ARISTOTLE, SOPHISTICAL REFUTATIONS 24, 179B17-26: A TEXTUAL AND INTERPRETATIVE NOTE*

In chapter 24 of his *Sophistical Refutations*, in the course of defending his own diagnosis of some paradoxical arguments, Aristotle makes a short excursion, considering the possibility that a single argument may suffer from several defects, only to reject it immediately. However, understanding the short and somewhat cryptic passage in which he does so, 179b17–26, is hampered by the fact that there are important differences between the existing manuscripts on which the edited text is based. Moreover, all modern editors, from Bekker onwards, have come to the conclusion that there remain places where none of the manuscript readings can be made sense of; by way of solution they have introduced several emendations. In this textual and interpretative note, however, I want to argue that these emendations do not solve the problem they purport to solve, but rather stem from an incorrect understanding of what Aristotle's point should be; and that once a better interpretation is in place, we can safely follow the text as given by the majority of the manuscripts.

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The text as read by Ross¹ is the following (I number the sentences for the sake of reference):

(1) Οὐδὲν δὲ κωλύει τὸν αὐτὸν λόγον πλείους μοχθηρίας ἔχειν, (2) ἀλλ' οὐχ ἡ πάσης μοχθηρίας ἐμφάνισις λύσις ἐστίν· (3) ἐγχωρεῖ γὰρ ὅτι μὲν ψεῦδος συλλελόγισται δεῖξαί τινα, παρ' ὅ δὲ μὴ δεῖξαι, (4) οἶον τὸν Ζήνωνος λόγον, ὅτι οὐκ ἔστι κινηθῆναι. (5) ὥστε καὶ εἴ τις ἐπιχειρεῖ συνάγειν ὡς δυνατόν, ἁμαρτάνει, κἂν [εἶ] μυριάκις ἢ συλλελογισμένος· (6) οὐ γάρ ἐστιν αὕτη λύσις· (7) ἢν γὰρ ἡ λύσις ἐμφάνισις ψευδοῦς συλλογισμοῦ παρ' ὁ ψευδής. (8) εἰ οὖν μὴ συλλελόγισται, † εἰ καὶ ἀληθὲς ἢ ψεῦδος † ἐπιχειρεῖ συνάγειν, ἡ ἐκείνου δήλωσις λύσις ἐστίν.

I just note that there is no need at all to follow Ross in bracketing of $\epsilon \hat{i}$ in (5)² or in reading in (5) $\hat{\epsilon}\pi i \chi \epsilon \iota \rho \epsilon \hat{i}$ where all but two manuscripts³ (c and u as against A, B, V

- * I should like to thank the Editor and an anonymous reader for helpful criticism of an earlier draft.
 - ¹ W.D. Ross, *Aristotelis* Topica *et* Sophistici Elenchi (Oxford, 1958).
- ² The origin of the deletion of $\epsilon \hat{\iota}$ is to be found in a remark made by J. Vahlen, *Beiträge zu Aristoteles'* Poetik (Leipzig and Berlin, 1914²), 241, who thinks every case of καν $\epsilon \hat{\iota}$ followed by the subjunctive suspect. However, there are quite a few places in the *corpus Aristotelicum* where all or a clear majority of the manuscripts read the subjunctive (e.g. *Topica* 5.6, 136a21, 27, *De Generatione et Corruptione* 1.6, 322b28, 1.8, 326a7, *Meteorologiae* 1.6, 343b33, *Politica* 3.6, 1279b22); modern editors have accepted the construction at *Historia Animalium* 10.5, 636b29 (D.M. Balme [ed.], *Aristotle:* Historia Animalium I: *Books I-X: Text* [Cambridge, 2002]) and at *Poetica* 1, 1447a24–25 (R. Kassel [ed.], *Aristotelis* De Arte Poetica *Liber* [Oxford, 1965]).
- ³ For an overview of the symbols standing for the different manuscripts (including their age), I refer to Ross's edition and the edition of the *Topics* by J. Brunschwig (*Aristote*: Topiques I *Livres I-IV* [Paris, 1967]). The information about the readings of V, not used before in any edition of the *Sophistici Elenchi*, is based on my own inspection of the manuscript.

and D as well as Boethius's translation $[\Lambda]^4$ and Michael of Ephesus, In SE 162.36⁵) have $\frac{\partial}{\partial n} = \frac{\partial}{\partial n} = \frac{\partial}{\partial n} = \frac{\partial}{\partial n}$. I should like to discuss, however, the following problematic clauses:

- in (5) Manuscripts A, B, V, c², i, f as well as Λ cf. Michael of Ephesus, In SE 162.35–163.2 read συνάγειν ὡς ἀδύνατον συνάγων εἰς ἀδύνατον, ἀμαρτάνει (f has ὡς δυνατὸν), while in D, u and c¹ the words ἀδύνατον συνάγων do not appear. Probably taking his clue from them, Bekker, followed by Waitz as well as Strache and Wallies, however, strikes out ἀδύνατον συνάγων but also εἰς, and Ross even goes on to leave out the α-privative of the remaining ἀδύνατον.
- in (6) D and Λ cf. Michael of Ephesus, In SE 163.2 read, as in Ross's text, $o\dot{v}$ $\gamma \acute{a}\rho$ (also the reading adopted by Bekker) but A, B, V, c and u have $\mathring{a}\lambda\lambda$ ' $o\mathring{v}\kappa$, in which they are followed by Waitz and by Strache and Wallies.
- in (8) The cruces Ross places already indicate the problems, among them the divergences between the manuscripts. The text as read by Ross is from A^2 , C and f and also appears to be referred to in the lemma in Michael of Ephesus, In SE 163.15. Manuscripts A^1 , B and V have $\mathring{\eta}$ instead of $\epsilon \ell$: $\mathring{\eta}$ καὶ ἀληθὲς $\mathring{\eta}$ ψεῦδος, 8 just as Boethius's translation (Λ): $vel\ verum\ vel\ falsum$; 9 this is the text adopted by Bekker and Waitz. Another καί is added in c^2 : $\mathring{\eta}$ καὶ ἀληθὲς $\mathring{\eta}$ καὶ ἀληθὲς $\mathring{\eta}$ καὶ ψεῦδος. D, c^1 and u have $\mathring{\omega}_S$ for the second $\mathring{\eta}$: $\mathring{\eta}$ καὶ ἀληθὲς $\mathring{\omega}_S$ ψεῦδος; this is the reading of Strache and Wallies. Then there are two proposals for emendation: (i) Ross, in his critical apparatus, proposes $\epsilon \mathring{\iota} \mathring{\iota} \mathring{\iota}$ ἀληθὲς $\epsilon \mathring{\iota} \mathring{\iota} \tau \epsilon$ ψεῦδος cf. Michael of Ephesus, In SE 163.16–17, who has καν ἀληθὲς καν ψεῦδος; (ii) Pickard-Cambridge, 10 0 and with him Forster, would like us to read $\mathring{\eta}$ καὶ ἀληθὲς $\mathring{\eta}$ ψεῦδος <ψευδώς>.

My first aim is to identify the source or sources for all these different readings as adopted by modern editors: what leads them to favour this manuscript over that and, more importantly, certainly in the case of (5), what makes them emend in this way? I shall do so by going through the passage sentence by sentence.

- ⁴ For the text of Boethius's translation, I rely on B.G. Dod (ed.), *Aristoteles Latinus* VI.1–3 De Sophisticis Elenchis. *Translatio Boethii, Fragmenta Translationis Iacobi, et Recensio Guillelmi de Moerbeke* (Leiden and Brussels, 1975).
- ⁵ His commentary is to be found in: M. Wallies (ed.), *Alexandri quod fertur In Aristotelis* Sophisticos Elenchos *Commentarium* (Berlin, 1898).
- ⁶ Besides Ross's, I refer to the following editions: I. Bekker (ed.), *Aristotelis Opera* (Berlin, 1831), Th. Waitz (ed.), *Aristoteles*: Organon *Graece* II Analytica posteriora, Topica (Leipzig, 1846), and I. Strache and M Wallies (edd.), *Aristotelis* Topica *cum libro* De Sophisticis Elenchis (Leipzig, 1923). Bekker's text is adopted by E. Poste, *Aristotle on Fallacies or the* Sophistici Elenchi (London, 1866) as well as E.S. Forster, *Aristotle*: On Sophistical Refutations *and* On Coming-to-be and Passing-away [together with D.J. Furley, *Aristotle*: On the Cosmos] (London and Cambridge, Mass., 1955).
- ⁷ As appears from my own inspection of manuscript c, Ross and Waitz mistakenly give $o\vec{v}$ $\gamma \acute{a} \rho$ as its reading.
- 8 That A^1 reads, just as B, $\mathring{\eta}$ $\kappa \alpha \imath \ \mathring{a} \lambda \eta \theta \acute{e}_S$, is a safe guess given that Bekker, who did read A, but did not take into account the corrective hand in A, does not mention $\epsilon \imath \ \kappa \alpha \imath \ \mathring{a} \lambda \eta \theta \acute{e}_S$ at all, and that Waitz, who collated A again, only mentions A^2 as one of the manuscripts diverging from the majority reading $\epsilon \imath \ \kappa \alpha \imath \ \mathring{a} \lambda \eta \theta \acute{e}_S$.
- ⁹ Strache and Wallies mention *quamvis aut* as its reading, but this is not found in the modern edition
- ¹⁰ W.A. Pickard-Cambridge (trans.), Topica *and* De Sophisticis Elenchis, in: W.D. Ross (ed.), *The Works of Aristotle Translated into English* I (Oxford and London, 1928).

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In (1) Aristotle states that a single argument may suffer from more than one defect, presumably by instantiating more than one fallacy or by otherwise having several false premisses. In response, however, he maintains in (2) that not just any diagnosis of a defect constitutes a solution – in order to have a real solution, Aristotle states in (7), referring through the use of the imperfect to other passages, one needs to identify the culprit. Knowing that there is something wrong with an argument is not the same thing as providing a solution, Aristotle points out in (3), for they come apart in the case of arguments with a false conclusion which are difficult to diagnose. Aristotle adduces in (4) Zeno's argument, presumably the Runner, that it is impossible to move, as an example of such an argument.

In (5) the real problems start. On the reading of the majority of the manuscripts, Aristotle is considering someone who by concluding to an impossibility concludes that something is impossible – in quasi-logical notation, someone who argues: if ϕ_1 , ..., ϕ_n , then ψ ; but ψ is false or impossible, therefore there is a ϕ_i which is false or impossible. Such a person makes a mistake, he says, but one may wonder what could ever be wrong with such an argument. And what is the relevance in the context? For in (3) Aristotle implies that one would be mistaken if one were to think that merely pointing out that an argument has a false conclusion is enough to have a solution, but this mistake is difficult to link to the purported mistake referred to in the majority of the manuscripts. Therefore, Michael of Ephesus already concluded, followed by all modern editors and commentators, that Aristotle must be thinking in (5) of someone trying to establish that Zeno's conclusion that motion is impossible is false, and thus of someone who is mistaken about what constitutes a solution. Then there are three options available: (i) one follows Ross in reading συνάγειν ώς δυνατόν, meaning: 'to conclude that motion is possible'; (ii) one follows Bekker and the others in reading συνάγειν ώς ἀδύνατον, meaning: 'to conclude that Zeno's conclusion is impossible'; or (iii) one follows Michael of Ephesus and retains the reading of the majority of the manuscripts, but is then forced to take the argument alluded to by Aristotle to be a reductio of the impossibility of motion - Michael of Ephesus proposes as the absurdity that there are then no days and nights. As the third alternative is very unattractive (there is not much more absurd than the impossibility of motion), there is no option but to emend; and then (i) seems to provide the logically somewhat more fluent text.

A problem for all three options, however, is that it is difficult to make sense of the final clause of (5) $\kappa \partial v \epsilon i \mu \nu \rho i \delta \kappa i s \dot{\eta} \sigma \nu \lambda \lambda \epsilon \lambda \delta \rho \nu i \sigma \mu \epsilon \nu o s$, for why would someone who wants to show that the conclusion that there is no motion, as drawn by Zeno, is impossible want to do that countless times? Would once not be enough in the case of such a deliberately paradoxical thesis? Thus it is impossible to give this remark even rhetorical significance. On the other hand, Aristotle's point in (6), backed up by (7), that the argument envisaged in (5) is not a solution, seems to confirm the underlying interpretation of (5), for, again, showing that the conclusion is wrong is certainly not a solution. As the reading οὐ γάρ would bring out this connection clearly, Ross's preference for it is easily understood. On the other hand, if the correct reading were $o\vec{v} \gamma \acute{a}\rho$, how is the emergence of the majority reading $\vec{a}\lambda\lambda$ ' $o\vec{v}\kappa$ to be explained, if $o\vec{v}$ $\gamma \acute{a}\rho$ is so natural? Such an emergence is all the more mysterious as it seems $\grave{a}\lambda\lambda'$ $o \grave{v}\kappa$ had better be avoided altogether. For since someone who merely purports to show that Zeno's conclusion that there is no motion is false does not even pretend in any way to provide a solution, there is no real sense to be given to the contrast implied by ἀλλά.

The most intractable sentence of the passage, however, is (8). It starts with a protasis: 'If, then, [it/one] has not deduced...' and ends with the apodosis '...the indication of that is a solution', but the function of the clause in between is completely mysterious. With regard to this function the readings of the manuscripts and the proposed emendations may be classified into two groups: (a) those readings which turn $\mu\dot{\gamma}$ $\sigma\nu\lambda\lambda\epsilon\lambda\delta\gamma\iota\sigma\tau\alpha\iota$ and ... $\epsilon\dot{\tau}\iota\chi\epsilon\iota\rho\epsilon\hat{\iota}$ $\sigma\nu\nu\dot{\alpha}\gamma\epsilon\iota\nu$ into two juxtaposed independent clauses together forming the protasis (A¹, B, V, D, c¹, u, c² and emendation [ii]); and (b) those which make the ... $\epsilon\dot{\tau}\iota\chi\epsilon\iota\rho\epsilon\hat{\iota}$ $\sigma\nu\nu\dot{\alpha}\gamma\epsilon\iota\nu$ clause dependent on $\mu\dot{\gamma}$ $\sigma\nu\lambda\lambda\epsilon\lambda\delta\gamma\iota\sigma\tau\alpha\iota$ (A², C, f and emendation [i]).

Even to decide between these two possibilities is only feasible if we have some idea of what Aristotle wants to say in (8). At first it seems that this sentence is a kind of conclusion to or summary of the preceding line of thought, as indicated by the use of $o\hat{v}$. This impression is reinforced by the clear echo of (5) in the phrase $\epsilon \hat{\tau}_{\mu\nu} \epsilon \iota \rho \epsilon \hat{\iota}$ συνάγειν. Nevertheless, when it comes to specifying such a connection, things prove to be much more difficult. No mention is made in what precedes of arguments failing to constitute a deduction. What one does read about are arguments deducing a falsehood in (3) and, according to the standard interpretation of (5), arguments deducing validly, though somehow pointlessly, that the conclusions of some arguments, such as Zeno's Runner, are false. However, trying to infer a truth or a falsehood (all readings of [8] except D, c¹ and u) or a truth as a falsehood (D, c¹ and u) does not seem to have anything to do with the latter kind of arguments. This apparent lack of connection between (8) and the preceding passage probably explains why constructions of the second type (b) have been more popular recently, 11 despite the fact that ϵi has less support in the manuscripts than η : by making the $\epsilon \pi i \chi \epsilon i \rho \epsilon \hat{i}$ συνάγειν clause dependent on $\mu\dot{\eta}$ συλλελόγισται, which does not seem connected with anything before anyway, one severs all possible links between (8) and the preceding lines. However, the only manuscript reading of this type, that of A², C and f, seems questionable, for what does it mean to consider the case that no deduction has come about, 'even though $(\epsilon i \kappa a i)$ one tries to infer something true or false'? Though it is presented as a concessive sub-clause, in terms of content it trivially covers all possible cases, making it impossible to function as a concessive sub-clause. This must be the reason why Ross proposes to emend the clause in such a way that it indicates that it is irrelevant what the veridical status of the inferred conclusion is.

The same effect of distancing (8) from (5) can also be achieved if one opts for a type (a) construction, but inserts $\psi \epsilon \upsilon \delta \hat{\omega}_S$, as in emendation (ii). For even though the clause $\mu \dot{\eta} \sigma \upsilon \lambda \lambda \epsilon \lambda \delta \gamma \iota \sigma \tau a \iota$ and the clause ... $\dot{\epsilon} \pi \iota \chi \epsilon \iota \rho \epsilon \hat{\iota} \sigma \upsilon \nu \dot{a} \gamma \epsilon \iota \nu$ are thus merely juxtaposed, the insertion turns the latter into a rewording of the former. Moreover, one could even try to justify the insertion by way of an argument from haplography.

In general, then, (8) has been taken as a statement which is more or less independent of the previous line of thought; at most it is treated as a kind of summary of what is involved in a real solution. This point is also reflected in the common interpretation 12 of $\epsilon \kappa \epsilon i \nu o v$ in the apodosis of (8) as referring to the protasis of (8) itself: there is a real solution if it is indicated that there has not been a

¹¹ Both L.-A. Dorion (trans. and comm.), *Aristote*: Les réfutations sophistiques (Paris and Laval, 1995) 377, and J. Barnes (ed.), *The Complete Works of Aristotle* [*CAW*] (Princeton, 1984) 306, actually adopt Ross's suggestion (i) for emendation.

 $^{^{12}}$ To be found, for example, in the translations by Pickard-Cambridge (maintained in its thorough revision in CAW), Dorion and Forster, but also already in Michael of Ephesus, In SE 163.16-18.

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deduction, whether or not of a true point (class [b] constructions) or, in addition, that the inference is achieved in some other false way (emendation [ii]). It is as if (8) is to be understood as a completely self-contained sentence which is only thematically related to the preceding lines.

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The most important lesson to be drawn from this overview of the editorial choices this passage has given rise to is that all of them are determined by content rather than more formal considerations of grammar and vocabulary. The rather drastic emendations to which these considerations of content then lead make one suspicious of the underlying interpretation, a suspicion which is only strengthened by the difficulties this interpretation itself generates: the impossibility of assigning a real function to the final clause of (5) $\kappa \tilde{a} \nu \epsilon l \mu \nu \rho \iota \acute{a} \kappa \iota s \tilde{\eta} \sigma \nu \lambda \lambda \epsilon \lambda o \nu \iota \sigma \mu \acute{e} \nu o s$, the difficulty of explaining the emergence of the majority reading $\tilde{a} \lambda \lambda' o \tilde{v} \kappa$ in (6), and the isolation of (8) from the preceding lines, notwithstanding the connective $o \tilde{v} \nu$ and the echo of (5) $\epsilon \pi \iota \chi \epsilon \iota \rho \epsilon \hat{l} \sigma \nu \nu \acute{a} \gamma \epsilon \iota \nu$. These misgivings should encourage us to look for an alternative interpretation of the crucial sentences (5) and (8) allowing us to adopt a text which finds support in the manuscripts.

Such an alternative interpretation can be formulated if we bring to bear on the present passage a point Aristotle makes elsewhere about incorrect arguments. It consists in a short remark in *Topica* 8.12 about one of the ways of there being an incorrect argument:

[An argument is incorrect] in another way if it does reach a conclusion, but not one pertaining to the thesis to be established – which happens mostly with those leading to an impossibility. (162b5–7)

Aristotle envisages an argument with a validly drawn conclusion which is nevertheless not pertinent to the thesis which the argument is meant to establish. How could such arguments be incorrect rather than just irrelevant? The answer lies in the kind of arguments Aristotle is thinking about: arguments which from given premisses infer an impossibility (if $\phi_1, ..., \phi_n$, then ψ , with ψ being impossible). About such arguments, which are in fact arguments with a false conclusion, Aristotle says repeatedly, both in our passage from Sophistici Elenchi 24 and elsewhere, e.g. Topica 8.10, 160b23-25, that in order to solve them, a proposition needs to be discarded, namely the one which is responsible for the falsehood – let us call it ϕ_c – and not just any false premiss. Therefore it is one thing to have provided an argument which validly deduces an impossibility or falsehood, but it is quite another to solve it by pinpointing the real source of the trouble ϕ_c and then asserting not- ϕ_c . It is thus possible to be wrong about which of the premisses ϕ_i is the culprit ϕ_c and should be denied: one may think ϕ_c is the opposite of the thesis to be established, but in fact it is not. In that case the argument leading to the impossibility (the reductio ad absurdum properly so-called) may be irrelevant, but the whole argument, including the identification of the culprit, is incorrect rather than irrelevant.

Now Zeno's argument that it is not possible to move is an example of such an argument: given certain premisses ϕ_i , among them the hypothesis that there is motion, an impossibility ψ is derived, and from that *reductio ad absurdum* Zeno concludes further that motion is impossible, clearly assuming that ϕ_c is the hypothesis that there is motion. That something must have gone wrong here, is obvious to everyone, for that

there is no motion is not an acceptable conclusion. ¹³ On the other hand, the absurdity ψ Zeno claims to have derived remains, and thus there must be a proposition ϕ_c which is responsible for ψ – however, it is very difficult to solve this part of Zeno's argument, as Aristotle remarks in *Topica* 8.8, 160b8–9. ¹⁴ Thus Zeno's argument turns out to be a very good example of an argument such as Aristotle envisages it in (3): an argument which one may show to have deduced a falsehood, namely the absurdity ψ to which Zeno wants to reduce the possibility of motion, without one being capable to solve it, that is, show on which false premiss assumed in the *reductio* part the deduced impossibility depends (which of the premisses ϕ_i is the premiss ϕ_c on which ψ depends).

By interpreting the point of the example of Zeno's argument in this way, there is no reason at all to diverge from the reading of the large majority of the manuscripts of the first part of (5): $\mathring{\omega}\sigma\tau\epsilon$ καὶ $\epsilon \mathring{\iota}$ τις $\mathring{\epsilon}\pi\iota\chi\epsilon\iota\rhoo\acute{\iota}\eta$ συνάγειν $\mathring{\omega}$ s $\mathring{\epsilon}\delta\acute{v}\nu\alpha\tau\sigma\nu$ συνάγων $\epsilon \mathring{\iota}$ s $\mathring{\epsilon}\delta\acute{v}\nu\alpha\tau\sigma\nu$, $\mathring{a}\mu\alpha\rho\tau\acute{a}\nu\epsilon\iota$. For Aristotle, rather than thinking of someone trying to establish the falsehood or even impossibility of Zeno's ultimate conclusion that there is no motion possible, must be thinking of anyone who follows the same argumentation-scheme as Zeno: if $\phi_1, ..., \phi_n$, then ψ ; but ψ is impossible, therefore ϕ_1 , say, is impossible. In that case one makes a mistake, because one fails to explain why it is ϕ_1 rather than ϕ_2 or any other ϕ_i that is the ϕ_c responsible for the absurdity ψ , thus failing to provide a solution of the *reductio* proper.

With this interpretation in mind it is also possible to see the purpose of the final clause of (5) $\kappa \ddot{a} \nu \epsilon \dot{i} \mu \nu \rho \iota \dot{a} \kappa \iota s \dot{\tilde{\eta}} \sigma \nu \lambda \lambda \epsilon \lambda o \gamma \iota \sigma \mu \dot{\epsilon} \nu o s$: it is a parenthetical remark which, through exaggeration, stresses that even if the impossibility ψ is deduced validly, that is not enough to infer the negation of the hypothesis assumed for reduction – for that one needs a solution. Aristotle makes this point in (6) regardless whether one reads $o\vec{v}$ $\gamma \dot{a} \rho$ or $a \dot{a} \lambda \lambda' o \dot{v} \kappa$, but the majority reading $a \dot{a} \lambda \lambda' o \dot{v} \kappa$ should be adopted, as it fits very well in the context, contrasting the unfounded identification of one particular proposition as ϕ_c with the provision of a real solution.

Finally, this interpretation of the point of (4) and (5) allows us, in keeping with the connective ov, to link (8) to what comes before. For if one is confronted, as in (5), with someone presenting a reductio ad absurdum argument: if $\phi_1, ..., \phi_n$, then ψ , with ψ being impossible, then one needs to solve it by identifying the proposition ϕ_c . Such a solution is relevant in two cases: (a) the absurdity ψ does not follow from $\phi_1, ..., \phi_n$, but would have followed validly if ϕ_c had been added; or (b) the reductio is used to establish a further point which is presented as the denial of one of the premisses ϕ_i which is alleged to be the culprit ϕ_c . Now if Aristotle were to have this in mind in (8), with $\mu \dot{\gamma} \sigma u \lambda \lambda \epsilon \lambda \delta \gamma \iota \sigma \tau a \iota$ standing for (a) and the ... $\dot{\epsilon} \pi \iota \chi \epsilon \iota \rho \epsilon \hat{\iota} \sigma u \nu \dot{\alpha} \gamma \epsilon \iota \nu$ clause for (b), $\sigma u \lambda \lambda \epsilon \lambda \delta \gamma \iota \sigma \tau a \iota$ in (8) has exactly the same import as $\sigma u \lambda \lambda \epsilon \lambda \delta \gamma \iota \sigma \tau a \iota$ in (3) and $\sigma u \lambda \lambda \epsilon \lambda \delta \gamma \iota \sigma \tau a \iota$ in (5), referring to the validity of the argument for ψ , while, in addition, the clause ... $\dot{\epsilon} \pi \iota \chi \epsilon \iota \rho \epsilon \hat{\iota} \sigma u \nu \dot{\alpha} \gamma \epsilon \iota \nu$ refers, just as in (5), to the second step of claiming one particular premiss to be ϕ_c .

¹³ Cf. Topica 8.8, 160b9-10.

¹⁴ Indeed, Aristotle talks about a diagnosis of Zeno's argument as a solution in *Physica* 8.8, 263a15 and 22, and then goes on to identify the hidden assumption in the *reductio* part of Zeno's argument (263a23–b9) which he thinks is the culprit ϕ_c . And anyway, what is there to solve about Zeno's argument but the *reductio* part? For pointing out that Zeno himself has identified the wrong ϕ_c still leaves the absurdity ψ intact to challenge us.

¹⁵ For this second use of 'the point depending on which the argument is false', see *SE* 18, 176b29–35.

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This suggestion makes perfect sense of the reading of almost all manuscripts (the exceptions are A^2 , C and f). For whether one reads $\epsilon \ell$ $\mu \dot{\gamma}$ $\sigma v \lambda \lambda \epsilon \lambda \delta \gamma \iota \sigma \tau a \iota$ $\ddot{\gamma}$ $\kappa a \dot{\ell}$ $\lambda \lambda \eta \theta \dot{\epsilon}_S$ $\ddot{\eta}$ $\psi \epsilon \hat{v} \delta o_S$ $\dot{\epsilon} \pi \iota \chi \epsilon \iota \rho \epsilon \hat{\iota}$ $\sigma v \nu \dot{\alpha} \gamma \epsilon \iota \nu$ (A¹, B, V, Λ ; cf. also c²) or rather $\dot{\omega}_S$ $\psi \epsilon \hat{v} \delta o_S$ (D, c¹ and u), the two cases (a) and (b) are clearly distinguished. The only difference between the two readings is that according to the former Aristotle implies it does not matter whether in case (b) the further point the *reductio* is used to establish is true or false, while according to the latter (b) is limited to cases in which this further point is a falsehood and thus the *reductio* is used to establish 'something true as a falsehood'. There are two reasons for adopting the former reading. The first is that it is supported by the best and the oldest manuscripts, and also the most, if we add for $\ddot{\eta}$ $\psi \epsilon v \delta o_S$ the support of A^2 , C and f. The second is that a limitation of (b) to cases where the further conclusion is false is not necessary and does not cohere with the point Aristotle makes in (5).

To make the integration of (8) into the whole of the passage complete, it will be clear by now that $\epsilon \kappa \epsilon i \nu o v$ in $\hat{\eta}$ $\epsilon \kappa \epsilon i \nu o v$ $\delta \hat{\eta} \lambda \omega \sigma \iota s$ does not refer to the protasis of (8), but rather to $\pi \alpha \rho$ δ $\psi \epsilon v \delta \hat{\eta} s$ in (7), a much more natural reference for $\epsilon \kappa \epsilon i \nu o v$, rather than $\tau o \hat{v} \tau o v$, anyway. For it is by the indication of the point depending on which the argument is false that the solution as required in cases (a) and (b) is accomplished.

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By way of conclusion I give the text as I think it should be read and translate it with interpretative additions:

- (1) Οὐδὲν δὲ κωλύει τὸν αὐτὸν λόγον πλείους μοχθηρίας ἔχειν, (2) ἀλλ' οὐχ ἡ πάσης μοχθηρίας ἐμφάνισις λύσις ἐστίν· (3) ἐγχωρεῖ γὰρ ὅτι μὲν ψεῦδος συλλελόγισται δεῖξαί τινα, παρ' ὅ δὲ μὴ δεῖξαι, (4) οἶον τὸν Ζήνωνος λόγον, ὅτι οὐκ ἔστι κινηθῆναι. (5) ὥστε καὶ εἴ τις ἐπιχειροίη συνάγειν ὡς ἀδύνατον συνάγων εἰς ἀδύνατον, ἀμαρτάνει, κἂν εἰ μυριάκις ἢ συλλελογισμένος· (6) ἀλλ' οὐκ ἔστιν αὕτη λύσις· (7) ἦν γὰρ ἡ λύσις ἐμφάνισις ψευδοῦς συλλογισμοῦ παρ' ὅ ψευδής. (8) εἰ οὖν μὴ συλλελόγισται ἢ καὶ ἀληθὲς ἢ ψεῦδος ἐπιχειρεῖ συνάγειν, ἡ ἐκείνου δήλωσις λύσις ἐστίν.
- (1) Nothing prevents the same argument from having several defects, (2) but not every exposure of a defect is a solution. (3) For it is possible to establish of some [argument] that it has deduced a falsehood, without establishing [the point] on which [the falsehood] depends, (4) for example, of Zeno's argument that it is not possible to move. (5) Hence also if someone were to attempt to conclude [of something] that it is impossible [merely] by concluding to an impossibility, he makes a mistake (even if he has deduced [the latter impossibility] countless times) (6) that, however, is not a solution. (7) For a solution was, [as stated before,] the exposure of a false deduction [together with the point] depending on which it is false. (8) If, then, [he] has not deduced [this impossibility] or in addition attempts to conclude a [further] truth or falsehood, the indication of [the point depending on which the argument is false] is the solution.

Thus I have shown that it is possible to make sense of the passage 179b19–26 without emending it, but sticking to the reading given by most of the manuscripts. At the same time it has emerged that there is a clear line of thought to be found in this passage, to which all statements contribute something in a coherent way. Now that these textual and interpretative matters have been settled, we are in a better position to judge the relevance of this passage to Aristotle's overall argument in *Sophistical Refutations* 24.