subject to which it is more likely to belong to.
> If a predicate does not belong to a subject, then it does not belong to another subject to which it is less likely to belong to.[69]

In addition to the syllogism, induction and analogy are included as relevant forms of reasoning in dialectic, though their role is confined to support premisses of the main syllogism.[70] No doubt Aristotle recognizes their non-deductive nature here as well.

**c. Non-inferential topoi**

A few of the locations, which may be called non-inferential *topoi*, offer strategies for other purposes than constructing inferences. They are, obviously, meant to help the questioner to carry through his argument strategy, as can be seen in the following example:

> Moreover, it is well to alter a term into one more familiar, e.g. to substitute 'clear' for 'precise' in describing a conception, and 'meddling' for 'officious'; for when the expression is made more familiar, the thesis becomes easier to attack. This location also is available for both purposes alike, both for establishing and for overthrowing a view. (*Topics* II.4 111a8–13)

We may note that, along with the illustrative example, this *topos* includes three similar elements as the inferential *topoi*: (1) an intended goal, (2) advice on how to achieve it, and (3) an explanation of why the advice is good in a dialectical exchange. Interestingly enough, the distinction between the questioner's task of refuting a positive view (ἀνασκευάζειν) and establishing one (κατασκευάζειν) also appears here, which accords with the idea that the answerer may adopt either a positive view or its negation as his thesis.[71]

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[68] *Topics* II.9 114b18–22, also III.2 117b4–9, III.6 119b8–13, IV.4 124a20–30, VII.1 152a1–4, Green-Pedersen (1984), 27.

[69] *Topics* II.10 115a7–11, also III.6 119b17–30, IV.6 127b26–27, V.8 137b15–27, VI.7 146a4–11, see Green-Pedersen (1984), 27.

[70] For induction as a second kind of inference in dialectic in addition to syllogism, see *Topics* I.12 105a11–16, as a *topos*, see II.2 109b13–29, III.6 120a32-b6. The strategic rules for induction are given in VIII.2 157a18-b33 and 8 160b10–12. Analogical reasoning is mentioned in I.17, VIII.1 156b10–17 and discussed as a form of hypothetical reasoning in I.18 108b7–19.

[71] Green-Pedersen (1984), 25. Aristotle is not fully systematic in the use of this terminology, Slomkowski (1997), 18.

### d. Strategic rules concerning the topoi

It is easy to see how the mastery of the *topoi*, though not easy to achieve, can promote the discovery of arguments as compared with memorizing particular arguments.[72] Like the mnemonic techniques, developed and widely used by the Greeks and later applied by the Romans to store and recall items one wants to remember, the lists of *topoi* can be used again and again to produce particular arguments of a certain kind.[73] To enhance their feasibility, Aristotle lists the *topoi* according to the predicables, with the exception of those dealing with values and choice given in Book III Chs. 1–4.

We thus obtain the following strategic rule for the questioner:

*Strategic rule for the questioner for inventing arguments:*
The questioner should appeal to the inferential *topoi* to invent arguments for given conclusions and non-inferential *topoi* to guarantee that the answerer concedes the premisses.

A corresponding advice for the answerer is given in Book VIII Ch. 9 160b14–16, noting that in order to be ready to oppose the questioner's arguments, the answerer should first work out an attack on it himself:

*Strategic rule for the answerer for preparing to defend his thesis*:
To prepare himself to defend his thesis, the answerer should first work out an attack on it himself.

## 4. Strategic Rules for the Questioner and Answerer: Concealment of Argument Strategy

### a. Means of concealing the questioner's argument strategy

The rules for the questioner to conceal his argument strategy are most important to our main aim concerning the relevance of dialectical skills in philosophical inquiry.[74] As already mentioned, some interpreters have taken

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[72] *Sophistical Refutations* 34 183b34–184b8. However, Aristotle advises memorizing arguments as well in *Topics* VIII.14 163a36-b22, 164a3–11, b16–19.

[73] Stump (1978), 6, Sorabji (1972), 22–26.

[74] One may ask whether all the advice for the questioner on how to elicit the desired response from the answerer should be called *topoi* or only those given in Books II-VII. Why not call the strategic rules for concealing one's argument strategy offered in Book VIII Ch. 1 of the *Topics topoi,* if the rule for changing an unfamiliar term to a more familiar one is so called? Aristotle may not have found this a matter of

these as evidence that there is, after all, no essential difference between dialectical and eristic disputation, and that dialectic thus has no role in an honest quest for truth. Such views reveal misconceptions concerning the role and nature of the rules of concealment, however. Aristotle's remark in *Topics* VIII.1 155b10–16 that the rules concerning the way questions are posed are useful only for the dialectician and neither for the philosopher, nor for one inquiring by himself seems to have gone unnoticed. It clearly indicates that he regarded dialectic and philosophy as separate social activities, sharing some, though not all means. The goals of their practitioners are contrary in that the philosopher aims at developing scientific syllogisms with premisses, as intelligible and as close to the conclusion as possible, while the dialectician typically needs to take some extra measures not to make his intended argument immediately transparent,[75] because, as Aristotle points out, dialectic always involves another party.[76] Taking the other party into consideration is necessary for the dialectician for several reasons, and in general, as a social activity a dialectical discussion needs to be interesting and enjoyable to each party involved in a manner different from solitary inquiry to which Aristotle compares philosophical activity.[77]

The basic concealment strategy offered for the questioner is to lengthen the series of questions by arguments for the premisses of the main argument, called necessary premisses,[78] then present the questions in a mixed rather than a logical order, and finally jump to the final conclusion by leaving out the intermediate argument steps. By these means the final conclusion comes as a surprise to the answerer as well as to the audience in case there is one:

> Speaking generally, the person who is getting answers in a concealed manner must ask in such a way that when the whole argument has been presented in questions and he has stated his conclusion, the reason why is to be sought. But this will best come about if we argue in the way just stated. For if only the last conclusion is stated, it will not be clear how it follows, because the answerer will not foresee what premisses it follows from if the syllogisms were not spelt out previously. (*Topics* VIII.1 156a13–19)

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great significance, and neither is it for our concerns. The non-inferential *topoi* may be regarded as strategic rules on the same footing as the rules for concealment, for instance.

[75] In this respect the aim of the dialectician is contrary to that of the rhetorician as well (*Rhetoric* II.2 1357a3–4, 10–12).

[76] For different interpretations of πρὸς ἕτερον in *Topics* VIII.1 155b10, 26–27 see the translation in Barnes (1984), Brunschwig (1986), 37, and Bolton (1994), 102.

[77] Devereux (1994), 270 n. 12.

[78] *Topics* VIII.1 155b17–20.

The concealment rules hence provide an important means to catch the attention of the audience.

In laying out a similar list of concealment tricks in *Sophistical Refutations* 15 174a26–29 Aristotle makes it clear that such means are neutral with respect to genuine and merely apparent dialectic: they can be applied both in fair and unfair argument. The rules themselves do not cause the argument to turn into a fallacious one, but do permit the intellectual amusement from which the dialectical practice takes its nourishment. This also holds for the means of adding irrelevant premisses, even though Aristotle notes that they may in particular confuse the answerer into granting propositions he would not otherwise concede, thus making eristic arguments pass more easily.[79] Somewhat earlier he suggests, however, using these rules to encourage an honest reply.[80]

It may be noted that in addition to logical and linguistic matters some of the following list of rules for concealment take into account also psychological characteristics of the answerer.

*Strategic rules for the questioner for concealing his argument strategy:*

1. The questioner should not put the necessary premisses, *i.e.*, the premisses of the main argument directly; but should develop a line of argument for the premisses of the main argument.[81]
2. The questioner should leave the premisses of the final argument unarticulated.[82]
3. The questioner should present the questions in a mixed, instead of a logical, order.[83]
4. The questioner should ask for acceptance for propositions irrelevant to the conclusion.[84]
5. The questioner should not pose the final conclusion in the form of a question.[85]
6. In formulating the question, the questioner should state the definitions for co-ordinates instead of stating them for the terms themselves.[86]

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[79] *Topics* VIII.1 157a1–5. Another reason is that it is too obvious for the conclusion (Smith 1997, 114).

[80] *Topics* VIII.1 156b8–9.

[81] *Topics* VIII.1 155b29–156a11, 156b27–30, *Sophistical Refutations* 15 174a16.

[82] *Topics* VIII.1 156a11–13, 16–22.

[83] *Topics* VIII.1 156a23–26, *Sophistical Refutations* 15 174a22–26.

[84] *Topics* VIII.1 157a1–3. For an illustrative example, see VIII.11 162a24–34.

[85] *Topics* VIII.2 158a7–13, *Sophistical Refutations* 15 174b8–11.

[86] *Topics* VIII.1 156a27-b3.

7. The questioner should formulate his questions so that it remains open whether he wants a 'Yes' or a 'No' answer.[87]
8. The questioner should sometimes bring an objection against himself.[88]
9. The questioner should sometimes formulate the question by adding 'It is generally held that ...' or 'It is commonly said that ...'[89]
10. The questioner should not be insistent.[90]
11. The questioner should sometimes formulate a question as if it were a mere illustration.[91]
12. The questioner should usually ask the most important premiss last; when arguing with ill-tempered people, or with people who consider themselves smart at answering, the most important premiss should be put first.[92]

The main purpose of the concealment tricks is, obviously, to make it more difficult for the answerer to foresee (προορᾶν) the questioner's argument strategy, and to find objections to the premisses.[93] Hence they open up new possibilities both for the questioner and the answerer to show their skills in dialectical argument.

**b. Means of showing the redundancy of propositions**

The most intriguing thing in this connection is that rule 4 above has its counterpart in Ch. 6 in the strategic rules for the answerer to be on the lookout for the relevance of the premisses for the conclusion. The link is indicated, for instance, by the fact that the term 'foresee' used in connection with the rules of concealment (155b13, 156a18), also appears here (VIII.6 160b12). By taking a look at this pair of rules we gain a more informative picture of what competition about dialectical skills meant for the ancient Greeks.

The somewhat artificial way of marking out the redundant propositions from the relevant ones clearly indicates that the rules do not characterize

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87 *Topics* VIII.1 156b4–9, *Sophistical Refutations* 15 174a30–33. For competitive purposes it is sometimes useful to formulate the question in terms of contraries instead of negations (174a40-b7).
88 *Topics* VIII.1 156b18–20.
89 *Topics* VIII.1 156b20–23.
90 *Topics* VIII.1 156b23–25.
91 *Topics* VIII.1 156b25–27.
92 *Topics* VIII.1 156b30–157a1.
93 *Topics* VIII.9 160b14–16.

everyday encounters, but are meant for formal disputations. The basic idea is that the answerer concedes all propositions not relevant to the conclusion, and for the relevant ones states their degree of acceptance, but says that they are too close to the conclusion and the thesis is refuted if they are granted.[94] In addition to acceptable and unacceptable propositions, the relevance rules take into account the middle position in which the proposition is neither acceptable nor unacceptable, a possibility mentioned in the preceding Chapter and to be discussed here in Section 6.

> *Strategic rules for the answerer to mark redundant propositions:*
> The answerer should concede all propositions irrelevant to the conclusion proposed by the questioner and state whether they are acceptable or unacceptable, but not add anything if they are neither.
> As to propositions relevant to the conclusion, the answerer should state whether they are acceptable, unacceptable, or neither, and that the thesis is refuted if they are granted.

Interpreting the concealment rules in the light of the relevance rules for the answerer form a clear vindication of the main thesis of this paper. First, this pair of rules offers efficient means for competing about dialectical skills. The answerer can manifest his skilfulness by showing that he can anticipate the questioner's argument strategy and distinguish the relevant from the irrelevant propositions,[95] while the latter gains credit only if the extra propositions were stated on purpose. As Aristotle remarks himself, apparently making a reference to the complementary roles of the answerer and questioner described in *Topics* VIII.4 159a20–24:[96]

> [I]n this way, not only will the answerer appear not to suffer anything through his own fault, if he concedes each premiss foreseeing [what will follow], but also the questioner will get his syllogism[.] (*Topics* VIII.6 160a11–13)

The deeper purpose of the pair of concealment and relevance rules is, however, to develop skills of good reasoning, necessary in a dialectical inquiry (σκέψις) towards truth. While the concealment rules may help the answerer

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[94] *Topics* VIII.6 159b39–160a11, cf. II.5 112a7–16.

[95] Slomkowski (1997), 37, Smith (1997), 133.

[96] Important devices in competition are that 'among competitors, the questioner must at all costs appear to be inflicting something on the answerer, while the answerer must appear not to be affected' (*Topics* VIII.5 159a 30–32). See *Sophistical Refutations* 15 174a19–22.

to elicit his true opinion, the relevance rules remove his motivation to state the contrary. Furthermore, the latter are important in guaranteeing that the inference is a genuine syllogism with no premisses irrelevant to the conclusion, since the propositions marked as redundant are not to be taken as premisses.[97] These rules help, likewise, to check that the questioner has not introduced redundant premisses by mistake.

## 5. Strategic Rules for a Proper Syllogism: Petitio Principii and Contrary Premisses

Among the rules for those assessing a dialectical disputation in Chs. 11 and 13 Aristotle discusses two ways of posing poor questions which appear to yield strategic rules both for the questioner and the answerer. While the questioner should avoid begging the final conclusion and asking contrary premisses, the answerer should correspondingly watch out for such premisses to reject them when found. It was perhaps considered a merit in the latter if he also pointed out the reason for the rejection. The reasons do in fact derive from the defining characteristics of the syllogism, requiring that the conclusion be different from the premisses and that the given premisses be the reason why the conclusion follows. The first requirement is broken by begging the question and the latter by asking contrary premisses.

Aristotle offers an interesting list of five ways of *petitio principii*:

*Strategic rule for the questioner to avoid begging the final conclusion*:
The questioner should not ask premisses of the following kind:

(i) the final conclusion either in the same or different terms
(ii) a universal proposition of which the final conclusion is a particular case
(iii) a particular proposition of which the final conclusion is an inductive generalization
(iv) two propositions of which the final conclusion is a conjunct
(v) a proposition equivalent to the conclusion.[98]

*Strategic rule for the answerer to object to begging the final conclusion*:
The answerer should reject a proposition which begs the final conclusion aimed at by the questioner in one of the ways mentioned in the strategic rule for the questioner.

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[97] *Topics* II.5 112a9–11, cf. *Sophistical Refutations* 17 176a21–27.
[98] *Topics* VIII.13 162b34–163a13, also 11 161b11–18.

Cases (ii)-(iv) have been the cause of puzzlement, since they are not included in the treatment of the matter in *Prior Analytics* II.16.[99] The problem disappears as soon as one interprets their role in the context of dialectical disputations. Having an inductive generalization, an application of a universal to a particular, or an inference to a conjunction as the main argument to the desired conclusion would certainly make a dialectical disputation quite pointless: the necessary distance from the conclusion would be lost and it would be too easy for the answerer to state his objections, indeed, all the fun would be spoiled by the whole interchange being over as soon as it began.[100] However, none of these need to be forbidden moves at an earlier stage of the discussion. Obviously, no syllogism derives in the case of (i) and (v) because of the requirement that the conclusion needs to be different from the premisses, which explains why only these two cases are mentioned in the *Prior Analytics*.[101]

The following pair of rules states the ways of asking for contrary premisses listed by Aristotle:[102]

*Strategic rule for the questioner to avoid asking contrary premisses*:
The questioner should not ask premisses of the following kind:
(i) a proposition and its denial
(ii) a proposition and its contrary
(iii) a universal proposition and a denial of one of its cases
(iv) a particular proposition and its universal denial
(v) a proposition contrary to a consequence of propositions already conceded
(vi) propositions from which contraries follow.

*Strategic rule for the answerer to object to contrary premisses*:
The answerer should reject a proposition which is contrary to a proposition already conceded by him in one of the ways mentioned in the strategic rule for the questioner.

Both of these sets of rules support the main contention of this paper by demanding logically neat and genuine inferences. An inference with contrary premisses is not a good one and, for Aristotle, not even a syllogism, since one

[99] For different solutions, see Smith (1997), 150–151.
[100] *Sophistical Refutations* 7 169b12–17, see Bolton (1994), 110–114, Smith (1997), 151. Note that Aristotle uses the same example of applying a universal to a particular case in both *Topics* VIII.1 155b30–34 and VIII.13 163a2–3.
[101] See *Topics* VIII.13 162a31–33 and *Prior Analytics* II.16 65a35–37.
[102] *Topics* VIII.13 163a14–28, see also 11 161b11–15.

of the contraries is not needed for the conclusion to follow. Clearly, the *petitio principii* rules imposing stricter demands than necessary for philosophical research form no objection to the relevance of dialectical skills in philosophical inquiry.

## 6. Strategic Rules for the Answerer: The Epistemic Status of Premisses

The constitutive rule for the answerer for accepting premisses (Section 2.b) does not guarantee that an inference is an *argument*, one precondition of which is that, in addition to being acceptable, the premisses are initially more acceptable than the conclusion so that, at least in the case of deductive reasoning, the acceptance of the inference raises the degree of acceptability of the conclusion. An argument thus has the potentiality to affect the acceptability of the conclusion. Aristotle is, to be sure, aware of the significance of this condition, although, in the passages most extensively devoted to this question he surprises us by abandoning the requirement that the premisses need to be dialectical by allowing unacceptable premisses. Having made the distinction between three epistemic statuses of the theses, acceptable, unacceptable, and neither acceptable nor unacceptable, he states what appears to be a condition for arguments:

> [W]hoever deduces well (καλῶς) deduces the problem [here the desired conclusion] assigned from more acceptable and more familiar things[.] (*Topics* VIII.5 159b8–9)[103]

He postulates simultaneously three situations: if the thesis of the answerer is unacceptable, the conclusion intended by the questioner is acceptable; if the thesis is acceptable, the conclusion is unacceptable; if the thesis is neither acceptable nor unacceptable, the conclusion is also neither. Since the above criterion demands that, in each case, the premisses are more acceptable and more familiar than the conclusion, the acceptance of the inference does raise the degree of acceptability of the conclusion, though, in the second and third cases, not up to the level of acceptability. For, if the conclusion is generally rejected, some of the premisses may also be generally rejected.[104] If such

[103] Also in *Topics* VIII.3 159a8–9, 6 160a13–16. 'More familiar things' here means premisses for which it is easier to produce arguments than for the conclusion (*Topics* VIII.3 159a10–11).

[104] *Topics* VIII.5 159a38-b23.

inferences are to be considered arguments at all, they will be arguments merely in *a weak sense*. These will be needed, though, if dialectic is to be argument both *pro* and *con*.

One may wonder, however, why the answerer would not rather choose the opposite of an unacceptable proposition, thus conceding a dialectical premiss, particularly if he can foresee that it is relevant to the conclusion. It seems that a great deal of cooperative will is needed from the answerer were he to defend an acceptable thesis by granting unacceptable premisses. However, as we have seen, he may rely on the relevance rules to manifest his capacity to anticipate the questioner's line of argument (Section 4.b), and thus save face.

Aristotle also offers a further classification of premisses in Ch. 5 by distinguishing degrees of acceptance *without qualification* and *conditionally*. By the latter he means acceptability to a particular person or school, the answerer himself, or a particular philosopher, such as Heraclitus. The guiding principle here is that in conceding premisses the answerer should follow the same criterion as in choosing his initial thesis.[105]

The following rule hence qualifies the constitutive rule for the answerer for accepting propositions by posing restrictions on the degree of acceptability as well as by allowing non-dialectical premisses:

> *Strategic rule for the answerer for accepting premisses*:
> The answerer should accept propositions proposed by the questioner which are more acceptable or at least less unacceptable than the conclusion aimed at by the questioner so that, if the thesis is acceptable, unacceptable, or neither without qualification/conditionally, the answerer should make his concessions without qualification/conditionally.

This strategic advice is given immediately after Aristotle promises to turn to issues concerning how an answerer should defend his thesis well in disputations for the purpose of training (γυμναστική), testing (πειραστική), and inquiry (σκέψις) in contradistinction to competitive discussions, for which effective strategies, evidently, have been codified.[106] One should ask, however, whether the above rules apply to each of the three purposes. The idea of accepting *adoxic* premisses seems to be out of place in arguments testing the interlocutor, for to convince one that he does not know a certain proposition, or that his beliefs are inconsistent, the premisses have to be acceptable rather than

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[105] *Topics* VIII.5 159a39-b1, 23–35. Cf. Vlastos (1983).
[106] *Topics* VIII.5 159a25–37.

unacceptable to him.[107] However, in serious inquiry for truth, poor argument with some *adoxic* premiss advanced for the sake of argument can be useful for distinguishing acceptable from unacceptable propositions, and the true from the false.[108] This appears to be a good reason to practice such moves in training arguments, even though Aristotle remarks in Ch. 3 that a proposition put by the questioner 'should be conceded by someone practising if it only appears true (ἀληθὲς μόνον φαίνηται)' (*Topics* VIII.3 159a12), obviously referring to one not yet familiar with what counts as an ἔνδοξον.

## 7. Strategic Rules for the Questioner and Answerer for Good Argument

### a. Induction

Book VIII of the *Topics* includes three pairs of rules for good argument which deal directly with truth, imposing severe demands on the answerer to control the quality of the argument. Moreover, the answerer is granted powers similar to those of the questioner by being allowed to pose arguments against the premisses and conclusions put to him. This implies that, within a single discussion, the argument may turn into a debate; in particular as the questioner seems to be entitled to make his own objections to the answerer's counter-arguments.

A natural place for the answerer to be on the lookout for weaknesses in reasoning is inductive as well as analogical reasoning, neither of which is deductively valid. Induction is dealt with from the point of view of the questioner in Ch. 2 and from the point of view of the answerer in Ch. 8 which also mentions analogy. As became evident in the rules concerning begging the question, induction cannot form the main argument for the final conclusion, but only auxiliary arguments for its premisses.[109] Furthermore, Aristotle advises

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[107] Smith (1997), 131. For peirastic arguments, see *Topics* VIII.10 161a24–36, *Sophistical Refutations* 2 165b4–7, 8 169b24–25, 11 171b4–6, 172a21–32. Cf. Bolton (1990, 1993, 1994).

[108] Bolton (1994), 107 and Smith (1997), 140. Cf. *Topics* VIII.9 160b21–22, 12 162b16–27. For a discussion of this, see 7.c. on 'solution'. The remark that the degree of acceptability of the conclusion is the mean of the degrees of the premisses (*Topics* VIII.11 161b19–22, 162a19–23) is not, however, in harmony with Aristotle's views in *Posterior Analytics* I.2–3 (Smith 1997, 144–145).

[109] *Topics* VIII.8 160a35–39.

to use induction with inexperienced interlocutors and syllogism with more experienced ones.[110]

The guiding principle here offers the questioner a proper chance to proceed, but what is more important, it neatly supports good argument as a means toward truth: the answerer should concede the particular cases if they are *true and acceptable*, and the universal as well, if he cannot put forward any objection.[111] Likewise with the general background assumption in analogical inferences.[112] Otherwise the answerer is to be considered a quarrelsome person preventing the common goal which, as we can see, is good argument.[113]

As soon as the questioner asks the respondent to concede several similar cases, the latter can anticipate that either a universal generalization or a further case will be offered in one of the next moves, and thus he should prepare himself with a counter-example or counter-argument against the conclusion. The questioner's interrogative powers are likewise expanded, since he may require the answerer to state his objections where the latter refuses to accept a generalization on the basis of several instances. This involves, in fact, the right to pose a wh-question.[114]

The disputation need not change its course completely as a result of the answerer's objections, since the questioner is allowed to qualify the generalization so as to make it immune to criticism.[115] Aristotle refers to truth again in pointing out that the proper place for such qualifying moves are universals which are only partly true, thus noting the role of the rules of induction in the search for truth through the refinement of given *endoxic* beliefs.[116]

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[110] *Topics* VIII.2 157a18–20, 14 164a12–13, I.12 105a16–19.

[111] *Topics* VIII.8 160a39-b13. Cf. *Sophistical Refutations* 15 174a34–38.

[112] *Topics* VIII.8 160a38, 1 156b10–17.

[113] *Topics* VIII.8 160b2–13, see 11 161a21-b10, Smith 1997, 135.

[114] *Topics* VIII.2 157a34-b2.

[115] *Topics* VIII.2 157b8–33.

[116] *Topics* VIII.2 157b28–31. Qualifying generalizations accords well with Aristotle's understanding of induction as reasoning with three terms, which deviates from our two-term notion of induction. As indicated in *Topics* I.12 105a13–16, VIII.2 157a21–33, the goal of induction may be to discover the general term, the *major* in the language of the syllogistic logic of the *Analytics*, while in the so-called *inductive syllogism* the discovery concerns the middle term (*Prior Analytics* II.23 68b15–37, see Hintikka (1980), Kakkuri-Knuuttila and Knuuttila (1990)). The inductive syllogism may, however, be used for justification, an example of which is the support through particular virtues for the definition of virtue as a stable capacity to hit the mean (see *Nicomachean Ethics* II.7 1107a28–32).

Since the main responsibility of good argument lies with the answerer, the moves around induction are easier to grasp if we begin with those for the answerer.

*Strategic rules for the answerer for induction*:
The answerer should concede all particulars, if true and acceptable, but should try to bring an objection against the universal either in the form of
(ii) a negative instance or
(iii) a counter-argument.
The answerer should concede the universal supported by many instances if he has no objection to bring against it.

*Strategic rules for the questioner for induction:*
The questioner should ask for objections to a universal refused by the answerer when the answerer has conceded the particulars in its support.
The questioner should modify the universal to meet the objections raised by the answerer.

Evidently the answerer may not always know whether the *endoxic* particulars proposed by the questioner are true or false, specially since the particulars proposed as premisses are not singular cases but generalizations.[117] This may, perhaps, be expected from the real expert with refined judgemental capacities as a result of long training in dialectical practices. In any case, the treatment of induction reveals that, instead of being excluded from dialectic, considerations of truth have a certain role in it.

**b. Ambiguous Terms**

Aristotle also offers a pair of rules concerning ambiguous terms, in Ch. 2 for the questioner and in Ch. 7 for the answerer. Like the rules for induction, these involve qualification of partial truths.[118] They hence serve the purpose of truth *via* good argument by offering means of avoiding fallacies of equivocation, most useful for the purpose of competition about argumentative skills, as well as for an Aristotelian philosophical inquiry. Here, too, the answerer is primarily responsible for good argument, and may manifest his dialectical abilities by distinguishing the several senses of ambiguous terms.

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[117] Kakkuri-Knuuttila and Knuuttila (1990).

[118] *Topics* VIII.7 160a26–28, see also VIII.2 157b2–8. See *Topics* I.13 105a23–24, 15 106a1–107b37.

In Ch. 7 Aristotle states that the answerer not only has the right to ask for clarification of ambiguous terms, but also the right to qualify propositions he accepts as premisses.[119]

*Strategic rules for the answerer concerning the meanings of the terms*:
If the terms are simple and clear, the answerer should say 'Yes' if he concedes the statement and 'No' if he rejects it.
If the sense of at least one of the terms is unfamiliar to the answerer, he should say 'I do not understand'.
If at least one of the terms is ambiguous and all of the senses are familiar to the answerer, then
(i) if he concedes the proposition in all of its senses, he should say 'Yes', and if he rejects it in all of its senses, he should say 'No',[120] and
(ii) if he concedes the proposition in one sense and not in the other, he should say in which sense he concedes it and in which sense not.[121]
If at least one of the terms is ambiguous and the answerer has conceded or rejected the proposition without realizing it, and if he later realizes the ambiguity, he may correct the earlier statement and say in which sense he concedes it and in which sense he rejects it.

Aristotle points out, furthermore, that where the answerer refuses to accept any of the definitions or distinctions suggested by the questioner, the latter is allowed to require the answerer's own specifications by posing the question in wh-form.[122]

*Strategic rule for the questioner for posing questions concerning the meanings of the terms:*
If the answerer does not accept definitions or distinctions presented by the questioner, the questioner should require the answerer to explicate his own definition or distinctions.

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[119] *Topics* VIII.7 160a24–34. Examples of Socrates' moves of this kind are to be found in Plato's *Euthydemus* 293b, 295b, e, 296a, b.

[120] In *Sophistical Refutations* 17 176a9–18 Aristotle proposes a different practice: always to point out an ambiguity in order to avoid giving a single answer to two questions.

[121] This is called one of the ways of giving a solution to a false syllogism in *Sophistical Refutations* 18 176b36.

[122] *Topics* VIII.2 158a22–24.

### c. Solution

In spite of the fact that perhaps the most intricate move in *Topics* VIII is the treatment of solution (λύσις) in Ch. 10, involving a shift from an emphasis on ἔνδοξα to an emphasis on truth, this passage has gone almost unnoticed.[123] This discussion offers further evidence for the claims that dialectic can aim at good argument and help to search for truth, that the main responsibility for the quality of argument lies with the answerer, and that the exchange may involve logical debating moves. The means listed are, for some reason, said to be the ways to hinder, or at least to impede an argument from coming to its conclusion.[124] However, most of the strategic rules for the answerer may likewise be counted as ways of causing difficulties for the questioner in reaching the intended conclusion.

As already repeatedly pointed out, a proper dialectical argument relies on *endoxic* premisses, no matter whether they are true or false,[125] except when the conclusion is *adoxic*, in which case some premiss may be *adoxic* as well. However, in Ch. 10 the answerer is required to present a solution to an argument with a false conclusion and, more, to identify the cause of the falsity.

Hence the proper solution to an argument with a false conclusion is to reject the premiss on which the falsity depends. Though, the best way of manifesting one's dialectical skills is to put a counter-argument against that premiss, as this reveals that one knows the cause of the falsity:

> Now, the person who rejects that because of which the falsehood comes about has certainly solved the argument, but it is the person who knows that the argument is by means of this who knows the solution. For it is not enough to object, not even if what is rejected is false, but he must also demonstrate why it is false: this is how it will be evident whether or not he makes his objection with foresight. (*Topics* VIII.10 160b33–39)[126]

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[123] Bolton (1991) and Kakkuri-Knuuttila (1993) Chs. 3 and 5 discuss the *akrasia* argument in the *Nicomachean Ethics* VIII.3 as an example of λύσις. Also Bolton (1994), 107.

[124] *Topics* VIII.10 161a1, 13–15.

[125] *Topics* VIII.11 162a8–10, 12 162b27–28, *Posterior Analytics* I.19 81b18–22.

[126] See also *Topics* VIII.12 162b11–15 and *Sophistical Refutations* 18 176b38–40. Judging by the example adjoined, the appropriate solution is to object to a premiss such that the same solution applies to other cases as well. For instance, if one infers from the premisses 'He who sits, writes' and 'Socrates is sitting' the conclusion 'Socrates is writing', the cause of the falsity is, as Aristotle points out, the general premiss, even though the second may also be false (*Topics* VIII.10 160b25–33). However, in purely competitive, *i.e.*, eristic disputations, the answerer should try to suggest purely apparent solutions *(Sophistical Refutations* 17 175a31 ff.).

Even if solution is here characterized for the case where the argument has been brought to its conclusion, the same procedure can also be applied during the disputation. This gives more credit to the answerer, because it shows he has anticipated the questioner's argument strategy. A similar idea is expressed in the *Sophistical Refutations*:

> Whenever one foresees any question coming, one should put in one's objection and have one's say beforehand; for by doing so one is likely to hinder the questioner most effectually. (*Sophistical Refutations* 17, 176b26–28)

The next chapter adds three further forms of solution as a means of solving false or apparent reasoning: an argument with a true conclusion and a false premiss is solved, likewise, by rejecting the false premiss, an argument with a false conclusion can also be solved by a counter-argument against the conclusion, and an argument which merely appears to reason is solved by drawing distinctions.[127]

*Topics* VIII.10 also includes a practical remark that an objection to a false premiss should not be such that arguing against it would take more time than allowed for the discussion.[128] This involves another reference to the possibility that certain dialectical discussions may turn into debates between the participants, as the answerer may produce counter-arguments against the premisses which the questioner then attacks.

This gives us the following rules:

*Strategic rules for the answerer for stating objections:*

The answerer should solve arguments leading to a false conclusion by rejecting the premiss on which the falsity of the conclusion depends, and advance a counter-argument against it, or advance a counter-argument against the conclusion.

The answerer should solve arguments with a false premiss and a true conclusion by rejecting the false premiss, and produce a counter-argument against it.

The answerer should solve arguments that fail to reason by making distinctions.

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[127] *Sophistical Refutations* 18 176b29–177a2. For uses of λύσις in this sense see, for instance, *Physics* I.2 185a5–10, *De Anima* II.11 422b19–30, and *Politics* VIII.6 1340b40–1341a5.

[128] *Topics* VIII.10 161a9–12. Aristotle evidently has in mind arguments, such as paradoxes of Zeno, which would impose on the questioner a task more difficult to deal with than the original one (*Topics* VIII.8 160b6–10, 3 159a4–14).

If the answerer does not succeed in doing this during the disputation, he should do it after it is concluded.
The answerer's objection should be such that arguing against it would not take more time than allowed for the discussion.

*Strategic rule for the questioner for stating objections:*
The questioner should try to solve arguments the answerer advances as solutions.

If the only way of solving fallacious inferences given is by making distinctions, this indicates that Aristotle fails to consider non-deductive syllogisms in the textbooks of dialectic. Here we may, however, refer to the treatment of the refutation of probabilities in *Rhetoric* II.25 where he notes that arguments from probabilities cannot be refuted through an objection, since it shows merely that the inference is not a necessary one. They have to be refuted, instead, by showing that the contrary is more probable.[129]

As Aristotle points out later, syllogisms leading to false conclusions are sometimes produced on purpose, and sometimes not, in which case the questioner is to be blamed for not having noticed the false premisses. However, in both cases the arguments are useful if their solutions help to identify false premisses.[130]

The rules discussed in this Section, those concerning solution in particular, seem to presuppose that, after all, truth is within the reach of the participants in some species of dialectic, at least. Why then care about the social epistemic status of the premisses and conclusion at all, *i.e.*, their degree of acceptability within one group or another? Aristotle's approach here, like in rhetoric and philosophy, seems to be that, though not all ἔνδοξα are true, it is, nevertheless, the best we have to start with. By way of argument and debate we may proceed towards truth in a manner peculiar to each of these communicative fields. But, clearly, it is the dialectical disputations which are meant to enhance one's skills in argument in general and the capacity to discern the true from the false, σκέψις, perhaps, being the one with a special focus on truth. For instance, such complicated concerns as are brought into play by solution seem to go beyond the task of revealing the ignorance of one who pretends to know, which forms the goal of certain examination arguments.[131] As for training arguments, such moves could be practiced only at a fairly advanced level.

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[129] *Rhetoric* II.25 1402b22–1403a2.
[130] *Topics* VIII.12 162b16–22.
[131] Cf. *Topics* VIII.11 161a24–33.

## 8. Strategic Rules for Criticizing an Opponent and Abandoning the Discussion

In Ch. 2 Aristotle deals briefly with poor disputation, following as a result of too much time spent on presenting a single argument.[132] In such situations, the other party should either criticize the faulty one, or perhaps even abandon the discussion. The latter possibility indicates that if the discussion stops being dialectical, the participants have the right to withdraw. The fault lies with the questioner, if he fails to reason or merely rambles because of repeating the same question, or posing too many questions without drawing the (inductive or analogical) conclusion. The remark that the answerer is to be blamed if he does not answer, could be expanded by later comments on cantankerous opponents who cause problems by not conceding even what is obvious, granting only the contrary of what the questioner proposes, or by claiming not to understand, thus exploiting the strategic rules concerning ambiguous terms.[133] By refusing to continue, the questioner can thus prevent the disputation from turning into an eristic one.

Hence we have the following rules for attacking the opponent:

*Strategic rules for criticizing the opponent and abandoning the discussion*:
The questioner should criticize the answerer or abandon the discussion if he fails to answer as he should.
The answerer should criticize the questioner or abandon the discussion if he fails to draw conclusions.

## 9. Criticism of a disputation

Aristotle's treatment of criticism (ἐπιτίμησις) of dialectical disputations in Chs. 11–13 offers further support for the relevance of dialectical skills to philosophical inquiry.[134] Though the position here is of those following an exercise or examination, ready to express their evaluation after the argument is concluded, we need not infer that the disputants themselves were not allowed to perform similar tasks. Inquiry (σκέψις) is not mentioned here for the obvious reason that it belongs to a social context in which the assessment of

[132] *Topics* VIII.2 158a25. Aristotle also refers to a time limit in VIII.10 161a10–12; see Moraux (1968), 285, Sorabji (1972), 27, and Ryle (1966), 105, 196; see Stump (1978), 163–164 for their criticism.

[133] *Topics* VIII.2 158a25–30, 10 161a2–4, 11 161a21–24.

[134] The verb ἐπιτιμᾶν is used in legal contexts for the assessment of penalties (Smith 1997, 138).

the participants' performance is less under focus than the evaluation of the arguments in themselves. This is not sufficient in training and examination, for the adversaries may find it hard to suppress their competitive desires, thus turning the discussion into an eristic one.[135] At any rate, in pointing out the consequences of the cooperative nature of the dialectical enterprise, Aristotle emphasizes that the goal is good dialectical argument:

> A criticism of an argument just as an argument in itself is not the same as criticism of it when it is put as questions. For the person questioned is often at fault for the argument not being argued well, because he will not agree to the premisses from which it would be possible to argue well against the thesis. For it is not in the power of one participant alone to see that their common work is well accomplished. (*Topics* VIII.11 161a16–21).

One's lack of capacity to identify what counts as an ἔνδοξον or a genuine syllogism may be another cause of poor argument. A further reason may be the problem at issue, as the conclusion may be simply such that it is not possible to put good arguments for it.[136] Hence the questioner is said to have argued well if he has brought the discussion to a conclusion from the most acceptable premisses possible regarding the difficulty of the conclusion, as well as the skills and mood of the answerer.[137] This I see as the ground for Aristotle to characterize dialectic as argument with premisses as acceptable as possible.[138]

Aristotle also offers criteria for judging arguments themselves, *i.e.*, as separated from the context of dialectical disputations. The criteria are based on the notions of syllogism and *elenchus* in a manner we are already acquainted with, and the epistemic requirements that the premisses be more acceptable and more familiar than the conclusion, included in the strategic rules for the answerer. Only two additional conditions are given, both needing a comment.

One of these is the statement that nothing is concluded (μὴ συμπεραίνηται) at all if all or most of the premisses are false or unacceptable.[139] This imposes a stronger restriction on the strategic rule for the answerer for accepting propositions than the

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[135] *Topics* VIII.11 161a23–24, 37-b10.

[136] *Topics* VIII.11 161b34–162a11.

[137] *Topics* VIII.11 161b37–38.

[138] 'Our programme was, then, to discover some faculty of reasoning about any theme put before us from the most acceptable premisses that there are ... in defending an argument we shall defend our thesis in the same manner by means of views as reputable as possible.' (*Sophistical Refutations* 34 183a37-b6, also *Topics* VIII.11 161b37–38). Cf. Bolton (1993), 144, (1994), 107.

[139] *Topics* VIII.11 161b19–22.

ones in Ch. 5, and indicates that for Aristotle the notion of drawing conclusions in the dialectical context includes an epistemic aspect not explicated in his definition of a syllogism. The message is clear, however. An inference with premisses all or most of which are either false or unacceptable cannot have epistemic value in a search for truth via *pro* and *con* argument. Such an argument is thus a poor one as judged by itself, though not necessarily a failure in the particular situation.

Another additional condition is what Aristotle calls 'argument through the appropriate method' (κατὰ τὴν οἰκείαν μέθοδον in Ch. 12 162b8). I shall use this idea to interpret the mysterious contrast between dialectical and eristic argument in Ch. 11 161a33–36 where the former is compared with geometrical proof. In the *Sophistical Refutations* Aristotle claims that reasoning should rely on starting points (ἀρχαί, 9 170a34) peculiar to the field in question (κατὰ τὴν τέχνην, 170a33). Geometry and medicine should argue on the basis of geometrical and medical starting points, respectively, no matter whether the conclusions are true or false. The peculiar feature of dialectic as compared with the particular sciences is that its *topoi* (170a35) are common (κοινοί, 170a36) to all sciences and capacities.[140] To illustrate, an attempted proof on the basis of a false diagram is called a fallacy in geometry, while a denial 'that it is better to take a walk after dinner by means of Zeno's argument' (172a8–9) is said not to be a medical, but a dialectical or eristic argument. This can be grasped on the basis of Aristotle's wider notion of logical form and validity pointed out in the discussion of inferential *topoi*, for, while the latter refers to the common notion of 'motion', the former depends on geometrical notions and axioms.[141] This allows Aristotle to say that dialectic offers a general theory of argument, and does not deal with any particular genus, because it deals with all.[142]

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[140] Dialectical arguments are often said to be λογικός in contrast to οἰκεῖος (*Posterior Analytics* I.24 86a22, *Physics* III.5 204b4, *De Caelo* I.7 275b12, *Generation of Animals* II.8 747b28–29, *Metaphysics* Z.4 1029b13, 1030a27, 17 1041a28, XII.1 1069a28, *Eudemian Ethics* I.8 1217b17, 21), or in contrast to λογικός (*Nicomachean Ethics* VII.3 1147a24, *Generation and Corruption* I.2 316a5–14, *Physics* III.5 204b4ff.). See Charles (1984), 128 n. 27, Irwin (1988) Ch. 2 n. 48, 49 and Ch. 7 n. 15.

[141] Cf. *Topics* VIII.14 164a7–11.

[142] *Sophistical Refutations* 11 171b6–22, 34–172b4. See also 9 170a31-b11, and Smith (1993), 339, 1994, 145–148. Aristotle's contrast between common and peculiar (ἴδιον) in 11 172a5, 25, 38 resembles the distinction between common and peculiar *topoi* in *Rhetoric* I.2 1358a10ff., II.22 1396b8–10, 27ff. In line 172a25 ἴδιον refers to principles of geometry in harmony with *Rhetoric* I.2 1358a22–26. Compare Bolton's reading of τὰ κοινά in his interpretation of examination in 1994, 129–131.

The following list consists of Aristotle's criteria for good dialectical argument which he offers for criticizing the performance of the questioner and answerer in an exercise or examination disputation.[143]

*The criteria of good dialectical argument:*

(i) The premisses necessarily imply a conclusion.[144]
(ii) The premisses imply the intended conclusion.[145]
(iii) No premiss is left out.[146]
(iv) There are no redundant premisses, *e.g.*, no contrary premisses.[147]
(v) The conclusion is different from the premisses, *i.e.*, the questions do not beg the intended conclusion.[148]
(vi) Most of the premisses are true and ἔνδοξα.[149]
(vii) The premisses are more acceptable than the conclusion.[150]
(viii) The premisses are more familiar than the conclusion, *i.e.*, they are not more difficult to argue for than the conclusion.[151]
(ix) The method of argument is appropriate to the field in question, *e.g.*, in dialectic a syllogism relies on a general proposition such as those included in the inferential *topoi*.[152]

Conditions (i)-(v) are logical in their nature, condition (ii) being derived from the definition of *elenchus* and the others from the definition of syllogism, which were shown to be satisfied by the strategic rule for the questioner to employ the inferential locations (Section 3.b). Those numbered (vi)-(viii) are epistemic conditions included in the strategic rules for the answerer. Clearly, conditions (i)-(viii) are relevant to philosophical inquiry. To what extent condition (ix) needs to be refined for such a pursuit is an

[143] Cf. Smith (1997), 141–142. I take the description of clarity in *Topics* 12 162a35-b2 to concern how the argument is expressed, thus helping to capture its components. Cf. Smith 1997, 146–147.
[144] *Topics* VIII.11 161b22–24, also 12 162b3–5, 25–26.
[145] *Topics* VIII.11 161b20–21, 24–26, also 12 162b5–7.
[146] *Topics* VIII.11 161b23–24, also 12 162a35–37.
[147] *Topics* VIII.11 161b22–24, 28–30, 161b11–18.
[148] *Topics* VIII.11 161b11–15.
[149] *Topics* VIII.11 161b19–22.
[150] *Topics* VIII.11 161b26–28, 30–31.
[151] *Topics* VIII.11 161b31–33.
[152] *Topics* VIII.11 161b33–36, 12 162b7–11.

issue for further research.[153] We may conclude that the criteria Aristotle offers for assessing arguments in themselves in dialectical disputations accord with the strategic rules for the questioner and answerer. These criteria are, however, epistemically weaker than those concerning induction and solution, since they do not require the premisses to be true or that the 'false' syllogisms are solved. This may be seen to justify the interpretation that the solution moves belong properly to inquiry type of dialectic, and that truth is not typically to be found in single arguments, but through *pro* and *con* argument.

## 10. Conclusion

The purpose of this paper has been to explicate basic features of dialectic as presented in Aristotle's *Topics* in order to build a firmer basis for assessing the relevance of dialectic for philosophical inquiry and the pursuit of truth in general. Since dialectic and philosophy are for him two distinct social communication practices with their peculiar goals, dialectic forms no part of philosophy as such. One may, nevertheless, pose the question whether dialectical skills are relevant for the argument strategies in an Aristotelian philosophical inquiry. To proceed in this task, I have explored the notion of *topos* underlying the advice for finding arguments presented in Books II-VII, and the rules for the questioner and answerer to be found in Book VIII. In order to reveal their logical, epistemic, and psychological roles, I have divided the rules into constitutive and strategic ones, classified them into systematic groups, ordered into pairs to illuminate the complementary tasks of the discussants and, finally, investigated their relation to the criteria for assessing dialectical disputations. I have also made some remarks concerning the kinds of dialectical disputation, but this matter has not been systematically dealt with. Neither have I studied Aristotle's comments on dialectic in his other treatises.

The investigation shows that the aim of proper dialectic is good argument, in which the truth of propositions also plays some role. It turns out that Aristotle does not regard a single line of argument as a strong means in the search for truth. The limits and possibilities of dialectical argument are clarified rather by the insight that the strategic rules delineate dialectic as a continuum of *pro* and *con* moves in argument as suggested already by his methodological remark in *Topics* I.2 101a34–36.

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[153] Nussbaum (1978), 108–113 discusses the relevance of the appropriateness criterion to philosophical inquiry in some of Aristotle's works. See also Freeland (1990).

Unfortunately, Aristotle himself is not very informative about how truth can be approached through *pro* and *con* argument. It may even seem that at the time of writing the *Topics* he took it as an easy task – at least to those naturally gifted – to identify the true from the false as soon as the debate is carried far enough.[154]

There remains, however, the danger of disputation turning into an agonistic and eristic one with the questioner using all his techniques to reach the contradictory of the answerer's thesis and the latter refusing to concede premisses leading to the contradiction. The clue to the strategic rules is to soften this opposition built into the logic of the *elenchus* itself by establishing a social structure for a higher-level competition about dialectical skills, and hence towards good argument and truth. This holds true in an interesting way of the rules for the questioner to conceal his argument strategy, applicable both to eristic purposes and competition about skills, as well as of the corresponding rules for the answerer to mark redundant premisses. The role of the audience is obviously decisive here, motivating either good or poor argument.

These results allow us to draw some conclusions concerning the different interpretations of the relevance of dialectic to philosophy in Aristotle. While the critical role of the dialectical skills is to a large extent based on the refutation form (*elenchus*) of dialectical disputations, the argument against the initial thesis has simultaneously a positive role in being an argument for its negation. Moreover, the strategic rules concerning conceptual clarification and qualification of excessive generalizations have a constructive role in generating more exact positive views. Since philosophical inquiry for Aristotle as *saving the appearances* consists of criticism, clarification and systematization of given conceptions (ἔνδοξα) on the matter under investigation, dialectical practice forms a good progymnastic for it, not least because of requiring acquaintance with the very same knowledge basis. And yet, dialectical skills are not sufficient for systematizing knowledge and belief in a whole field of research. The detailed study of these issues, including argument moves available to philosophical inquiry and not belonging to dialectic, such as those allowing one to distinguish between first principles and other truths, will be left for later research.

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[154] *Topics* VIII.14 163b9–16.

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# THE ESSENTIAL FUNCTIONS OF A PLOTINIAN SOUL

*Damian Caluori*

In reading Plotinus one might get the impression that the essential functions of a Plotinian soul are very similar to those of an Aristotelian soul. Plotinus talks of such vegetative functions as growth, nurture and reproduction. He discusses such animal functions as sense perception, imagination and memory. And he attributes such functions as reasoning, judging and having opinions to the soul. In *Plotinus' Psychology,* Blumenthal bases his whole discussion of the soul on an analysis of these functions. He concludes that Plotinus 'saw the soul's activities as the functions of a series of faculties which were basically those of Aristotle' (Blumenthal (1971), 135).

This conclusion seems to fit uneasily, however, with other claims which we find in Plotinus. At *Enn.* VI.3.1.21-28, for example, Plotinus claims that the soul belongs to the intelligible realm and that it is a foreigner in the sensible world.[1] Given its belonging to the intelligible realm, we would rather expect the soul's essential functions also to belong to this. We might expect the soul, for example, to be basically engaged in the contemplation of intelligible entities, such as Platonic Forms. Moreover, if the soul is a foreigner in the sensible world, one wonders whether the functions to which Blumenthal refers are, for Plotinus, essential functions of the soul. And if so, one might also wonder whether the essential functions of the soul in Plotinus really are those of Aristotle.

In this article I shall focus on two functions that, I will argue, are the two essential functions of the soul. The discussion of these two functions will, I hope, put the various functions mentioned above into perspective and show that the essential functions of the soul – far from being basically those of Aristotle – are those of a Platonist. Before considering the two functions of the soul, however, let us first briefly discuss in what sense we might wish to talk of functions of the soul at all. I will base this discussion on Plato and Aristotle. This will help us, I hope, to better understand Plotinus' position.

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[1] See also, e.g., *Enn.* I.6.8.16; IV.8.1.19; IV.8.5.5.

## 1

Living things differ from non-living things in various ways. They can do many things that non-living things cannot do. A lemon tree bears fruit, and a lion sees its prey and pursues it. Human beings think about their future and make decisions. In order to explain the manifold behaviour of living beings, ancient philosophers introduced the notion of the soul. The soul enters an explanation of the behaviour of living things in basically two ways. Either the functions (or at least some of the functions) that make a living being a living being are attributed to the soul or they (or at least some of them) are attributed to the living being *in virtue of having a soul*. Aristotle famously attributes the functions that make a living being of a certain kind a living being of this kind to the composite of body and soul. He believes that the composite possesses these functions in virtue of having a soul. Plato, too, claims that the thing that makes a living being a living being is the soul (e.g. *Phd*. 105C). But, unlike Aristotle, Plato attributes at least some of the functions of the composite living being to the soul alone and not to the composite. The composite living being only possesses them, according to Plato, in a derivative sense. If it has any role to play at all, the body is at most the tool by which these functions get exercised. At *Timaeus* 45AB, for example, Plato explains that sense organs are instruments that the soul uses in order to perceive. Thus, according to Plato, the soul is not only the thing in virtue of which living beings are able to exercise sense perception, but it is also the proper subject of sense perception. Hence, unlike Aristotle, Plato makes room for functions which belong to the soul alone and for whose exercise the body is no more than a tool.

But according to Plato the soul is also active in a further way. It can exercise certain functions without any involvement of the body. In such a way the soul is able, for example, to grasp intelligible entities such as mathematical objects or Forms. What is more, the body, according to the *Phaedo* (79C), far from being a tool for this kind of cognition, is actually a hindrance to it. Thus in order to contemplate entities of these kinds, it is better for the soul to be on its own and without a body (*Phd*. 79Dff.). In this way the soul has its own life – a life that is independent of the body.

Thus both Plato and Aristotle believe that we need to attribute certain functions to living beings in order to explain their behaviour. In order to account for these functions they both introduce the notion of the soul. However, the notion of the soul enters the explanation in different ways. While Aristotle thinks that the functions of living beings are not functions of the soul but functions that the living being possesses in virtue of having a soul, Plato thinks

that, properly speaking, these functions (or at least some of them) belong to the soul. Moreover, Plato – as opposed to Aristotle – believes that the soul possesses functions that are independent of the body and in whose exercise the body has no role to play. These functions constitute the soul's own life.

Given the fact that Plotinus is a Platonist, it is not surprising that he sides with Plato in this discussion. He rejects the Peripatetic notion of the soul and in doing so he also rejects the Aristotelian conception of the functions that are related to the soul in the way discussed above. According to Plotinus the idea that the soul is essentially the thing in virtue of which corporeal living beings have certain functions is misguided. The reason why Plotinus thinks this can most easily be seen in his discussion of the way in which the late antique Peripatetics believed the soul to be in the body.

According to Alexander of Aphrodisias, for example, everyone agrees that the soul is in the body (*DA* 13.9ff.). In some sense Plotinus would also agree with this claim. It is not obvious, however, in what sense the soul is supposed to be in the body because the expression 'being in' is ambiguous. And here Plotinus disagrees with the Peripatetics. According to Alexander the soul is in the body in the sense in which the form is in the composite. Alexander illustrates this way of *being in* with the form of the statue and the statue (*DA* 13.24ff.). Plotinus objects to this and similar views with two arguments. Firstly, in his view the Peripatetic claim amounts to saying that the soul is what it is of something else, namely of the body; thus the soul depends for its being on the body.[2] According to Plotinus, however, it is rather the other way round. The body depends for its being on the soul while the soul is independent of the body.[3] This is due to the fact that the soul is an οὐσία. (*Enn.* IV.7.8[5].40-43). Secondly, if the soul were the form of a body, then it would be inseparable from the body just as the form of the statue is inseparable from the statue. But the soul is, according to Plotinus, separable from the body (*Enn.* IV.3.20.27-30). I do not wish to discuss the merits of these arguments. In order to make them convincing we would have to elaborate on them in much more detail. All that is important for our purposes is that the premises of these arguments reveal something important about Plotinus' conception of the soul. They show that, according to Plotinus, the soul is a separate οὐσία.

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[2] For a further discussion see Corrigan (1996), 111.

[3] For this reason, Plotinus claims (following *Timaeus* 36DE) that we should say that the body is in the soul rather than that the soul is in the body (*Enn.* IV.3.22.7-11).

The fact that the soul is a separate οὐσία allows for the claim that the soul is not only responsible for its body but is also something that has a life of its own.[4] We have seen above that this is Plato's view. Depending on how strong the separation of body and soul is, it even allows for theories according to which body and soul become separate to the extent that the latter loses its function as being the thing that gives life to bodies. Descartes' dualism, for example, is such a theory. Descartes abandons the soul as a principle for explaining the behaviour of living bodies because he no longer considers it necessary. By means of his new physics he believes himself to be able to account for the behaviour of living bodies in essentially the same way that he accounts for that of non-living ones. That being done, the soul becomes superfluous for the explanation of living bodies.

## 2

Whilst following Plato in believing that the soul has a life of its own, Plotinus does not go as far as Descartes. He still believes that the soul gives life to bodies (*Enn.* IV.7.9.6ff.). However, the giving of life to bodies is not essential to the soul. Instead, it is only the soul's *external* activity. This external activity follows from the soul's *internal* activity or, what amounts to the same, from the life that the soul possesses on its own. The soul's own life is, as I shall argue, constituted by the soul's two essential functions. We will consider in more detail how the soul's external activity follows its exercise of the two essential functions. Before doing so, however, let us first ask what these essential functions are.

We can find an answer to this question in the following passage. At *Enn.* IV.8.3.25-27 Plotinus claims: 'But when it [i.e. the soul] looks to what comes before it, it exercises its intelligence, when it looks to itself it sets in order what comes after it and directs it and rules it...'[5] I shall suggest that the looking to what comes before it is the soul's first essential function and that the looking to itself is the soul's second essential function. In what follows I shall try to explain how these two functions are to be understood.

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[4] See, e.g., *Enn.* IV.7.9.6-9: 'For the soul is the origin of motion and is responsible for the motion of other things and it is moved by itself, and gives life to the ensouled body, but has it of itself, and never loses it because it has it of itself' (Armstrong's translation).

[5] Βλέπουσα δὲ πρὸς μὲν τὸ πρὸ ἑαυτῆς νοεῖ, εἰς δὲ ἑαυτὴν τὸ μετ᾽ αὐτὴν κοσμεῖ τε καὶ διοικεῖ καὶ ἄρχει αὐτοῦ κτλ.

The first function of the soul is its looking to what comes before it. In order to explain what this means we have to explain, firstly, what the thing is that the soul looks to and, secondly, what the looking to consists in. Let us first deal with the former point. The being that is before the soul is the intellect.[6] The intellect is an entity that has its own kind of activity. Following Plato, for example in the *Republic*'s simile of the line, Plotinus believes the intellect to be the proper subject of grasping Forms. The corresponding activity of grasping, or intellection (νοεῖν), is the intellect's essential activity (*Enn.* V.3.7.18-20). Thus the intellect's activity consists in the grasping or understanding of Platonic Forms which constitute the realm of true being and reality. Plotinus does not think, however, that the intellect and the world of Forms are two distinct entities. The world of Forms is in no way separate from the intellect (*Enn.* V.4.2.46ff.). Instead, intellect and the world of Forms are identical.[7] Thus the intellect contemplates itself and sees the world of Forms. Since the intellect is the world of Forms, the soul, too, when looking at the intellect, sees the world of Forms and thus true reality and being.

Let us now turn to the second point and try to explain what the soul's looking at consists in. It is the soul's intellectual activity or – as Armstrong translates – the exercise of its intelligence. This activity is constitutive of the soul. It is an activity that essentially belongs to the soul.[8] But, if this is so, the following problem arises. The intellect's essential activity consists in the contemplation of these Forms. If the soul's essential activity consists in the very same type of contemplation of the very same objects as the intellect's, does not the soul itself become an intellect? Moreover, what Armstrong translates as 'exercise of its intelligence' is the Greek word 'νοεῖν' which we would expect to refer to the activity of the intellect (νοῦς). But if the soul, in its contemplation of Forms, does not differ from the intellect, how can this activity be constitutive of the soul? The answer to this is, I think, the following.

The soul's intellectual activity is not intellection properly speaking. Accordingly, the word 'νοεῖν' is ambiguous. The soul has its own way of understanding the eternal truths of the intellect. This consists in its understanding

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[6] At *Enn.* V.1.3.4-9, e.g., Plotinus calls the intellect the soul's upper neighbour.

[7] The view that the world of Forms is not separate from the intellect was already held in Middle Platonism. Some Middle Platonists believed that Forms are thoughts in the mind of God. See, e.g., Seneca, *Letter 65* or Philo of Alexandria, *Opif.* 16, Alcinoos, *Didask.* chs. 9-10. See also Pépin (1956) and Armstrong (1960).

[8] See, e.g., *Enn.* III.9.5: 'The soul itself must be like sight and what it sees is intellect; before it sees it is indeterminate, but naturally adapted to intellection'.

of λόγοι (e.g. *Enn.* III.2.2.15; III.5.9.17-23).[9] Together, these λόγοι constitute a whole which is (at least) analogous to the whole of an axiomatic science. In the latter, many different λόγοι are connected with each other by deductive relations. Understanding the science consists in understanding the λόγοι and their interconnections. But, of course, the point of the science does not consist in an understanding of the λόγοι alone. Rather it consists in understanding the *objects* of the science. If I understand geometry, I understand the definition of a circle, the Pythagorean theorem etc. All of these are λόγοι. But in understanding these λόγοι, I understand what a circle is and I understand what properties a triangle possesses. These are *objects* of geometry, and I cannot grasp them immediately. I cannot immediately grasp the circle, for example. However, I can grasp the circle indirectly in grasping its definition. More generally, the only means to grasp a geometrical object is, for me, to grasp it through the science of geometry. The analogy would be that the intellect immediately grasps the objects themselves, i.e. the objects that are analogous to the circle, the triangle etc. It does not need any kind of mediation. The soul, on the other hand, cannot have immediate cognitive access to these objects. Instead it grasps the λόγοι in virtue of which it understands the intelligible objects. It grasps, for example, the definition of the circle or the theorem of Pythagoras, and only in this way can it understand the circle or certain properties of triangles.

This way of grasping objects is not restricted to mathematics. According to Plotinus, metaphysics (or dialectic) also proceeds in this way. The objects of metaphysics are – for a Platonist – Forms. Let us look at one example. If we wish to understand what a human being is (i.e. the Form *Human Being*) then we might try to find a definition, for example 'rational living being', a definition that we also find in Plotinus (*Enn.* VI.7.4.11). According to Plotinus, I take it, this definition grasps what, according to the soul, the Form *Human Being* is. In grasping *Human Being* in this way, we already grasp it as a λόγος consisting of two parts. As Plotinus puts it at *Enn.* VI.7.10.15f.: 'And the λόγος is living being and something else, which is not identical with living being.'[10]

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[9] As already Witt discovered: 'Soul, by beholding the eternal Ideas, conceives immaterial λόγοι' (Witt (1931), 106). Witt does not explain, however, the difference between the soul's and the intellect's contemplation of Forms. Rist (1967) devotes a whole chapter to the λόγος. According to his interpretation, the λόγος has only a creative role to play in Plotinus and he does not seem to consider that it has a function in the contemplation of the intellect.

[10] καὶ ὁ λόγος δὲ ζῷον καὶ ἄλλο τι, ὃ μὴ ταὐτὸν τῷ ζῷον.

The 'something else' being, I assume, the specific difference that distinguishes *Human Being* from all other species of living being. On the level of intellect, these two parts of the definition (the 'living being' and the 'something else') are not two distinct parts. They are only aspects of one thing, the Form *Human Being*. This Form is such, however, that it can be unfolded into a definition on the level of soul.

This is one way in which the soul's contemplation of Forms differs from the intellect's contemplation of the very same Forms. The soul grasps the Forms via λόγοι while the intellect grasps them immediately. The other way is closely related to the first one. The intellect grasps all Forms at once. Its cognitive activity is in this sense holistic. The soul, however, is able to think about one λόγος at a time without necessarily actively thinking about all other λόγοι at the very same time. Compare the soul to a mathematician who is in the middle of proving some theorem. The mathematician knows at each step of his proof all the axioms, definitions and theorems that are necessary for the whole proof. This does not imply, however, that he – at each step – actively thinks about all of them. He only actively thinks about those propositions that he needs for the next step in his proof. In a similar way, the soul knows all λόγοι and in this way it knows all Forms. But unlike the intellect, the soul does not necessarily actively think about all λόγοι (and so all Forms) at once.

Accordingly, the essential activity of the soul is not intellection properly speaking. In passages where he wishes to mark clearly the distinction between the intellect's and the soul's kind of thinking, Plotinus calls the latter dianoetic thinking (διάνοια) and contrasts it with intellection properly speaking (e.g. at *Enn.* V.5.1.38-39).[11] If the intellect's contemplation of the intelligible realm differs from the soul's in the way described, then the first essential function of the soul can be constitutive of the soul without making the difference between intellect and soul disappear.[12]

## 3

As we shall see, the first function of the soul is related to its second function, and is even a presupposition for the exercise of the second function

[11] Compare also Lloyd (1969-70) and Lloyd (1986).

[12] Blumenthal (1974), 211 discusses, amongst other things, the problem considered here. This problem is resolved, I think, if we understand the soul's contemplation of the intellect in the way suggested above.

to which I now wish to turn. The second function has two parts, one theoretical and one practical. I will first discuss the theoretical part.

As we saw in the quotation above, the soul exercises its second function when it looks into itself. What it sees when it looks into itself, is, I think, the paradigm according to which the sensible world should be set in order, directed and ruled. Thus, the difference between the soul's first essential function and its second essential function is this. In its first essential function the soul contemplates the world of Forms. In its second essential function it sees in itself a paradigm for the sensible world. I shall explain this shortly.

But before doing so, let me discuss what might seem to be a puzzling aspect of the claim that the soul finds the paradigm of the sensible world in itself. For we might think that the intellect, who is the world of Forms, is the paradigm of the sensible world. It is a Platonic commonplace that the sensible world is an image of the world of Forms. Plato tells us in a famous passage of the *Timaeus*, for example, that the divine Craftsman looks at the Forms as a model for the creation of the sensible world (*Tim*. 39E), a passage that Plotinus discusses in detail at *Enn*. III.9.1. But if the world of Forms is the paradigm in whose image the sensible world is made and, as we have seen, the world of Forms is the intellect, then how can the soul find it in itself?

We have seen above that the soul sees Forms mediated through λόγοι. When the soul looks at itself it sees these λόγοι which unfold the content of Forms. In this sense there is no contradiction with the claim that the world of Forms is the paradigm of the sensible world. But according to Plotinus the unfolding into λόγοι is crucial in order to have a paradigm for the sensible world. What distinguishes the Forms as they are in the intellect from their representations as λόγοι in the soul is the structure that λόγοι – as opposed to Forms – possess. For λόγοι are predicationally structured. They are structured in such a way that there is a subject and an attribute, and that the attribute gets predicated of the subject. In a λόγος that unfolds a Form, for example, we find an essential predication that expresses the definition of the corresponding Form. I have already referred to Plotinus' use of the classic example of the definition of *Human Being*. In this way the soul not only possesses the content that it receives from the intellect and that it wants to realise in the sensible world. It also possesses this content in a predicational structure. Plotinus follows Aristotle in postulating that this predicational structure is the basic metaphysical structure of the sensible world. This can be seen from the fact that, according to Plotinus, the primary entities of the sensible world are sensible substances (namely bodies) of which all

other things in the sensible world can (either essentially or accidentally) be predicated (*Enn.* VI.3.8.9-11).

Thus, if the soul looks into itself then it sees λόγοι. These λόγοι represent the content of the world of Forms in a predicational structure. Represented in this way they are the paradigm of the sensible world. In this sense it is clear that Plotinus does follow Plato in believing that the sensible world is an image of the world of Forms. But according to Plotinus the soul needs to represent the content of the world of Forms in an appropriate way. This representation is provided by the theoretical part of the second function of the soul.

The difference between the soul's first function and the theoretical part of its second function might seem to be negligible. For already in its first function the soul sees the world of Forms unfolded as λόγοι. However, there is a crucial difference. Whereas the soul, in its first function, sees the λόγοι as representations of the world of Forms and contemplates the world of Forms via λόγοι, it sees the same λόγοι in the theoretical part of its second function as a paradigm of the sensible world. Thus, although the soul sees the same λόγοι in its first function and in the theoretical part of its second function, the λόγοι serve two distinct purposes. In the first function they provide the soul with the knowledge of the world of Forms whereas in the second function they provide the soul with a paradigm for the sensible world.

But the possession of a paradigm, although necessary, is not sufficient for giving order to and directing and ruling the sensible world (*Enn.* IV.8.3.25-27). For in order to do so, the soul also has to know how to achieve this aim. It has to know how to act in order to realise the paradigm. So the soul needs to have not only theoretical but also practical knowledge. This kind of knowledge is called practical wisdom (φρόνησις). It is the practical part of the second function. Before discussing further what practical knowledge consists in, I first wish to rule out a conception of practical knowledge that is not Plotinus'.

Influenced by Aristotle, we might think that the acquisition of practical knowledge requires experience and hence such things as sense perception and memory. This is not Plotinus' view. On the contrary, Plotinus thinks that sense perception and similar influences that come from the body tend to distract the soul and confuse it, so that instead of helping the soul acquire wisdom they rather tend to distract the soul from exercising the wisdom that it already possesses (*Enn.* IV.8.8.16-23).

I have already at the beginning of this article referred to a passage in Plato's *Phaedo* (79C) which states that sense perception is disturbing for the soul. Another such passage can be found in the *Timaeus*. According to *Timaeus* 42A there are two things that disturb a soul: on the one hand sense perception and

on the other things like desire, pain, and fear. I will call things of the latter type 'lower emotions'.[13] The context of the discussion in the *Timaeus* makes it clear that souls possess sense perception and lower emotions only if, and because, they are incarnated in human (or animal) bodies (cf. *Enn.* IV.8.8.16-23). They inform the soul about the state of the body and its environment and in this way help the soul to decide what action might be best suited to help the survival of its or – depending on the situation – another body. If my soul gets informed (by sense perception, perhaps combined with fear), for example, that a lion is about to attack me, my soul under normal circumstances would decide to make my body run away, or shoot the lion, or whatever else the soul considers appropriate.

There are embodied souls, however, who possess neither sense perception nor memory.[14] These souls are the souls of the stars and the World Soul. Plotinus argues for this conclusion at length (*Enn.* IV.4.6-17) and I do not wish to consider his discussion in any detail. Unlike souls incarnated in sublunary bodies, these souls have no need for sense perception or memory. Neither would lower emotions be of any use to them. The basic reason for this is, according to Plotinus, that their bodies, unlike ours, are perfect and do not need to have any kind of exchange with the environment.

Now the fact that these divine souls do not rely on any kind of experience does not prevent them from being wise. On the contrary – they are in a sempiternal state of wisdom and they rule what they have to rule on the basis of this practical wisdom. This can be seen from the following passage in which Plotinus considers the World Soul's administration (διοίκησις) of the sensible world: 'What discursive reasoning (λογισμός)[15] or what calculating or what memory can there be when practical wisdom is always present, active

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[13] I will call them 'lower emotions' because these emotions are due to the soul's sublunary incarnation and thus come, in Plotinian parlance, from below. They have to be contrasted with emotions that the soul possesses while, for example, contemplating the intellect. Examples of such emotions might be serenity or joy. In the present context I only wish to talk of lower emotions.

[14] To be precise: they possess the capacity for sense perception and memory but they will never exercise it.

[15] I am translating 'λογισμός' as 'discursive reasoning' and understand the word 'discursive reasoning' only in the restricted sense explained in this passage. Dianoetic reasoning (διάνοια), however, includes both discursive reasoning and the kind of dianoetic reasoning that, for example, the World Soul exercises. Dianoetic reasoning thus understood is quite generally the way in which the soul reasons – namely thinking in terms of λόγοι.

and ruling?' (*Enn.* IV.4.11.11ff.).[16] According to this passage the ruling of the sensible world is based on practical wisdom. Since the sensible world is ruled by the World Soul, the World Soul always rules on the basis of practical wisdom. But because the World Soul possesses practical wisdom there is no need for memory or discursive reasoning. In the same chapter, *Enn.* IV.4.11, Plotinus states that, unlike discursive reasoning (λογισμός), practical wisdom is unchanging (11.26). It is the aim of discursive reasoning. As soon as this aim is achieved there is no more change (*Enn.* IV.4.12.6f.).

In thinking discursively we try to decide how to act. The end of this process consists of practical wisdom. We are then in a state in which we *know* how to act. The World Soul is always in this state. Since it knows how to act it does not have to think about it discursively. In the same passage, Plotinus compares the relation of discursive reasoning and practical wisdom to the relation of learning to play the lyre and knowing how to play it. As soon as you know how to play the instrument, you are no longer learning how to play it.

Thus, the World Soul and the souls of the stars possess neither sense perception nor memory nor do they think discursively. Moreover, since there is no need for them to procreate because their bodies last forever, they do not have any vegetative functions. This clearly shows how different a Plotinian soul is from an Aristotelian soul. It also shows that the functions of the soul that I have listed at the beginning of this essay are not essential functions of the soul. The soul only makes use of them if it has to care for a sublunary body. For this reason we should not, I think, base our interpretation of Plotinus' psychology on them.[17]

## 4

Let us now resume our discussion of what, according to Plotinus, practical knowledge is. We have seen that it is the knowledge which allows the soul to set in order, direct and rule what comes after it. Given that through its theoretical activity the soul knows the paradigm that it wants to realise in the sensible world, it also needs to know how to realise it. Let us come back to the example of Human

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[16] Τίς οὖν ὁ λογισμὸς ἢ τίς ἀρίθμησις ἢ τίς ἡ μνήμη παρούσης ἀεὶ φρονήσεως καὶ ἐνεργούσης καὶ κρατούσης καὶ κατὰ τὰ αὐτὰ διοικούσης;

[17] However, a proponent of the Aristotelian line could still object that what is true of the World Soul and the souls of the stars does not apply to sublunary souls. In doing so he could try to restrict the Aristotelian interpretation of Plotinus' functions of the soul to souls in the sublunary world. I will argue against this below.

Being and assume that the λόγος by which the soul grasps the Form *Human Being* is 'rational animal'. In its practical function the soul has to think about how to realise the rational animal. The soul has to consider that in order to make a rational animal it has to create a body that is able to be acted upon in certain highly complex ways. Presumably a brain of high sophistication is necessary for the soul to act on the body in the appropriate way. This brain has to be placed into a head that is hard enough to offer reasonable protection to this delicate organ. The head, in its turn, has to be connected with a suitable trunk, arms, legs etc. The *Timaeus* provides us with a probable account of how a wise Craftsman might go about ordering the sensible world and the living beings in it.

In this way, practical decisions have to be taken; taking certain decisions influences further decision making, and makes some further decisions more attractive and others less so. Perhaps this aspect of the ordering of the sensible world can be compared to playing chess. Amongst possible opening moves there is a range of standard moves, none of which is intrinsically better than any other. But as soon as you have opened the game, some further moves (even if legal) are no longer reasonable to make because they would be bad moves, while others, depending on the opening move, are good moves. Among these further intrinsically equally good moves, again, the player has to choose and his decision will have consequences for the evaluation of further moves etc. In the same way the sensible world could have been ordered in various ways – some of them making it a perfect image of the world of Forms. But the soul, in its practical wisdom, has ordered it in one of these best possible ways. As we have seen, the soul in so far as it has practical wisdom has not had to go through a *process* of thinking about how the sensible world is best to be ordered. It did not have to reason discursively (λογίζεσθαι). Instead, it is in a sempiternal state of possessing the corresponding knowledge.

## 5

Like the first function, the second function that I have discussed is an essential function of the soul (*Enn.* IV.7.10.13). If this is true then all souls possess this function. Plotinus' claim that the World Soul and the souls of the stars possess practical knowledge and base their actions on it may be convincing. But one might doubt whether the souls of sublunary beings do so. For they often take wrong decisions. But if so, then they do not base their decisions on practical knowledge and one wonders whether they possess practical knowledge at all. But if they do not possess practical knowledge then there are souls who lack the second function. But then, how can the second function be essential?

In order to answer this question, I firstly wish to point out that, according to Plotinus, the souls of sublunary beings sometimes do share with the World Soul in the government of the sensible world (e.g. *Enn.* IV.8.4.5-9). When a soul shares with the World Soul in the government of the sensible world, then it will base its actions on practical wisdom (and hence possess it) and be in full awareness of the paradigm of the sensible world. Moreover, Plotinus claims that a part of each of our souls always remains in the intelligible realm, even if our soul descends into the sublunary world (*Enn.* IV.8.8.1ff.). This part of our souls is in the same position as the World Soul and the souls of the stars. It sempiternally exercises its two essential functions. Despite their descent, then, our souls do not lose their wisdom. But through their descent they get confused and lose sight of it. This confusion is due to the fact mentioned earlier that they have to take into account sense perception and lower emotions in order to make decisions. We have already seen above that Plato in the *Phaedo* professes a similar view. The descent of the soul and the precise reason for the confusion are complicated issues and would need further elaboration. However, for present purposes it is sufficient to note that Plotinus accounts for the fact that souls in the sublunary world often do not base their decision on their practical wisdom but that this does not imply that these souls do not possess practical wisdom.

Although as a matter of fact very few souls do so, even souls in the sublunary world are principally able to base their decisions on practical knowledge. But decisions in the sublunary world are more complicated because they usually have to be taken in concrete situations. In order to take the right decisions of this kind the soul not only has to possess practical knowledge, it also has to know how concretely to apply it.[18] It has to think carefully about how to act thereby taking into account information that it receives, for example, through the senses.

A soul of a human being, for example, has to take decisions related to the feeding of its body, thereby taking notice of the concrete state of its body. Having taken notice of the body's need for food it has to think practically about how to go about feeding the body. It has to decide, for example, what kind of food is most appropriate, how to acquire this food, when to feed the body etc. Thus, in order to take the right decision in this case, the soul has to consider many concrete and contingent facts. The feeding of the body is something that the

[18] For the relationship between practical wisdom and its application also see, for example, Epictetus, *Diss.* II.11.

soul has to do because it has to care for its body.[19] It would be wrong for the soul, however, to ignore its body in order to focus – selfishly – on more lofty activities and thereby let the body starve to death. If the soul did so, it would not only harm its body but also itself because it would have taken a wrong decision.

From this example we can see that the souls in the sublunary world are also active there. The soul has to apply its practical knowledge, it has to make use of sense perception and memory, for example, and it has to think about many contingent facts. All these activities are necessary for the soul's work in the sublunary world. But not only the souls in the sublunary world but also the souls of the stars and the World Soul are active in the sensible world even if their work is less burdensome (*Enn.* IV.8.2.26-30). Thus, all souls are, in some way or other, active in the sensible world. However, their activity in the sensible world is not essential to them, as Plotinus argues at VI.8.5. Instead, they follow from the soul's practical knowledge (*Enn.* VI.8.5.31-37).

We might be puzzled here. For the soul's practical wisdom consists in knowing how the sensible world and the things in it should be arranged. Does this not imply that giving order to the sensible world is the aim of the soul's practical thinking? But if its aim is an activity in the sensible world then it is hard to believe that this activity is not essential to the soul. In order better to understand Plotinus' solution to this problem it is helpful, I think, to look at the following discussion in Stoicism. For it seems to me that Plotinus inherited the solution to this problem from there.[20]

For the Stoics, according to the second telos-formula of Antipater, the goal of life consists in 'doing everything in one's power, constantly and unwaveringly, to obtain the primary natural things' (SVF III, p. 253.3-7).[21] Now at the same time, according to the Stoics, the obtainment of the primary natural things is irrelevant to happiness. Some opponents of the Stoics thought that this amounts to a circle or at least to a paradox.[22] That it need

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[19] To rule out a possible misunderstanding: every soul has to care for the sensible world and not only for its body. It ought not to be egoistic in this sense. But under normal circumstances caring for the sensible world is – for a soul in the sublunary world – most easily done in caring for its particular body.

[20] For the following, see Striker (1996) and Reiner (1969).

[21] The primary natural things (τὰ κατὰ φύσιν), according to the Stoics, are those things whose acquisition or possession contributes to the maintenance of one's natural constitution (Cic. *Fin*. III.20). Under normal circumstances, health, for example, is one of them (Stob. II.83.10-84,2=SVF III, p. 30.6-13).

[22] For example, Plutarch, *Comm. Not*. 1070ff., Alexander of Aphrodisias, Mantissa 159.15ff.

not be can be seen from the famous example of the archer (Cic. *Fin*. III.22). The archer does everything in his power to hit the mark. But he does not do so, and this is the difficult part, in order to hit the mark. Instead he does so, in order to do everything in his power to hit the mark. As Striker remarks: 'This is, to be sure, complicated but not absurd' (Striker (1996), 305). It means that the archer aims at exercising his art skilfully. If he has exercised his art in such a way that – as far as what is in his power is concerned – the hitting of the mark follows from his exercise, then he has achieved his aim. This is what he was striving for. But it is not his aim to hit the mark. His hitting of the mark is only something that *follows* (or not) from the skilful exercise of his art. Thus he has fulfilled his task whether he has hit the mark or not – as long as he has done everything in his power to hit it. Whether, as a matter of fact, he hits the mark or not is completely irrelevant to the success of the archer's action. Understood in this way archery – just like acting and dancing (Cic. *Fin*. III.24-25) – has its aim in itself. For our purposes, however, the archer is a better example, because unlike the latter two, it takes into account the thing that follows from the exercise of the art – namely hitting the mark.

In the same way it is irrelevant for the Stoic sage to obtain the primary natural things. It is only relevant – and of the highest relevance indeed – that he has done everything in his power to obtain them. It is crucial that he thought about the obtainment of the primary natural things in the right way, for example, and that he has taken the right decisions to obtain them. The obtainment itself does not matter.

Let us now apply this Stoic idea to a Plotinian soul. The aim of the soul consists in the proper exercise of its essential functions and hence also in the proper exercise of its thinking about how to order the sensible world. But the aim of the soul does not consist in the arranging of the sensible world. The aim rather consists in the *thinking* about the arranging of the sensible world in the right way. The ordering of the sensible world follows from this thinking without being the aim of this thinking.

Let us look at an example. Let us assume that the soul of the moon thinks about the direction of the movement of its body. It will carefully take into account all relevant factors and it will consider which direction of the moon will be best for the sensible world. On the basis of this consideration it will take the right decision and decide in what direction its body has to be moved. Although, because of its thinking, the body of the moon will be moved precisely as wished by the soul of the moon, this physical movement was not the *aim* of the soul of the moon. The aim of the soul of the moon was rather to think about this in the right way and to take the right decision. Thus, although it is true

that the soul of the moon moves the body of the moon, this is not an essential function of the soul of the moon. It is rather a consequence that follows from the essential functions of the soul of the moon.

If we still have doubts as to whether we are entitled to use the above piece of Stoic ethics in Plotinus, then perhaps, the following consideration helps to dispel them. I wish briefly to consider two notions that are important in Plotinus' ontology in general, namely the notions of internal and external activity. I will then show that Plotinus uses these notions in the case of the soul in precisely the sense that I have suggested.

Plotinus uses the notions of internal and external activity on all levels of his ontological hierarchy.[23] He claims that the internal activity of something is essential to it and that by exercising its internal activity, an external, non-essential activity follows. Perhaps we can give at least some intuitive content to these claims if we look at the following examples (*Enn.* V.4.2.27-33; *Enn.* V.1.6.28-35). They will also show, I hope, how this relates to the above discussion of the Stoic τέλος-formula. The fire's essential activity (ἐνέργεια) is its being hot. But its heat also heats bodies in its environment. While the heat of the fire in itself belongs to the fire and is essential to it, the heating of other bodies is not an essential activity of the fire. But it follows from the essential activity of the fire. Analogously, snow's essential activity is being cold but it also cools bodies in its environment. The cooling of these bodies is not an essential, internal activity of the snow but rather its external activity. It follows from the snow's internal activity without being the aim of it. Although it seems difficult to spell out the details of this account – a task that would also go far beyond the scope of the present paper – the intuition behind these examples is perhaps sufficiently clear. [24]

Moreover, whatever its details, we can see that it shares crucial aspects with the discussion of the Stoic τέλος-formula. Plotinus' internal activity corresponds to the archer's exercise of his art while the external activity corresponds to the archer's hitting of the mark.[25] The internal activity of a thing

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[23] For a discussion of the relationship of internal and external activity and its place within Plotinus' ontology see O'Meara (1993), chs. 6-7.

[24] According to Rutten (1956), Lloyd (1987) and Lloyd (1990) the model goes back to Aristotle's Physics.

[25] While archery is a stochastic art, i.e. an art whose perfect exercise does not necessarily yield the expected consequence (an unexpected gust might blow the arrow off course), Plotinian external activities follow without exception their internal activities. For our purposes this difference does not matter.

does not aim at something outside itself. Through the exercise of it, however, an external activity (on a lower ontological level) follows.

Plotinus also uses the notions of internal and external activity in relation to the soul (*Enn.* IV.3.10.31-32). The soul lives a life of its own and it is also active in relation to what comes after it, namely the corporeal world. The soul's own life is its internal activity and the activity in relation to what comes after it, is its external activity. Plotinus explicitly states that the soul's activity in the sensible world, is its *external* activity. It 'goes out to something else' (10.36), namely to the corporeal world. It is this activity that 'makes alive all the other things which do not live of themselves [i.e. bodies], and makes them live the sort of life by which it lives itself' (ibid.).[26] As we would expect from the more general discussion of internal and external activity above, the soul's external activity is dependent on its internal activity. Plotinus claims that what the soul gives to the body is an *image* of life. The life of which the body receives an image is the soul's own life. It consists in its internal activity. 'So since it [the soul] lives in a λόγος, it gives a λόγος to the body, an image of that which it has...' (10.38-39).[27]

The internal activity of the soul consists in the exercise of its two essential functions, namely the contemplation of the intellect and the thinking about the ordering of the sensible world. This is the life of the soul – ideally a stable and unchanging life in the intelligible realm that does not aim at the ordering of the sensible world. The ordering of the sensible world is only the soul's external activity. Unlike its internal activity, the external activity is not essential to the soul. Instead it follows from the proper exercise of the two essential functions just like the hitting of the mark follows the proper exercise of the art of archery.

## 6

If we now look back at the discussion of Plato's and Aristotle's views of the functions of the soul, we can clearly see that a Plotinian soul is very different from an Aristotelian one. Its essential functions are not at all those argued for by Aristotle. Even the exercise of the functions that we might be inclined to call Aristotelian is merely the soul's external activity and hence not essential to it.

Instead, Plotinus follows Plato. Like Plato, he claims that the soul has a life of its own – a life situated in the intelligible world, independent of, and

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[26] *Ζῆν οὖν καὶ τὰ ἄλλα ποιεῖ, ὅσα μὴ ζῇ παρ᾽ αὐτῶν, καὶ τοιαύτην ζωήν, καθ᾽ ἣν αὐτὴ ζῇ.*

[27] *Ζῶσα οὖν ἐν λόγῳ λόγον δίδωσι τῷ σώματι, εἴδωλον οὗ ἔχει κτλ.*

separate from, the body. Views of this sort were ubiquitous in late antiquity. But often it remains unclear how the soul's otherworldly life differs from that of an intellect. Plotinus, however, explains the soul's own life in the intelligible world as one consisting of two essential functions. In doing so he is able to draw a clear distinction between the soul's first function, its contemplation of the Forms, and that achieved by the intellect. The distinction drawn between intellect and soul, however, does not threaten its independence from the sensible world. Even in properly exercising its second function, its thinking about how to order the sensible world, the soul is not bound to it but retains its place in the intelligible world.[28]

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[28] I am very grateful to Michael Frede for his support and advice in drafting this paper.

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# THE GREEK PHILOSOPHICAL CODEX No. 265 IN THE PLOVDIV PUBLIC LIBRARY

*Ivan Christov*

The dramatic course of history in the Balkans has quite often led to changes of cultural orientation. This also refers to the attitude towards the Hellenic tradition. An eloquent example of cultural 'oblivion' is the fate of one manuscript preserved in Plovdiv National Library. In 1921 the inventory book of the 'special collection' received entry No. 265 registering a Greek philosophical codex 'by some Porphyropoulos', and describing it as 'a compilation of works by ancient Greek authors'.[1] The manuscript fared no better in the second half of the twentieth century. The hand of an unknown librarian added in the same inventory book that this was 'a complete presentation of Aristotle's works – *Nicomachean Ethics*, *Physics*, *Metaphysics*, etc.'[2] The manuscript is still missing from the catalogue and there are no studies on it. Although the codex received little or no attention of researchers, library always recognized its cultural value and tried to bring it to scholarly attention.[3]

The codex in fact contains a transcript of Theophilos Korydaleus' (1563-1646) commentaries of Aristotle's *Physics* and *De caelo*.[4] Its value is determined by five circumstances. First, it is one of the earliest copies of the above mentioned commentaries.[5] Second, it is one of the earliest autographs

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1 *Инвентарна книга № 1*, 1901-1954, Ръкопис № 265.

2 Ibid.

3 It was exhibited together with the most valuable items of the manuscript collection to scholars-medievalists from Germany, Austria and Bulgaria, who visited the Plovdiv library in May 2005. Together with Prof. Kapriev we managed to inspect the codex and were convinced that it was not what it had been considered to be. During the following days I started my study to establish its real content.

4 Cf. Tsourkas (1967) and (1943), 333-356. His commentaries were highly popular on the Balkans and particularly in Romania. There are more than 200 MSS in the Romanian Libraries (Balan, Roman, 1990, 192).

5 From the MSS with Korydaleus' commentary of *Physics* known to Λ. Γ. Μπενάκης (Μπενάκης (1967), 94, no. 1) 13 date back to the 17th century. The Codex No. 265 is made in 1689. Our copy of the commentary of *De Caelo* is one of the most rare. For example there was only one such 17th century copy in the library of Prince's Academy of Bucharest, made in Janina in 1682 (Camariano-Cioran (1974), 214).

of Markos Porphyropoulos (– †1719) – a personality with exceptional merits for the Aristotelian tradition in the Balkans.[6] Third, as I am inclined to assume, it was written by Porphyropoulos for personal use and it was his working book in the course of 30 years, where he added marginal notes during his studies and teaching in Tirnavos, Constantinople and the Prince's Academy in Bucharest. Fourth, this is an itinerant book exemplifying the movement of philosophical literature belonging to the Aristotelian tradition on the Balkans. Based on the data available, it can be claimed with certainty that it was in Greece, Romania and Albania before reaching Bulgaria and that it belonged to at least 6 owners. Fifth, in a curious way it demonstrates cultural re-orientation of the Bulgarian society during the age of national Revival. In the eighteenth century, the Hellenic education was one of the sources of European identity of the Bulgarians. In Plovdiv there was a Hellenic school whose rich library contained, along with incunabular books with the works of ancient authors, manuscripts with Aristotle's commentaries – John Philoponus' on the *De anima*, as well as the interpretations of Theophilos Korydaleus of the same and other works, among others the *De generatione et corruptione*, *Physics* and *Organon*[7]. It is well-known that copying Proclus' texts was a form of penance in the nearby Bachkovo monastery. Moreover, Plato, Aristotle and other ancient philosophers are included in the Jesse tree of the monastery's refectory.

Markos Porphyropoulos' name is also familiar. His disciple was the celebrated figure of the Bulgarian Revival, Partenij Pavlovich (1695-1760), who, according to his own words 'listened to the late Markos of Cyprus about Aristotle's philosophy' in Bucharest.[8] At the middle of the nineteenth century, however, Greek nationalism came into collision with the Bulgarian national project. This triggered a counter-nationalist reaction of denial with the struggle for cultural and ecclesiastic independence[9]. Blinded by the absurd idea to create

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[6] Markos Porphyropoulos (Markos of Cyprus) was one of the most distinguished scholars and teachers of Aristotle's philosophy in the end of the 17th and the beginning of the 18th c. He succeeded Sevastos Kyminitis as a Head of the Prince's Academy in Bucharest in 1702. In his times the Academy flourished and he was one of those who, according to Dimitri Kantemir was the link between it and the Great patriarchal School in Constantinople (Καραθανάσης (1982), 91 n. 6). On his life and activities in Bucharest and the academy, see Οἰκονόμος (1843), Καραθανάσης (1982), 90-94, Camariano-Cioran (1974), 373-80, Papacostea (1983), 283-329.

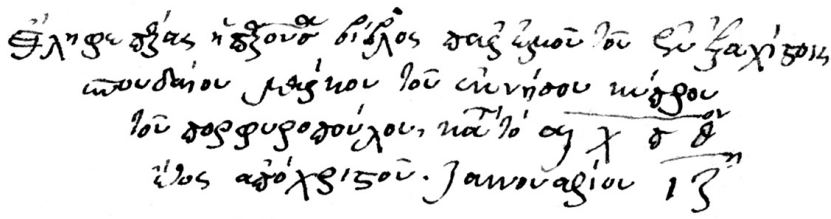
[7] Кодиксь, 388.

[8] Ангелов (1964), 11.

[9] After the fall of the Second Bulgarian kingdom (1396), the Bulgarian Patriarchy was abolished. The Patriarch of Constantinople was given the authority over all

a new state – successor of the Byzantine empire including the Bulgarian lands, the Greek nationalists conducted a politics of denationalization. Teaching in the Bulgarian language was prohibited in some parts of the country, teachers and activists of the Bulgarian Revival were persecuted. Many of them were imprisoned or exiled. In the 20s and 30s of the 19th century non-tolerance to Slavonic heritage took place. Understandably, in such circumstances the appeal of Hellenic education and culture waned. It was no more regarded as a part of European identity of Bulgarians, but rather as an instrument of Greek nationalism and opposition to the Bulgarian national identity[10]. These events determined the fate of the manuscript No. 265.

The codex contains 403 folios (paper, 15 x 21 cm.). The beginning and the end have been torn off. The book was re-bound in Markos' times. In the place of the missing first quire a fascicle from a sheet folded in four was added; the first two folios made in this way were glued to each other and together they were glued to the cover. These pages were used by Markos and other owners of the book for various notes. From the 3rd to the 315th folios we find the commentary on the *Physics*, the beginning of which has been lost. On folio 315 Markos marks the date he has completed his work on the *Physics* – 17 January 1689.



orthodox Christians within the bounds of the Ottoman empire. The Bulgarian episcopate, however was left untouched. This changed in 1767 when the Bulgarian clergy was replaced with Greek clergy. Under the Ottoman rule the Patriarchy of Constantinople acquired an authority over this country that he never had in Byzantine times. The Greek nationalism seized the opportunity to pursue its ends. In the second half of 19th c. the Patriarchy of Constantinople misused its position in the Empire to conduct Hellenisation and denationalization of the Bulgarian people. That is why the struggle for national and cultural independence was inseparable from the struggle for ecclesiastic independence. When the Bulgarian church regained its autonomy in 1870, the Patriarch of Constantinople excommunicated it as 'schismatic' and formally recognised it only after World War II, in 1945.

[10] So Dimitar Miladinov, one of the most prominent figures in the Bulgarian national Revival, who used to teach Sophocles in ancient Greek, radically changed his stand and started agitating against the Greek language in public.

17 Εἴληφε πέρας ἡ παροῦσα βίβλος παρ᾽ ἐμοῦ τοῦ ἐν ἐλαχίστοις
σπουδαίου Μάρκου τοῦ ἐκ νήσου Κύπρου
τοῦ Πορφυροπούλου, κατὰ τὸ ,αχπθ$^{ον}$
20 ἔτος ἀπὸ Χριστοῦ ᾽Ιαννουαρίου ιζ$^{η}$.

From folio 316 the commentary on *De caelo* starts. Part of the interpretation of Book one, from the beginning to I.6 279b4, has been preserved. The lower cover has been lost together with the rest of the text.

The commentaries start with Korydaleus' detailed analyses of philosophy as a whole, of its parts and the place of the individual Aristotelian treatises. These analyses and the commentary on the *De caelo* abound with references to ancient philosophers. Syrianus' and Iamblichus' points of view are presented and compared to the views of Simplicius and the Paduan neo-Aristotelians. He builds his thesis on interpretations of Alexander of Aphrodisias, which is especially emphasized in the marginal notes (e.g. f. 320v, m. 1). Like in his other commentaries Korydaleus does not mention his Byzantine predecessors, whereas Western scholasticism is the subject of severe criticism (e.g. 166, 401v etc.). The manuscript is full of marginal notes by Markos, as well as by other owners of the book, and they deserve serious attention.

The headings do not strictly follow the structure of the text and there are omissions.

## [Notes of the holders]

[᾽Επιγράμματα Νικολάου
Μαρίτζη τοῦ Λευκαδίου][11]

f. cv, n. 1 Εἰς τὸν ἐκλαμπροτάτον τὸν αὐθέντην εἰς βίβλον τυποθησομένην ἡρωελεγεῖον.

f. cv, n. 2 ῾Ηρωελεγεῖον.

f. 1, n. 1 Εἰς τὴν εἰκόνα ἐκλαμπροτάτου τοῦ αὐθέντου ἡρωελεγεῖον.

f. 1, n. 2 Εἰς τὴν συνιστορηθείσαν εἰκόνα καὶ ἐκλαμπροτάτης δόμνινας κυρίας Μαρίας· ἰαμβικά.

f. 1, n. 3 Εἰς τὴν εἰκόνα αὖθις τοῦ ἐκλαμπροτάτου ἡρωελεγεῖον.

f. 1, n. 4 ῞Ετερον ἐκ μέρους τῆς εἰκόνος τοῦ ἐκλαμπροτάτου μπεϊζατὲ κυρίου Στεφάνου, υἱοῦ τοῦ γαληνοτάτου αὐθέντου ἡρωελεγεῖον

[11] Hurmuzaki (1909), 401-2.

[f 1, n. 5] Ἐκ μέρου[ς] τῆς εἰκόνος τοῦ μπεϊζατὲ Κωνσταντίνου πρὸς τὸν αὐτοῦ πατέρα.

f. 1v, n. 1 [Ἕτερον εἰς τὸν ἐκλαμπρότατον αὐτὸν ἡγεμόνα ἡρωελεγεῖον.]

f. 1v, n. 2 Εἰς τὸν Ῥάτουλα Γολέσκον ἰαμβικόν.

*[...]*

f. 1v, n. 3 Εἰς τὸν μακαριώτατον κύριον Δοσίθεον πατριάρχην τῆς Ἰερουσαλὴμ ἐπίγραμμα ἡρωϊκόν.

f. 2, n. 1 Σημείωμα πιττακίου.

f. 2, n. 2 Ἕτερον.

f. 2v, n. 1 Ὑπόμνημα εἰς πατριάρχην

f. 2v, n. 3 Αὐτὸ τὸ βιβλίον ὑπάρχει καὶ εἶναι ἐδικό μου τοῦ Γιαννάκη τοῦ Χρυσοβέργη καὶ ἐμένα μὲ τὸ χάρησεν ὁ ἡγούμενος τῆς παναγίας ἀπὸ τὸ Φοκσάνι, καὶ ὅποιους ἤθελε τὸ ἀποξενώσει ἢ ἀπὸ τοὺς σπουδαίους, ἢ ἀπὸ τοὺς βαρβάρους, νὰ ἔχει τὴν κατάραν τῆς παναγίας καὶ ἔγραψα ἐγὼ μὲ τὸ χαίρι μου εἰς
20 ἔτος ,αψνζ᾽ ἰουλλίου 25.

f. 2v, n. 4 Ὅτι εἶμαι τῷ Κωνσταντίνῳ ἱερεῖ δῶρον παρὰ τοῦ κὺρ Τριανταφυλλίδη δασκάλου.

## [Commentary on Arist. *Physica*]

*[Ὑπομνήματα εἰς τὰ ὀκτὼ βιβλία τῆς φυσικῆς ἀκροάσεως Ἀριστοτέλους]*

f. 3 Διαίρεσις φιλοσοφίας.

f. 3v Ἐμπέδωσις τῆς ἐκτιθείσης διαιρέσεως.

f. 4 Ἀνασκευὴ τῆς ἐκτιθείσης δόξης δηλαδὴ τῶν στοϊκῶν.

f. 4 Διαίρεσις φιλοσοφίας κατὰ τοὺς περιπατητικούς.

f. 4v Ὅτι γνήσια τοῖς τοῦ φιλοσόφου δόγμασι ἡ ἐκτιθεῖσα διαίρεσις.

f. 4v Ὁπότερον μέρος τῆς φιλοσοφίας ἐστὶ κρεῖττον καὶ τιμιώτερον.

f. 5v Διαίρεσις τοῦ θεωρητικοῦ φιλοσοφίας.

f. 11 Ὁποία ἐστὶν ἡ ἀξία καὶ τὸ χρήσιμον τῆς περὶ φύσεως ἐπιστήμης.

f. 11v Ἔκθεσις τῆς ἀληθέας.

f. 11v Τὸ χρήσιμον τῆς φυσικῆς ἐπιστήμης κατὰ τὴν οἰκείαν αὐτῆς φύσιν.

f. 12 Λύσις τῶν ἀντικειμένων λόγων.

f. 12v Ὁποῖον ἐστὶ τὸ ἐπιστητὸν γένος τῆς φυσικῆς ἐπιστήμης.

f. 13 Δόξα τῶν βουλομένων ἐπιστητὸν γένος τῆς φυσικῆς εἶναι τὸ κινητὸν ὄν.

f. 13v Ἀνασκευὴ τῆς ἀνωτέρω δόξης.

f. 14 Ἀπάντησις πρὸς τοὺς λόγους τῶν αὐτῶν.

f. 15 Ἀπορία.

f. 15v Δόγμα τῶν βουλομένων τὴν κινητὴν οὐσίαν γένος ἐπιστητὸν εἶναι.

f. 16 Ἀνασκευὴ τῆς ἐκτεθείσης δόξης.

f. 17v Ὅτι τὸ ἐπιστητὸν γένος τῆς περὶ φύσεως ἐπιστήμης ὀρθῶς ἔχει λέγεσθαι τὸ φυσικὸν σῶμα.

f. 18v Ὁποῖον οἰκειότερον κατὰ λέξιν τοῦ φιλοσόφου ῥητέον τὸ ἐπιστητὸν γένος τῆς φυσικῆς ἐπιστήμης.

f. 19v Δόξα β.

f. 20 Ἔκθεσις τῆς ἀληθέας.

f. 20v Λύσις τῶν ἀντικειμένων λόγων.

f. 21v Ὁρισμὸς τῆς φυσικῆς ἐπιστήμης καὶ διαίρεσις τῶν μερῶν αὐτῆς.

f. 21v Διανομὴ τῶν μερῶν τοῦ ἐπιστητοῦ γένους τῆς φυσικῆς ἐπιστήμης.

f. 22 Περὶ τῆς τάξεως τῶν μερῶν τῆς περὶ φύσεως ἐπιστήμης.

f. 23 Περὶ τῶν ὀκτὼ βιβλίων τῆς φυσικῆς ἀκροάσεως.

f. 23v Ἔκθεσις τῆς δευτέρας δόξης.

f. 24 Ἀνασκευὴ τῆς ἐκτεθείσης δόξης.

f. 24v Θέσις τοῦ ἀληθοῦς καὶ λύσις τῶν ἐναντίων ἐπιχειρημάτων.

f. 25v Ἀπάντησις πρὸς τοὺς ἀντικειμένους λόγους.

f. 26 Ὅτι οἰκεῖα τῆς περὶ φύσεως ἐπιστήμης ἡ παροῦσα πραγματεία.

f. 26v Ἀπάντησις πρὸς ταῦτα.

f. 26v Λύσις τῶν ἐναντίων λόγων.

f. 27 Ἐπὶ τῆς ἐπιγραφῆς τῆς προκειμένης πραγματείας.

f. 27v Περὶ τῆς κοινῆς ἐπιγραφῆς τῶν ὀκτώ.

f. 28 Περὶ διαιρέσεως τῶν ὀκτὼ βιβλίων τῆς φυσικῆς ἀκροάσεως.

f. 28v Ὑπομνήματα εἰς τὸ πρῶτον τῶν περὶ φυσικῆς ἀκροάσεως· διαί ρεσις τοῦ βιβλίου.

f. 29 Ὑπομνήματα εἰς τὸ πρῶτον τῶν φυσικῆς ἀκροάσεως.

f. 101v Εἰς τὸ δεύτερον τῶν περὶ ἀρχῶν ὑπομνήματα.

f. 153 Συνοπτικαὶ ὑπομνήσεις εἰς τὸ γ$^{ον}$ τῆς περὶ φυσικῆς ἀκροάσεως.

f. 169v Εἰς τὸ δ$^{ον}$ τῶν φυσικῶν, ὑπομνήσεις συνοπτικαί.

f. 187 Εἰς τὸ ε$^{ον}$ τῶν φυσικῶν ὑπομνήματα.

f. 209v Εἰς τὸ ζ τῶν περὶ φυσικῆς ἀκροάσεως ἔκθεσις συνοπτική.

f. 238 Τὴν ἑβδόμην ἐν τάξει τῶν περὶ φυσικῆς ἀκροάσεως βίβλον.

f. 261v Βιβλίον η$^{τον}$ εἰς τὸ θ τῆς φυσικῆς ἀκροάσεως. Εἰσαγωγὴ Θεοφί λου τοῦ Κορυδαλλέως τοῦ σοφωτάτου.

f. 314 Ἐπίλογος ἐπὶ τῆς φυσικῆς ἀκροάσεως.

## Commentary on Arist. *De caelo*

f. 316 Ὑπόμνημα συνοπτικὸν καὶ ζήτημα εἰς τὴν περὶ οὐρανοῦ πραγματείαν.

f. 316 Προοίμιον.

f. 316 Τὶ τὸ περὶ οὗ ὁ λόγος ἐνταῦθα.

f. 316v Ἀνασκευὴ τῆς ἐκτεθείσης δόξης.

f. 317 Ἀπάντησις πρὸς τοὺς λόγους τῆς ἐκτεθείσης δόξης.

f. 317v Πρῶτον τοίνουν ἀπὸ τῆς τάξεως συνάγεται τὸ τοῦ Σιμπλικίου δόγμα.

f. 318 Ἀναίρεσις τῆς δόξης τοῦ Σιμπλικίου.

f. 319 Δόξα τῶν νεωτέρων περὶ τοῦ ἐπιστητοῦ τῆς πραγματείας.

f. 320 Ἔκθεσις τῆς ἀληθέας.

f. 321v Ἀντίθεσις πρὸς Ἀλέξανδρον ὑπὲρ Σιμπλικίου ἡ τῶν οἰκείων.

f. 323 Περὶ οὐρανοῦ βιβλ. Α$^{ον}$ κεφ α$^{ον}$.

f. 326 κεφ β$^{ον}$.

f. 330 κεφ γ$^{ον}$.

f. 334 κεφ δ$^{ον}$.

f. 369 κεφ ε$^{ον}$.

f. 382v κεφ η$^{ον}$.

It is difficult to say where the codex was made, as there are no data about Markos' training before 1699, when he taught Aristotle's physics in Tirnavos (Thessaly) basing his lectures on Korydaleus' treatise Ὑπομνήματα εἰς τὰ ὀκτὼ βιβλία τῆς φυσικῆς ἀκροάσεως Ἀριστοτέλους.[12] It is highly probable that Markos used the copy he finished 10 years earlier. In any case, we have reasons to believe that he used this codex also in the following years, during his stay in the Great Patriarchal School ('Phanar'), as well as after 1702, when he became a Professor of philosophy and the Director of the Prince's Academy in Bucharest. This is supported by excerpts from different patriarchal diplomatic letters written in his own handwriting on f. 2 of the manuscript. We know that in the Academy, apart from philosophy, Markos taught grammar and rhetoric and perhaps he used these excerpts during his sessions. A study of the marginal notes accompanying the commentaries is still to be undertaken, but apparently they are work-notes. This allows me to put forward a hypothesis that we are dealing with Porphyropoulos' work book which he used in his teaching and research.

We do not know much about the subsequent owners of the codex. From note 3 on f. 2v we learn that one of them was John Chrysobergos.[13] He had received it on 15 July 1757 from the parish councillor of the 'Most Holy' church in Foksani. John puts a malediction on whoever would try to deprive him of it. After him the book came into possession of the teacher Triantaphyllidis, who gave it to some priest Constantine (f. 2v, n. 4).

According to the entry in the inventory book, the codex came from Albania. This leads to inevitable associations with Moschopolis[14], but so far we have no evidence to confirm this conjecture. In this outstanding centre of Hellenic culture Korydaleus' works were well-known, some of them being printed there, but amongst the published books there are no commentaries on the *Physics* and *De caelo*[15]. My attempt to learn the name of the person from whom the then director of the library, Boris Djakovich, acquired it, proved unsuccessful. It turned out that the archives for 1921 were lost in the chaos of socialist 'hyperorganisation'. Perhaps, the seller was a tailor from Plovdiv, who traveled to Albania. We can conclude it from a slip in the manuscript,

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[12] Camariano-Cioran (1974), 374 no 63.

[13] Obviously, the case in point is about a member of the Wallachian family of the Chrysobergs.

[14] Because of the special interest to the Greek heritage in this town, where the famous New Academy was established (1750) as well as the first printing-house on the Balkans outside Constantinople (1722).

[15] Peyfuss (1989), 221.

written on the same paper and inserted between the pages, containing names of people who made payments, as well as names of debtors. At the end of the list the 'tailor's clerk' modestly mentions himself. This is where we learn about this tailor's large-scale business spreading over the Balkans and reaching as far as Germany, Denmark and Spain. An attempt could be made to establish the name of the last owner of the codex and to track the book's itinenary from Albania, however hypothetical this possibility may be.

Markos Porphyropoulos' autograph undoubtedly deserves serious attention. This is a valuable document about the Aristotelian tradition on the Balkans and it is a compelling evidence of the way passions of nationalism can radically alter intellectual attitudes in a multi-cultural milieu.

## Acknowledgements

I would like to express my special gratitude to Veneta Ganeva from the Public Library in Plovdiv for her cooperation while working on the manuscript. I owe my thanks to Prof. Nadia Danova and Prof. Petya Yaneva for their invaluable help with interpreting some difficult parts of the text and for the elucidation of the historical circumstances connected with the time the codex was written and with its 'travels' through the Balkans. I am especially grateful to Dr. Pavel Gregorić for revising the English of the paper.

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# Gábor Betegh, *The Derveni Papyrus. Cosmology, Theology and Interpretation,* Cambridge University Press, Cambridge, 2004 (pp. xii+441, ISBN 0–521–80108–7)

Gábor Betegh has provided scholars with precisely the book that is needed on the Derveni papyrus. Unlike most papyri, which were preserved in the arid climate of Egypt, this papyrus was found in Greece near Derveni, which is north of Thessalonica. It owes its preservation to being burnt on a funeral pyre some time in the late fourth century BCE and thus desiccated. The lower half of the scroll was totally destroyed in the fire, but the upper half of twenty-six columns of text, with somewhere between 10 and 17 lines in each column, is largely legible. The outer part of the scroll naturally suffered the most damage, and thus the first three columns are in particularly bad condition. The bulk of the text is an allegorical reading of an Orphic poem about the gods, particularly Zeus. It is thus an extremely important text for the study of one of the most obscure areas of Greek religion, Orphism. The author of the text explains the poem as a riddling reference to a cosmology that has close connections to the cosmologies of the Presocratic philosophers Anaxagoras and Diogenes of Apollonia. Thus, the papyrus has the potential to shed light on Presocratic philosophy and on the intersection between mystery religions such as Orphism and rational Greek philosophy. In the forty some years since its discovery, the papyrus has already attracted a significant body of important scholarship, but this scholarship has taken the form of articles that deal either with just small parts of the text, e.g. a specific column, or with just one or two of the important issues relating to the papyrus, e.g. the authorship of the text found on the papyrus or the nature of the Orphic poem on which that text comments. Scholars have lacked a reliable resource where they can get an account of the basic information concerning the papyrus as well as critical discussion of the large range of issues that are raised by it. Betegh (hereafter ***B***) provides this resource and more; he gives new and challenging answers to a number of the puzzles that have figured prominently in scholarship on the papyrus.

Given the ruinous state of the papyrus, the answers to many questions involve a great deal of speculation; it is thus impossible for ***B***, or anyone else, to develop anything like a definitive interpretation. Moreover, we are still in desperate need of an authoritative edition of the text of the papyrus. As ***B*** recounts the story, upon its discovery in 1962, S. G. Kapsomenos was given the first chance to produce an edition, but he had not completed it when he died in 1978. Since

then his assistant K. Tsantsanoglou has been working on the edition. In the meantime, an unauthorized edition was published anonymously in *Zeitschrift für Papyrologie und Epigraphik* in 1982.[1] This unauthorized edition has been the basis for much of the scholarly work on the papyrus. In the collection of essays on the papyrus edited by André Laks and Glenn Most in 1997,[2] Tsantsanoglou published a preliminary account of the first seven columns of the papyrus and provided remarks on the editors' translation of the entire papyrus. ***B*** himself had the chance to inspect several of the columns of the papyrus at an exhibition in the Archaeological Museum at Thessalonica, and he notes the results of his inspection some 15 times in the apparatus. Despite this additional editorial work, ***B*** asserts that Janko's 2002 edition[3] 'should form the textual basis for the study of the papyrus until Prof. Tsantsanoglou's long-awaited edition becomes available' (1). See Richard Janko in *Bryn Mawr Classical Review* 2005.01.27 for a critical evaluation of the text and translation printed by ***B***.[4]

One of the great virtues of ***B***'s book is his systematic approach to the papyrus, in accordance with which he thought it best 'first to separate the different strata of the text' and 'analyse them one by one' before considering 'the way they are related to and built upon each other' (viii). Thus, in Chapter 1 he starts logically with the archaeological context of the burial, in association with which the papyrus was discovered, and on the physical characteristics of the papyrus. In Chapter 2, he proceeds to a discussion of the first six columns, which are in the worst condition and appear to deal primarily with ritual and eschatological concepts. He next reconstructs and gives an interpretation of the Orphic poem, for which the author of the papyrus provides an allegorical interpretation (Chapters 3 and 4), before reconstructing the author's own theology and cosmology (Chapters 5 and 6), so that we are provided with an account of the contents of the papyrus that is as much as possible based on internal evidence, before comparing the Derveni author's outlook with Presocratic cosmology and theology. ***B*** next gives us separate chapters investigating the connections of the Derveni author to Anaxagoras (Chapter 7), to Diogenes of Apollonia and

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1 [Anonymous], 'Der orphische Papyrus von Derveni', *Zeitschrift für Papyrologie und Epigraphik* 47 (1982), 1*–12*.

2 Laks, A. & G.W. Most (eds.), *Studies on the Derveni Papyrus.* Oxford: Clarendon Press 1997.

3 Janko, R., 'The Derveni Papyrus: An interim text', *Zeitschrift für Papirologie und Epigraphik* 141 (2002), 1–62.

4 Available at: http://ccat.sas.upenn.edu/bmcr/2005/2005-01-27.html

Archelaus (Chapter 8), and to Heraclitus and the gold tablets as well as to other experts in Orphic initiation in the fifth and fourth century (Chapters 9–10). In Chapter 10, ***B*** also addresses the big synthetic questions about the papyrus: what sort of a figure was the author of the papyrus and what was his project? ***B*** in particular addresses the question of the connection between the early columns of the text, which focus on ritual and eschatology, and the bulk of the text which contains the allegorical commentary on the Orphic poem. ***B***'s principle of using internal evidence to answer questions before rushing to external parallels, which is evident throughout the book, is another great virtue. He thus avoids the real danger of remaking the text of the papyrus in the image of later evidence and instead uses the papyrus to provide crucial early evidence on important issues.

The book is very rich, and I cannot do justice to all aspects of ***B***'s accomplishment here. Instead I will try to give an idea of some of the most important theses. ***B***'s overarching conclusions are that, although attempts to identify the Derveni author with any specific historical figure have so far been unconvincing (***B*** devotes an appendix to a largely persuasive rejection of Janko's suggestion that Diagoras of Melos was the author), he was probably in the business of carrying out Orphic initiations for individuals anxious about the next life. The Derveni author is critical of many lesser practitioners of these initiations and in particular emphasizes that he can convey better understanding of the ritual and indeed of the cosmic context in which the ritual takes place than other supposed experts. He deploys the concepts of Presocratic cosmology in order to bring Orphic initiation up to date and to display his superior understanding of it. Although certainty is hardly possible, ***B*** suggests that the first part of the papyrus may have explained the actions of a specific ritual, probably a funerary ritual, while the second part of the papyrus, the analysis of the poem, provided explanation of the verbal aspects of the ritual.

In Chapter 1, 'The Find', ***B*** primarily presents a clear summary of the work of others. He does argue that the scroll served not just as scrap paper to start the pyre, nor as a simple heirloom but was rather purposely burned with the corpse as part of an Orphic funerary ritual, as is suggested by the striking role of fire in the Derveni text. ***B*** rightly emphasizes that this need not mean that the person buried in the tomb had also lived a rigorous Orphic life. It is possible that he was simply buying purification by having an Orphic funeral ritual. The term Orphic, like the term Pythagorean, could be applied to people with a wide range of different beliefs and ways of life. Thus, arguments that the person in the tomb cannot have been an Orphic in any sense, because the vases for pouring wine found there conflict with a supposed Orphic ban on drinking wine, or because the wealth of the tomb or the military equipment found in it conflict with Orphic

asceticism or a prohibition on bloodshed are ultimately inconclusive. In addition to the arguments presented by ***B***, I would note that the presence of a material object tells us little of its actual use. Pitchers typically used to pour wine (οἰνοχόαι) can also pour water. ***B***, in fact, questions Burkert's claim that the Orphics did ban wine. ***B***'s argument has some force, in that the passage from Plato's *Laws*, which Burkert cites (672B ff.), contains no explicit assertion that the Orphics banned wine. It is not clear, however, that ***B*** sees the full force of Burkert's argument. The passage in the *Laws* suggests that there was an Orphic story according to which wine was given to mortals by Dionysus as a punishment (See also 672D). What would be the point of such a story if not to suggest that wine was dangerous for humans and should be avoided as much as possible?

Chapter 2 is devoted to the first six columns of the papyrus, which focus largely on ritual and eschatological concepts. This is the most severely damaged portion of the papyrus. ***B*** argues plausibly that the author is speaking of a ritual to secure safe passage to the underworld for the souls of the dead. The *daimones* mentioned prominently in these columns are equivalent to the souls of the dead. When they impede those who want to pass to the underworld, they are called Erinyes, while souls that have been appeased are called Eumenides. The magi, whose enchanting songs are said to remove impeding *daimones*, are not Persian magi but rather a group of religious professionals in Greece, who claim expertise in matters of sacrifice, divination, initiation etc.; moreover, the author of the papyrus would include himself in this group.

In his reconstruction of the Orphic poem in Chapter 3, ***B***'s policy is to give priority to evidence internal to the papyrus, unless that evidence leads to impossible consequences. ***B*** argues that the author of the papyrus followed the sequence of the poem and gave a systematic exegesis of it without jumping around. Thus, we can reconstruct the poem, if we 1) take in sequence the lines of the poem that the author quotes before each section of commentary (the lemmata) and 2) , where those lemmata are missing because of the damage to the papyrus, reconstruct the lemmata from the words the author highlights in his commentary. The narrative sequence that results from this reconstruction is quite different from other Orphic poems. After a proem that warns off the profane, the poem proper begins with Zeus' accession to power, following which he swallows the phallus of Ouranos, which had been cut off by Kronos. As a result, in a manner that is not at all clear, all things come to be in Zeus and are reborn from him; a hymn to Zeus follows. There is then a reference to an incestuous relationship between Zeus and his mother Rhea, but the consequences of this union are not clear. In adopting this reconstruction, ***B***'s most controversial move is to suppose that the Derveni author is right to interpret αἰδοῖον to mean 'phallus', although a number

of scholars have argued that in the poem it was an adjective modifying δαίμων and hence a reference to 'the revered daimon', Phanes, the bisexual god who plays a prominent role in the much later poems known as the *Orphic Rhapsodies*.

In Chapter 5, ***B*** provides an interpretation of the poem that he has reconstructed in Chapter 4. He argues that, although the poem is usually called a theogony, it does not properly belong to the genre, since its primary interest is not the origin of the world, but rather Zeus. It has elements of a hymn to Zeus but lacks features that one would expect in a hymn (e.g. use of the vocative case). Its genre remains ultimately elusive. The story of Zeus that is told in the poem does presuppose a theogony, but the theogony that ***B*** derives from it surprisingly has more connections to Hesiod than to the Orphic theogonies attested in the later tradition and is missing prominent features of those theogonies. Thus, there is no trace of the deity Chronos, the egg which he places in the aither or of the winged god Phanes, who hatches out of the egg. The theogony starts with Night and Aither as male and female principles. The divine succession found in Hesiod (Ouranos, Kronos and Zeus) appears in the Derveni poem as well. While Kronos castrates Ouranos as in Hesiod, the severed phallus has a different fate, however, in that it is eaten by Zeus, so that Zeus and Kronos are to some extent collaborators. The crucial act of the theogony is Zeus' recreation of the world by swallowing the phallus. A typical problem in theogonies is that the first god and the highest god are not the same. ***B*** argues that the theogony of the Derveni poem solves this problem by having the highest god, Zeus, become the first god through recreating the world. ***B*** maintains that the use of the verb μήσατο indicates that Zeus recreates the world not by sexual reproduction but by a rational act of planning.

In Chapter 5, ***B*** turns from the Orphic poem to the Derveni author who is commenting on it and in particular to his theology. For the Derveni author, all the various names of the gods in the poem refer to the one god, but the names are not simply synonyms but rather refer to different aspects or functions of the one god. Aphrodite is the one god insofar as he brings different portions of being together. Although allegoresis is used to reduce the traditional gods to one, the author stops short of pantheism and accepts that there is a plurality of beings separate from the one god. The monotheistic tendency of the Derveni author is, at least on the surface, in direct conflict with the polytheism of the Orphic poem on which he is commenting. ***B*** suggests that he is not doing as much violence to the poem as might appear at first sight, since the poem too has a monistic moment, when everything is in Zeus and Zeus is alone.

The Derveni author's view of the relation between his one deity and the plural world is found in his cosmology, which ***B*** treats in Chapter 6. The

cosmology adheres to strictures on coming to be emphasized by Parmenides: there is no generation in the absolute sense. Apparent coming to be is in reality a new configuration of previously existing entities. The Derveni author is a pluralist who posits a preexisting cosmic mixture, which certainly contained air and fire and probably other elements as well. In the precosmic state, entities were not able to develop because of the presence of fire which prevented them from 'coagulating'. The crucial cosmogonic act is the separation of a large number of fiery particles out of the mixture by the cosmic god, who then fashions the sun from them. This act leads to the emergence of the cosmos in several ways. The removal of fiery particles from the precosmic mixture makes it possible for separate entities to coagulate. In addition, the sun still communicates two sorts of motions to the remaining mixture. It instigates motions that cause collisions which lead things to be broken into bits of matter; it also causes the bits of matter to meet to form larger entities by the principle of like to like. It remains unclear to me, how the sun can be understood to be responsible for inspiring these two quite different sorts of motions. ***B*** goes on to argue that the Derveni author envisaged a cosmic cycle, in which a phase of mixture dominated by air is followed by an ignited state dominated by fire; this ignited state becomes the cosmos we know, when the cosmic god collects bits of fire together to create the sun; our present cosmos will finally return again to the phase dominated by air. It is again unclear what motivates the movement from the phase dominated by air to the phase dominated by fire. The history of the cosmos is thus the result of the interaction of air and fire, but they are not principles of the same sort. Air is intelligent and can control fire, whereas fire is a purely mechanical force. ***B*** notes that this cosmology of air and fire is not as foreign to the Orphic poem, to which it is applied through allegoresis, as we might suppose, since the theogony presupposed by the poem begins with two similar principles, night and aither.

B (pp. 167 and 275) draws attention to what he regards as a striking similarity between these first principles (night/air and aither/fire) and the principles that Zaratas (Zoroaster) is reported to have taught Pythagoras (father/light and mother/dark) according to a testimonium in Hippolytus (*Ref.* 1.2.12 = *Aristoxenus* Fr. 13, Wehrli). This is a problematic testimonium, however, and it is uncertain how much we can learn from it. Hippolytus cites as his sources Diodorus of Eretria and Aristoxenus. Aristoxenus is one of our best early sources for Pythagoreanism. As Wehrli notes (pp. 50–51), however, the testimonium has internal contradictions, which show that it is a compound of several reports, and some details directly contradict other testimonia from Aristoxenus (e.g. the prohibition on beans is denied in Aristoxenus Fr. 25); thus, it is unclear how much of the testimonium can be assigned to Aristoxenus

as opposed to the otherwise unknown Diodorus. The mention of Aristoxenus would make no sense unless he had at least reported contact between Zaratas and Pythagoras, but none of the details of Zaratas' teaching need go back to Aristoxenus and are thus of uncertain provenance. It is noteworthy that the Pythagorean table of opposites as reported by Aristotle includes the pair male and female as well as the pair light and dark (*Metaphysics* A.5 986a23–26). This evidence from the table of opposites need not confirm that either Pythagoras or the Pythagoreans got these pairs from Zaratas, however, but rather suggests that the oppositions of male and female and light and dark are common to a number of theogonies and cosmological systems and in themselves not distinctive enough to suggest either a Persian or Pythagorean background for the first principles found in the Derveni author and the Orphic poem on which he is commenting. The more distinctive pair from the Derveni papyrus, night and aither, are not found in the report about Zaratas or the table of opposites.

Having methodically reconstructed from internal evidence the theological and cosmological views of the Derveni author as well as the nature of the poem on which he is commenting, in the last four chapters, ***B*** carries out a detailed comparison between the views of the Derveni author and those in the Greek philosophical and religious tradition to whom he seems most connected. Anaxagoras (Chapter 7) is famous above all for introducing mind into cosmology and the Derveni author not only makes prominent use of a cosmic mind but uses Anaxagoras' name for it, νοῦς. It is characteristic of ***B***'s approach, however, that he does not rest content with facile similarities and draws out the complex nature of the relation between the Derveni author and his predecessors. Thus, the Derveni author explicitly calls his cosmic mind divine, as Anaxagoras does not, and, while Anaxagoras is emphatic that mind is separated from the world and not mixed with other things, the Derveni author identifies mind with air. There are striking similarities in the early stages of the cosmogony; Anaxagoras starts with all things together but with air and aither dominating, just as the Derveni author envisages an initial mixture with air and fire dominant; in both accounts entities emerge by a separating off of portions of matter followed by a combination of these bits of matter. In light of these similarities to Anaxagoras, it is not surprising that, when the Derveni author says in column 19 that 'existing things have been called each single name by reason of what dominates', many scholars have assumed that this is a reference to the Anaxagorean principle of predominance, according to which, although everything has small portions of everything else in the world in it, each thing is called after that which predominates in amount in it, e.g. if something has more fire in it than anything else, we call it fire. ***B*** strikingly rejects this conclusion (pp. 270–71), but his argument is not completely persuasive. He

seems right to stress that, elsewhere in the papyrus, air is said to dominate things not by being in things but rather because things are in it. Nor is there any trace of Anaxagoras' doctrine that everything is in everything. Nonetheless, it is not clear what sense B is giving to the passage in column 19. If 'existing things have been called each single name by reason of what dominates' and what dominates is air, why aren't all things called air? The passage itself suggests, on the contrary, that there are a variety of names assigned to things rather than just one, and ***B*** himself argues that the Derveni author is not a monist.

In Chapter 8, ***B*** argues that, while the similarities of the Derveni author to Diogenes of Apollonia are strong, they are not as significant as usually supposed; in many ways the Derveni author is closest to the revised Anaxagoreanism of Archelaus. Both the author of the papyrus and Diogenes regard air as the cosmic principle and agree that it is divine and intelligent. On the other hand, while Diogenes is a monist, i.e. everything is a form of air, it is clear that for the Derveni author fire, at least, cannot be reduced to air. Diogenes' air, moreover, acts on the world by being part of everything, whereas for the Derveni author air is an independent cosmic agent which works on the world from outside. Archelaus combines features of the views of Anaxagoras and Diogenes in a way that is quite similar to the Derveni author. For Archelaus mind is the cosmic principle, but it is not separate from the world as in Anaxagoras but 'closer to matter' as it is for the Derveni author. Archelaus also calls mind divine, as the Derveni author does and Anaxagoras does not. Moreover, there is some evidence that Archelaus regarded air as the arche, which points to the same prominent role for air as in the Derveni author and Diogenes.

In Chapter 9, ***B*** emphasizes that the eschatology discussed in the first columns of the papyrus and the cosmology deployed to interpret the poem in the latter columns are joined by a quotation from the only author cited in the papyrus besides Orpheus, Heraclitus: 'The sun ... according to nature is a human foot in width, not transgressing its boundaries. If ... oversteps, the Erinyes, the guardians of Justice, will find it out.' The papyrus here presents as one fragment what had previously been regarded as two, Fr. 3 and Fr. 94. Heraclitus is quoted both because of his emphasis on the limits of the sun, which is important given the Derveni author's emphasis on the delimitation of the sun as the crucial act in cosmogony, and also because Heraclitus identifies the Erinyes as the agents who enforce the limits on the sun, while the Erinyes are mentioned several times in the first columns of the papyrus and are thus clearly central to the eschatology of the Derveni author. Heraclitus would thus appear to be crucial in understanding the connection between the two parts of the papyrus. Again, however, ***B*** rejects the notion that the Derveni author is simply borrowing from Heraclitus. The

relationship is more complicated. ***B*** makes the reasonable assumption that it is the central cosmological doctrine, 'the dynamic interplay between the intelligent air and the brute force of fire' (332), that provides the link between eschatology and cosmology. He cites extensive evidence from Greek myth, from the gold plates found in Greek burials and from Orphic narratives that fire, in the form of a thunderbolt or pyre, had a significant role in eschatology. He sees a similar role for fire in Heraclitus Fr. 66, 'The fire will judge and convict all things when it comes upon [them].' The Derveni author is critical of Heraclitus' notion that fire is divine and intelligent, arguing instead that fire has a purely physical power, which is directed by intelligent air. ***B*** makes the intriguing suggestion that the Derveni author quotes Heraclitus in part to show that Heraclitus is in fact inconsistent: If fire is indeed divine intelligence, then why must it be so closely watched and limited by the Erinyes? ***B*** concludes that for the Derveni author fire has immense power, but this fire is controlled by intelligent air and is the means through which divine justice acts. This central physical and eschatological doctrine is thus summed up in a line from the Orphic poem: 'Zeus the king, Zeus who rules all with the bright bolt.'

The final chapter provides answers to the big questions: what sort of figure was the Derveni author and what was the project of the papyrus as a whole? ***B*** ends with an illuminating comparison. Empedocles presents himself as a divine poet like Orpheus, but he provides both a doctrine of the fate of humans after death and also a physical explanation of that doctrine in terms of the four elements, a physical explanation not provided by Orpheus. The Derveni author on the other hand is not a divine poet but rather a prophet, who explains the riddling teaching of Orpheus' poem in terms of a physical cosmology. ***B*** argues that the Derveni author is a specialist in initiations of an Orphic character, but one who is critical of many of his competitors and who regards it as crucial that the initiate not just complete the ritual actions and say the ritual words but also understand the cosmic significance of these words and actions. The Derveni author is analogous to Plato's master doctor who wants to understand his practices and explain them to his patient, while the practitioners of initiations attacked by the Derveni author are analogous to Plato's slave doctors, who prescribe courses of treatment and threaten patients but do not explain what is going on (*Laws* 720A-E and 857C-E). ***B*** suggests that the author may have thought that his presentation needed to fulfill the standards of a scientific account both to impress his clients by showing his understanding of the ritual in a cosmic context and to be persuasive enough to produce a psychological effect. ***B*** draws a suggestive parallel between the Derveni author and Heraclitus in their claim to knowledge that most people lack without knowing it and in their use of the interpretation of oracles as the model for all

learning. Similarly he suggests that Plato and the Derveni author have a common conviction that salvation resides in genuine knowledge of the nature of the soul, the world and the way the divine controls it (364–70). It seems to me, however, that ***B*** does not put enough emphasis on the real differences between Heraclitus and Plato on the one hand and the Derveni author, on the other, differences that make the former philosophers and the latter a prophet. In the case of Heraclitus, a fragment such as 'the road up and the road down are one and the same' (Fr. 60) is on its face a paradox involving important philosophical issues (How can up and down be the same?), and it is a paradox that is found not just in the text of Heraclitus but in the world itself. If one can solve the paradox in the text of Heraclitus, one might be able to solve the same paradox as it is presented by the world. The Derveni author tells us that the text of the Orphic poem on which he comments is a riddle, but the poem does not for the most part present philosophical puzzles as the fragments of Heraclitus and the world do. Actions such as Zeus' eating the phallus of Ouranos may cry out for allegorical interpretation to some, but there is no straightforward paradox here nor in the words 'Zeus the king, Zeus who rules all with the bright bolt,' which ***B*** regards as one of the key assertions of the poem. Moreover, while the Derveni author provides the correct interpretation of the Orphic poem to his readers, he does not teach a method of interpreting the poem or the world. In the end the initiate has to rely on the authority of the Derveni author. Plato and the Derveni author may both regard an understanding of the soul as crucial, but while Plato proposes a dialectical method for determining the nature of the soul and the cosmos, the Derveni author teaches no method for interpreting either the soul or the world but rather supplies an answer from on high.

This is a remarkable book because of ***B***'s success in addressing the complex problems of a complex text in a clear and systematic fashion and in developing a unified interpretation of that text which takes into account its many layers of meaning. ***B***'s book provides scholars with a challenge. Here is a powerful and unified presentation of what the Derveni papyrus is all about. Not all of its theses will ultimately survive scholarly scrutiny but many will; the debate ***B***'s book stimulates as well as the answers he has given will inevitably lead to greater understanding of this puzzling text.

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Peter Kingsley, *Reality,* The Golden Sufi Center, Inverness, 2003 (pp. 591, ISBN 1-890-350-08-7 (hb), ISBN 1-890-350-09-5)

An introduction to, or more precisely, an initiation into the world of μῆτις is the shortest description of this outstanding book – an initiation into the world of Parmenides and Empedocles, into the world of Greeks, into the world in which we, Europeans, actually live. The author's intent is not to give us another piece of scholarly work or to contribute to our knowledge about Greek philosophy, although he does that too. He is going to transform the reader existentially, to turn him to the true reality. This explains the title - *Reality* - the real subject of this unusual discourse. The book is consiously left outside the boundaries of scholarly conventions. Not only that there is no index, no numbering of fragments, no footnotes and the table of contents lists only two parts of a book of about 600 pages. Kingsley is telling a story – the 'strange story of our lives' (15) – and writes it in stone, not in paper, 'and you are the stone' (15). The sceptical academic will be tempted to dismiss this 'story' straight away, but perhaps he or she should overcome his prejudices.

The book is based on high quality research. There are several points of innovation. (1) Kingsley chalenges the traditional thesis of Parmenides as the founder of logic and rational discourse. (2) He goes further than anybody else in rejecting the *from mythos to logos* formula introducing the concept of μῆτις as a fundamental characteristic of reality, recognized by Homer and by Greek philosophers. (3) Analyzing the μῆτις vocabulary, he finds new links between Parmenides and Empedocles and explains the positive characteristics of Strife, (4) This sheds light on the irrational (or better the suprarational) aspect of Socratic ἔλεγχος and on Platonic mysticism. (5) This contributes to the better understanding of Phoenicians elements in Greek culture. (6) In Parmenidean and Empedoclean texts the reader will find some unexpected links to the sophistic εὐβουλία – the practical wisdom in the world of change. But by introducing μῆτις, Kingsley is not looking for a common ground. He is not looking for logical means of resolving contradictions in philosophical doctrines in favour of the unity of philosophical 'development'. 'In the world of μῆτις there is no neutral ground... The more you let yourself become a part of it the more you begin to discover that absolutely everything, including the fabric of reality itself, is trickery and illusion (91)'. Here we have the grounds of the particular mysticism Kingsley expounds in his book. Every philosophical

teaching is a road to an illusory and not rational reality. It does not contain germs of truth to be collected in a big picture. On the contrary, it conveys the reality by its illusory nature, by its deceitfulness, by its cunning tricks. That is why Kingsley is so sensitive exploring the language of μῆτις in philosophical texts. Kingsley is not a historian of philosophy who wants to accumulate knowledge but he wants to induce understanding, a kind of mystical experience. And this mystic element might seem the most controversial point in his work.

*Reality* consists of two parts, the first of five and the second of seven chapters. All five chapters of the first part deal with Parmenides and, in this connection, with Zeno and Socrates. Kingsley sums up the essence of the Parmenidean vocabulary in the word μῆτις - in Greek: cunning, skilfulness, practical intelligence, trickery, and, in philosophical prospective, that which can make humans equal to gods, something quite opposite of everything we understand by concepts. The word refers to the particular quality of intense awareness of the evasive and contradictory reality that always manages to stay focused on the whole (90). Parmenides happens to use this language of μῆτις, rather than anything else, to define the human condition (92). According to Parmenides, the entire human condition can be defined as a lack of μῆτις, which makes man vulnerable (385). But μῆτις is more than that: 'We live in a world created by the μῆτις, the supreme cunning, of a great being: a goddess called Aphrodite.' (385) This fact has to be recognized by man. Man has to adapt to this reality. And this is the instruction Parmenides gets from the goddess Dike. He received his wisdom through incubation; through making the journey into another world (92). Kingsley makes an amazing analysis of fr. 8.65 (ὡς οὐ μὴ ποτὲ τίς σε βροτῶν γνώμη παρελάσσηι) and connects it with two passages in Homer - *Iliad* XXIII.313 ff. that nobody could ride past a charioteer who is skilled in μῆτις, and with *Odyssey* IX.365 where the skilled in μῆτις Odyssey tells Polyphemus that his name is Οὖτις. Then the words οὐ μὴ ποτὲ τίς actually refer to μῆτις and this is what the goddess is about to bestow on Parmenides. 'When she introduces her hint about nobody being able to outdo Parmenides in μῆτις, the goddess expresses herself with the help of a pointedly emphatic double negative - οὐ μὴ ποτὲ τίς, nobody at all, absolutely nobody' (226). No ordinary human has the capacity to see or know anything. Knowledge is only reachable through the ἔλεγχος of the goddess. All the three goddess' paths are a trick, a μῆτις. At this point Kingsley makes an excursus to Socrates' practice of ἔλεγχος, and he connects it with ἔλεγχος in the poem of Parmenides. He regards both of these ἔλεγχοι as techniques of existential transformation induced by a growing consciousness of the inability of reason to grasp the truth. The ἔλεγχοι are essentially forms of philosophical

initiation. Hence, Kingsley argues that it is wrong to regard Socratic ἔλεγχος as a search for definitions and a conceptual enterprise. Kingsley gives a similar interpretation to the arguments of Zeno. He was not just performing some clever tricks. He was revealing, with his μῆτις, the true reality, the fact that this whole world we believe in is an illusion (298).

In the second part of the book the author turns to Empedocles. He is interpreted along the same lines as a continuator of the tradition of μῆτις. Kinglsey finds an evidence for this in the last sentence of the opening passage of his poem: 'Mortal resourcefulness (μῆτις) can manage no more' (fr. 2.17). Human beings have to put their lives in order under the guidance of divinity and reach for μῆτις equal to cosmic Love. In Kingsley's story it is not Love, but Strife that is the positive factor. Imposing harmony and measure on the universe, Love creates an illusion about its nature. She introduces us to a world of deception, rational thinking being part of this deception (482). She takes us hostages of her μῆτις. To get free we have to acquire μῆτις equal to hers. This can only be done by men who know to bound things in the way she does, by men familiar with her trickery - the magicians. Kingsley argues that Empedocles' cosmological texts are inseparable from his magical conceptions. In his reading of Fragment 115, 'This is the way that I too am now going, an exile from the gods and a wanderer, placing my trust in mad Strife', he finds an evidence for the positive role of Strife, which resolves the unitarian deception of Love (431).

This is a great book indeed, rich in scholarly inventions and spiritual insight. Even the toughest of sceptics will find it entertaining, if not stimulating, and it may be of especial interest to East-European readers, because of its sympathy with Eastern cultures. Kingsley's book is, above all, a brilliant pattern of μῆτις in the history of ancient philosophy.

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# Debra Nails, *The People of Plato: A Prosopography of Plato and Other Socratics*, Hackett, Indianapolis/Cambridge, 2002 (pp. xlviii+414. ISBN 0-87220-564-9)

As the subtitle of the book suggests, Debra Nails' *The People of Plato* is a Prosopography of Plato and other Socratics. On the jacket of the book we read that this is 'the first study since 1823 devoted exclusively to the identification of, and relationships among, the individuals represented in the complete Platonic corpus'. This is a modest assessment. Groen van Prinsterer, whose *Prosopographia Platonica* (Leiden, 1823) was reprinted in 1975 (Amsterdam: Adolf M. Hakkert), wrote in Latin and presented his material by entries corresponding not to individuals, but to professional groups (poets, philosophers, sophists etc.), so that, even if one overcomes the obstacle of reading Latin, he/she must use the index in order to identify the section within which a given person has been classified — and even then, the lay-out and typeface of *Prosopographia Platonica* do not allow the reader to identify names in an easy way. I do not profess to offer a detailed comparison between the two books. But even on a superficial level, one cannot fail to notice that *The People of Plato* is at least twice as long as *Prosopographia Platonica* and that, unlike the latter, it uses a standard format which seems to exhaust the evidence on any given person, providing stemmata of relationships where appropriate. Moreover, *The People of Plato* is more comprehensive and, unlike *Prosopographia Platonica,* it is confined to persons of whom one at least has reasons to believe that they are historical (hence, for instance, there are no entries for Musaeus or Orpheus, who do appear in *Prosopographia Platonica*).

By 'people of Plato' Nails refers not just to those who appear in Plato's texts, but also to individuals whose life may shed light on our understanding of the dialogues: the author has 'included for convenience persons from the Socratica of Xenophon, Aeschines, Antisthenes, and Phaedo, and persons associated with Plato's maturity' (p. xxxvii). In addition, Nails provides cross-references to both primary texts and secondary sources (her abbreviations section lists an impressive number of lexica and other works of compilation). The book includes maps, a glossary, a bibliography, and four interesting appendices with the following titles: I. Dramatic dates, characters, setting, and style (of particular importance for any Plato scholar); II. Peripheral persons; III. Athenian affiliation: demes, phratries, clans, *et al.* IV. Chronology of the

period of the Platonic dialogues and letters. Last but not least, Nails 'provides self-contained discussions of historical material that impinges on several of the dialogues and the people who populate them: the mutilation of herms and its aftermath from 415, the trial of the generals after Arginusae in 406, the succession of the Thirty in 404, and the amnesty forged to effect a lasting peace after 403' (p. xxxix). These discussions are particularly enlightening for students of Plato whose background does not give them competency in the fifth century Athenian history. Nails' methodological criteria on the use of the sources and avoidance of possible biases are carefully stated on p. xl-xli.

Of course errors are bound to occur in a book like *The People of Plato*, and one can only hope that scholars will come forward with criticism; the author herself shows how important this procedure is by pointing to misunderstandings in previous scholarship (to mention just one example, she explains why the assumption that Phaedrus was guilty both of profanation and mutilation of the herms, which one finds in Martha Nussbaum's influential *The Fragility of Goodness,* Cambridge, 1986, is based on an erroneous reading of Andocides IV, which Nails traces to J.K. Davies' authoritative *Athenian Propertied Families 600-300 B.C.* Oxford, 1971). There are a few spelling mistakes (presumably typos) in names in Greek characters (Πώλος instead of Πῶλος; Προτάγορας instead of Προταγόρας; Φιλήβος instead of Φίληβος), while breathing marks and accents have been misplaced in the names of Eudicus, Eudoxus, Euphraeus. The author does not cite the original titles of ancient works, except when '[her] argument depends on a particular reading' (p. xlvi). I find this regrettable, not only because it would be rather helpful for the reader to have immediate access to the original title, but also because currently conventional renderings of Greek titles into English tend to reproduce conventional, though not necessarily always valid, interpretations. Furthermore, it would be useful to have references to the sources of these titles, for texts which have not come down to us. To mention one example, for the titles of Protagoras' books Nails cites the authority of Diogenes Laertius, without, however, giving us a specific reference to his text. Now it is true that the ready availability of the TLG makes it easy to fill in such gaps, but a reference book like *The People of Plato* should not omit such valuable information.

I already noted that the material in Groen van Prinsterer's *Prosopographia Platonica* is organized not by names of individuals but by the 'disciplines' under which the individuals in question are placed. The problem with such classification, as we all know, is its circularity, insofar as it presupposes demarcation among fields and genres which are a product rather than a premise of the texts under consideration. Nails herself has shown her awareness of such problems and

has contributed to our understanding of the constitution of philosophy in Plato's time with her older monograph *Agora, Academy, and the Conduct of Philosophy* (Dordrecht, 1995). I was therefore somewhat disappointed by the way in which her *People of Plato* represents Gorgias' relation to rhetoric: Nails cites as evidence for 'the distance between rhetoric and philosophy' Gorgias' *Helen* §13, where there is no explicit reference to either philosophy or rhetoric. To be sure, Nails *s.v.* Antiphon points to a certain confusion among the descriptions of orator, rhetorician, and sophist, and concedes that the term sophist is ambiguous. This may be the reason why she ascribes to Protagoras, *s.v.*, the 'teaching of rhetoric', which may well be less ambiguous, but is more anachronistic than sophistry. On the other hand, I was favourably surprised by Nails' avoidance of any mention of relativism in connection with Protagoras. As she says in the entry on Protagoras, 'a prosopography ought not to dictate philosophical interpretation' (p. 256). And, in a sense, this is the most difficult challenge the author of any Platonic Prosopography must face: namely, how can we avoid circularity in our treatment of sources?

In her *Introduction* Nails suggests that 'whereas previous researchers have addressed discrepancies among Plato and other sources on the assumption that Plato was historically unreliable and should be used only as a last resort, [her] research shows that there is much to be gained on the opposite assumption: the people of Plato, unless there is strong evidence to the contrary, should be taken as he presents them' (p. xxxviii). This is certainly not the place to embark on a discussion of this question, which is anything but new in Platonic scholarship. However, and though I respect the author's qualification that 'there is much to be gained on the opposite assumption', I was puzzled by the way she seems to apply her view in her treatment of Socrates, in particularly concerning the evidence from Aristophanes' *Clouds*, where she rather uncritically adopts (or at least fails to challenge) Dover's conclusion, which she represents as follows: 'the philosopher serves as a token of the 5th c. intellectual in general; thus many of the gags should not be taken literally as representing the Socrates of, for example, Plato or history' (266). I do not propose to challenge Dover's conclusion, and I do not suggest that Nails should necessarily do so. However, given the growing interest in the relation between Socrates and the Sophists (see forthcoming Robert W. Wallace, «Plato's Sophists, Intellectual History after 450, and Sokrates», in *The Cambridge Companion to Athens in the Age of Pericles*, ed. L. J. Samons II, Cambridge, 2005), but also Nails' own interest in the Socratic question (demonstrated more thoroughly in her earlier monograph) one would expect a more qualified discussion of the relevant evidence.

Setting aside these critical remarks, one can easily conclude that *The People of Plato* will become – and has already become – an indispensable tool for teachers and students of Plato. And it is tempting but also instructive to raise the question: why is it that such a book appears as late as in 2000? Any answer must take into account the dominant Anglo-American tendency of the 20th century to study the arguments of the dialogues in isolation from the narrative or dramatic setting, including the characters, in which they are cast. The situation has changed dramatically since the 90s, and there is no longer any need to stress that not only classicists but also philosophers cannot properly interpret Plato's texts without taking into account the fictitious context of the arguments he presents as well as the choice of the particular literary form, namely the dialogue.[1] In this respect, Nails' contribution is not only the offspring of this relatively new tendency in Platonic studies, but hopefully also a springboard for further research.

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[1] In fact, the interest comes both from scholars in the field of Comparative Literature (see, *inter alia*, Andrea Wilson Nightingale, *Genres in Dialogue: Plato and the Construct of Philosophy*, Cambridge, 1995; Ruby Blondell, *The Play of Character in Plato's Dialogues*, Cambridge, 2002), but also from philosophers who urge us to appreciate the philosophical implications of Plato's use of the dialogue (see, most importantly, Michael Frede, 'Plato's Arguments and the Dialogue Form', *Oxford Studies in Ancient Philosophy* 1992; *Plato and the Socratic Dialogue: The Philosophical Use of Literary Form*, Cambridge, 1996; Thomas A. Szlezák, *Platon lesen*, Stuttgart, 1993).

# John Sellars, *The Art of Living: The Stoics on the Nature and Function of Philosophy*, Ashgate, Aldershot, 2003 (x+228 pp., ISBN 0-7546-3667-4)

With his study, *The Art of Living: The Stoics on the Nature and Function of Philosophy*, John Sellars is entering a long lasting and ongoing debate concerning the nature and function of philosophy. Although the author does not intend to draw any sharp dichotomies, one is made right from the start: philosophy considered as an exclusively theoretical discipline is to be distinguished from philosophy as an art expressed in one's actions and able to transform one's life. Thus among those who conceive philosophy mainly as theory, the author places philosophers such as Aristotle, Hegel and also Bernard Williams, while Socrates and the Stoics as well as Nietzsche, Michel Foucault and Gilles Deleuze are thought to maintain an idea of philosophy closely related to one's way of life. It is the latter conception of philosophy that the author is inquiring into, a conception which in antiquity came to be fully developed by the Stoics; hence it is with them that his study is primarily concerned.

The implications of such an attempt are quite serious and the possible initial objections are sufficiently acknowledged by the author. As he explains in the Introduction, a philosophical way of life is distinguishable from others, i.e. a religious way of life, insofar as the rational understanding - λόγος - plays an essential role within it. What Sellars aims at, then, is to reconcile theory and practice as the two basic components of one unified art, namely the art of living, which he identifies with philosophy as it was first understood by Socrates and developed later by the Stoics. Whether or not Aristotle's contemplative life (βίος θεωρητικός) should be part of this discussion, is open to question; for Sellars, though, Aristotle's priority is definitely given to philosophy as a matter of λόγος, while the author himself wishes to approach a conception of philosophy as something which is primarily expressed in one's way of life.

One of the book's merits is its clear and systematic structure. It is divided into two parts, each dealing with two of the crucial notions which define philosophy as an art of living. Thus the first part concentrates on the relationship between βίος and τέχνη, which corresponds to the relationship between biography and philosophy as conceived in antiquity. After he has outlined a conception of philosophy as an art related to one's way of life, the author devotes the second part of his work to exploring the two components of

philosophy conceived as an art, namely λόγος and ἄσκησις. By exploring the Stoic conception of philosophical exercise, Sellars offers a detailed account of the nature and function of philosophy as a τέχνη. His analysis of a τέχνη περὶ τὸν βίον presents philosophy as something broader than just theory, although it is not the author's intention to suggest that this is a more genuine or superior way of understanding philosophy.

Part I consists of four chapters, in which the idea of philosophy as something that could transform an individual's life is developed. The first chapter, 'Philosophy and Biography' exploits a series of anecdotal and biographical material concerning the lives of ancient philosophers, in order to attribute the philosophical significance attached to them. The section on the status of the 'philosopher's beard', although delightful, goes as far as to suggest that a certain type of beard actually expressed certain philosophical positions. The idea that different types of beard could indicate which philosophical school an individual belonged to is indeed present in the texts , but it is doubtful whether we should be able to conclude this individual's, for example, metaphysical doctrine judging from the type of his beard alone.

The close connection between philosophy and biography in antiquity is more solidly presented through a number of passages which demonstrate two points: the first is that the idea of harmony between a philosopher's deeds and words was essential to a conception of philosophy originated with Socrates and developed by the Stoics. The second point is that ancient biographies of philosophers were of philosophical significance, insofar as they meant to present an individual's character (ἦθος) and way of life, functioning as an example of his theories in action. These points can be connected if we are to understand the function of philosophy as having an impact upon one's life and philosophical ideas as primarily expressed in one's behaviour. The first chapter then introduces the conception of philosophy as something related to one's way of life. A reconstruction of this conception is attempted in the next chapter.

Sellars claims that the earliest origin of the idea of art of living can be traced back to Socrates. The author states that he is interested in the historical Socrates rather than in the character in the Platonic dialogues and thus he is raising once again the so called 'problem of Socrates', to which he also devotes an extended additional note at the end of the book (Additional Note 1). Sellars concentrates on Plato's *Apology* as the best point of departure for a reconstruction of the historical Socrates, but he also considers *Alcibiades I* and Xenophon's *Memorabilia*. Three main points arise from Sellars' choice and treatment of these specific passages: the first is that Socrates appears to

have an embryonic conception of philosophy as an art, which is expressed in actions rather than words. The second point is that this is a conception that only the historical Socrates appears to have, and which is present mainly in the *Apology*. Third, this view of Socrates challenges directly the common idea of the 'intellectualist Socrates', that is the idea that Socrates' priority is intellectual knowledge and the search for definitions.

The author's focus on the historical Socrates is due to his interest in the Stoics, who although they claimed to be followers of Socrates, were in many ways in disagreement with Plato. Sellars gives some justification for the use of *Alcibiades I* and of the *Memorabilia* as a source for the Socratic conception of philosophy, although he does not get involved in the dispute regarding the authorship of *Alcibiades I* or the reliability of Xenophon as a source for Socrates. What seems rather inconsistent is the extended use of the *Gorgias* in the account both of the Socratic art of taking care one's soul and of the role of ἄσκησις within that art. Sellars himself admits that the systematic account in the *Gorgias* is more Platonic than Socratic. He also claims that he is using *Gorgias* only to the extent that it develops a theme already present in the *Apology*. But in fact, the whole analysis of the different types of art is based on the *Gorgias* and does not appear in the *Apology*.

Yet, it is from this analysis that another interesting point of this chapter is made. Sellars defines ἀρετή as the product of the art of taking care of one's soul (ἐπιμελεῖσθαι ψυχῆς), the product at which the practice of this art aims at and Socrates searches for, identified with εὐδαιμονία. Although this identification of human excellence with well-being is not that obvious, it avoids the difficulties of an instrumentalist reading of Platonic ethics, as the one suggested by Irwin and challenged by Vlastos.[1] Surprisingly, Sellars does not discuss here Alexander Nehamas' study, which shares the same title.[2] For Sellars, the Socratic ἀρετή is not merely knowledge, but knowledge developed by the art of taking care of one's soul. The possession of this art is identified with knowledge (ἐπιστήμη), and that further identification attributes a special role to ἄσκησις. This, according to Sellars, is what Aristotle failed to see in his account of Socrates. The author devotes a section to discussing Aristotle's

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[1] T. Irwin, *Plato's Moral Theory: The Early and Middle Dialogues*, Oxford: Clarendon Press, 1977, p. 73-74. G. Vlastos, *Socrates: Ironist and Moral Philosopher*, Cambridge: Cambridge University Press, 1991, p. 6-10.

[2] A. Nehamas, *The Art of Living: Socratic Reflections from Plato to Foucault*, Berkeley: University of California Press, 1998.

interpretation of the Socratic human excellence strictly as λόγος. Sellars concludes that Aristotle's view of Socrates is not only misleading, but also partly responsible for the intellectualist image of Socrates. Although Sellars' interpretation of Aristotle's Socrates is a legitimate one, the evidence is weak enough to leave the matter open to question.

Sellars considers Socrates' view of philosophy to be an embryonic conception of an art of living. It is with the Stoics that this concept appears fully developed and from chapter three onwards they will be the author's main concern. The Stoic conception of an art of living should not be identified with philosophy, but rather with the end of philosophy, that is the ideal mental disposition, which the Stoics identified with wisdom and human excellence. This conclusion is derived from a well-aimed connection which Sellars attempts between the theory of οἰκείωσις and the art of living insofar as this art aims at human excellence. The connection is further supported by the account of the Stoic ideal of the sage, which functions as an idealized image of actual individuals and not merely as a hypothetical ideal. If Sellars is right about his image of the Stoic sage, then it is reasonable to accept the Stoic conception of philosophy as that which transforms philosophers into sages. And Socrates' figure appears to be a convincing example of the kind of sage that the Stoics had in mind, although it is doubtful whether anyone could ever fulfil the Stoic requirements, including the Stoics themselves.

A rather complicated issue tackled by the author is the analogy between the art of living and the art of medicine, a common Stoic theme which emphasizes the function of philosophy as the art that takes care of the soul, analogous to the way in which medicine takes care of the body. This analogy seems to offer a good model for the conception of philosophy that Sellars examines: both medicine and philosophy can be seen as arts that involve not only theory but also practice, and they both aim at the transformation of one's life. But the art of taking care of the soul – the *Socratica medicina* as Cicero called it – cannot very successfully meet the criteria of a certain type of τέχνη as the Stoic defined it, due to the complication of defining what kind of art medicine is. Sellars tries to solve the problem by accepting that wisdom can be described as a performative art which is directed towards the art itself. Unfortunately, this suggestion does not correspond with the medicine analogy and thus a promising argument is decisively lost. Despite this problematic relationship, Sellars establishes a connection between ἄσκησις and λόγος as the two necessary components of the art of living as it was conceived by the Stoics.

In chapter four Sellars discusses the Sceptical objections against the possibility of the existence of an art of living. Sellars offers first an outline

of the Sceptical methodology, then he considers each of Sextus Empiricus' objections to an art of living and finally he attempts to find a way to bridge the distance between Sextus and the Stoics. The author considers ἀταραξία as the pursuit of Sceptical philosophy, which in this sense is directed towards the transformation of one's way of life. One can see the connection made between ἀταραξία and εὐδαιμονία, but it is doubtful whether the Sceptics would claim that this can function as the criterion for the evaluation of different arts of living. Tranquillity (ἀταραξία) comes to the Sceptic τυχικῶς, following by chance from one's suspension of judgement and it is therefore not clear how it could play the role of a criterion or that of a systematic pursuit. But it is an interesting point that since the Sceptics wish to cure by argument, they intend to get in some way involved in one's way of life.

The idea of philosophy as an art associated with βίος is further discussed in the second part of the study, in which the author focuses upon one of the two components of the art, that is ἄσκησις, the other being λόγος. Sellars emphasizes the role of philosophical exercise as that which determines the essential difference between philosophy conceived as an art and philosophy conceived simply as a matter of rational understanding. In chapter five the author focuses on the meaning of philosophical ἄσκησις. In order to define the concept of 'exercise for the soul', Sellars turns his attention not only to a number of ancient texts, but also to the relevant recent discussion. What the ancient passages primarily indicate is that these exercises of the soul are directed towards the cultivation of mental health just as physical exercises are directed towards the health of the body. One way to understand these exercises is by identifying them with philosophy itself. This is Pierre Hadot's interpretation,[3] which Sellars rejects on the basis that it reduces philosophy to a process of habituation that would undermine the role of rational understanding. On the other hand, Sellars also challenges Martha Nussbaum's view[4] of these philosophical exercises as simply 'rational exercises'. Instead, Sellars tends to agree with Michel Foucault's position that the τέχνη requires ἄσκησις[5]. Sellars' main point here is that these 'spiritual exercises' cannot be identified with philosophy itself; they rather belong

[3] P. Hadot, *Exercises spirituels et philosophie antique*, Paris: Études Augustiniennes, 1981, p. 15-16.

[4] M. Nussbaum, *The Therapy of desire: Theory and Practice in Hellenistic Ethics*, Princeton: Princeton University Press, 1994, p. 353-354.

[5] M. Foucault, *Dits et écrits*, Paris: Gallimard, 1994, vol.1, p. 213.

to the second component of philosophy conceived as an art, ἄσκησις, the other second necessary component being λόγος.

The rest of this chapter offers a detailed account of the function, the mechanism and the form of the spiritual exercises. It appears then that the main function of these exercises is to transform one's philosophical principles into one's actions and behaviour through the processes of 'habituation' of the soul and 'digestion' of philosophical principles. To understand the exact way in which these exercises work, but also the different accounts given by the Stoics regarding their function, Sellars discusses the Stoic conception of the soul. In his consideration, he draws specific attention to the way a difference of tension (τόνος) in the breath (πνεῦμα) will generate different qualities. The soul of an individual can be seen as the breath present in that individual at certain degrees of tension. Spiritual exercises aim at the increase of the soul's tension, which will lead to the transformation of the disposition of the soul, and will involve a transformation of one's life.

The discussion of the form of spiritual exercises is particularly interesting. For Sellars philosophical exercises may be seen to have their own literary genre. The author deals with two distinct literary forms of exercise: one type of exercise would be instructional text, serving the training of a student of philosophy after he has completed his education in philosophical theory. The second type would be text written by the student himself, where the exercise is identified with the act of writing itself. In the next two chapters, the author examines Epictetus' *Handbook* as an archetypical example of exercise of the first type, and Marcus Aurelius' *Meditations* as an example of the second type. As Sellars himself notes, Seneca's *Epistulae* could very well be a third literary form of exercise, although they are not treated in Sellars' book.

The exercises in Epictetus' *Handbook* were, according to the author, meant for advanced students of philosophy, who had already been engaged in philosophical theory. Sellars' analysis of the *Handbook* illustrates that Epictetus suggested three τόποι, three philosophical areas of training, which correspond to the Stoic division of philosophical discourse in three parts: ethics, logic and physics. Ethical exercises, for example, are designed to assimilate the Stoic ideas expressed in the ethical part of philosophical discourse. The study of philosophical theory, then, must be presupposed. For Sellers the priority given to philosophical exercise over philosophical theory in these kind of texts may reflect their literary genre. This priority should not be taken as a devaluation of philosophical theory; rather, it underlies that theory cannot on its own constitute philosophy, hence we should understand philosophy conceived as the art which involves both λόγος and ἄσκησις.

The last chapter is devoted to Marcus Aurelius' *Meditations*. Sellars concentrates on the reflections of the Stoic epistemological theory in the *Meditations* and attempts to challenge Bernard Williams' view that the study of Chrysippus' logical works could hardly have an impact upon one's behaviour;[6] this statement serves only as an example of Williams' doubt that philosophy conceived mainly as λόγος, could transform one's way of life. Sellars considers the *Meditations* as a sort of an attempt to put Stoic epistemological theory into practice and thus as a text of philosophical importance. Insofar as the *Meditations* are considered as an exemplified philosophical exercise, they correspond to the one of the two components of philosophy conceived as art, namely ἄσκησις.

Sellars also offers a summary of the conclusions drawn throughout the study. He adds four Additional Notes, one on the 'problem of Socrates', which was mentioned earlier, a second on the Stoicism, and the other two on the texts of Epictetus and Marcus Aurelius respectively. Glossary of Greek words and phrases and Guide to ancient philosophers and authors, although limited, are useful, especially to students of ancient philosophy. Extended Bibliography and Index Locorum added at the end of the book complete Sellars' study.

Whatever questions Sellars' study raises, it sheds new light in the way philosophy was conceived. It seems that a stimulating philosophical issue, which was constantly neglected by the analytical tradition, has been raised again. Sellars' study along with the preceding works of Hadot, Foucault, Nussbaum and Nehamas, challenges us to think of philosophy not merely as an academic discipline, but as a way of life. The author himself denies that a conception of philosophy as an art of living as opposed to the conception of philosophy as λόγος, marks an ancient-modern dichotomy. Or that the former conception is in any way superior to the latter. What he establishes is the Stoic idea of philosophy's nature and function as an art of living. But by doing so, he rekindles the crucial question of how we should understand and practise philosophy. And that can only be considered as a special quality of this study.

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[6] B. Williams, 'Do not Disturb', *London Review of Books* 16 no. 20, 1994, 23-24.

## Teleology Across Natures

*István Bodnár*

Aristotelian natures – internal principles of motion and rest – provide a rich account of the goal-directed behaviour of natural entities. What such natures cannot account for, on their own, are cases of teleology across natures, where an entity, due to its nature, furthers the goals of another entity. Nevertheless, Aristotle admits such teleological configurations among natures: most notably *Politics* I.8 1256b15-20 claims that plants are for the sake of animals and animals are for the sake of humans.

The paper first scrutinizes two recent attempts – by Mohan Matthen and David Sedley – at an explanation of such teleology across natures. The fundamental move these proposals make is that they claim that the universe has a nature of its own. Accordingly, teleology across natures could be explained as the operation of this single cosmic nature. But the introduction of a cosmic nature contravenes fundamental strictures of Aristotelian natural philosophy. Hence the third section of the paper formulates an alternative proposal, that the teleological interaction across different natures is underpinned by the self-benefitting activity of individual natural entities, which are able to use the natural processes of their environment to their own advantage.

## The Relevance of Dialectical Skills to Philosophical Inquiry in Aristotle

*Marja-Liisa Kakkuri-Knuuttila*

In spite of numerous outstanding recent contributions on Aristotle's dialectic, it seems that our picture of dialectic in the *Topics* is not yet clear enough to settle the questions concerning the purpose and utility of dialectic. The goal of this paper is a more modest one, simply to clarify our notion of dialectic and the skills involved. This investigation will allow us to draw some conclusions concerning their relevance to Aristotle's philosophical inquiry.

The paper formulates and systematizes the rules for dialectical disputations in *Topics* Book I and III so as to reveal their epistemic, logical, and psychological peculiarities. First, it is argued that so-called *constitutive rules* offer a framework for both good and bad, fair and unfair argumentative discourse in question-answer form. Second, *strategic rules* are demonstrated to yield logical and epistemic moves to enhance good argument and the search for justified truth claims through debate.

# The Essential Functions of a Plotinian Soul

*Damian Caluori*

The soul, according to Plotinus, is active both in the intelligible and in the sensible world. In focussing on the soul's activity in the sensible world, Blumenthal has claimed that the functions of a Plotinian soul are basically those of Aristotle. Against this I argue that the soul's activity in the sensible world is merely its external and non-essential activity. This activity follows from its internal and essential activity – from the soul's own life in the intelligible realm. I discuss the two essential functions of which the soul's own life is constituted and explain how Plotinus gives the soul a place in the intelligible realm, thereby carefully distinguishing the life of the intellect from that of the soul.

# NOTES FOR CONTRIBUTORS

Contributions in all fields of ancient philosophy and science are invited. Articles and book-reviews will be published in English, German, French and Italian. Papers sent by post should be submitted in two identical copies, with personal details supplied on a separate page. Contributions sent by e-mail should be submitted as e-mail attachments in MS Word or Rich Text Format, accompanied by a note concerning the Greek font and the system employed for achieving Greek. Contributions in electronic form will be prepared for blind review by the Editor-in-chief.

Papers should be typed on A4 or American quarto (Letter) pages, in double-spacing with wide margins. At the stage of initial submission, footnotes may be placed at the foot of the page, also double-spaced. Relatively familiar Greek words, but not whole phrases and sentences, may be used in italicised transliteration. Otherwise use the Greek alphabet with all diacritics in a completely legible and accurate form. Where appropriate, the original texts should be accompanied by a translation. Use the Harvard style for quotations, bibliography and references. It is a type of author-date style. The citation in your paper requires only the name of the author(s), the year of publication, and page numbers. In addition, a full list of bibliographical entries should be supplied at the end of the paper. All papers should be accompanied with an abstract of no more than 300 words. Please take note of the following format descriptions.

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### 1. Ancient authors

***Title (full name or abbreviation)*, book in roman numerals (for Aristotle's texts only *Metaphysics* in capital Greek letters), dot, chapter in Arabic numeral, followed either by a space and standard referencing with line numbers, or by a dot and section in Arabic numerals**

Aristotle*, Metaphysics* A.1 982b11

Aristotle*, De anima* III.1 425a14–18

Plutarch*, Stoic. rep.* 1033C–D

Herodotus, *Histories* I.23.6–7

## 2. Modern authors

**surname (year**[lower case letter label]**), page(s)**

Livingstone (2001), 3

It is normally sufficient to put only surname, without initials – unless, of course, there are two individuals of the same surname.

e.g. Gerson (1990), 70; Frede, M. (1980), 22; Frede, D. (1982), 33–36.

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Barnes, J. (1982), *The Presocratic Philosophers*, 2nd ed., Routledge, London and New York.

## 2. Chapter citation

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Frede, M. (1996), 'Aristotle's Rationalism', in: M. Frede & G. Striker (eds.) *Rationality in Greek Thought*, Oxford University Press, Oxford, 157–73.

## 3. Journal article citation

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