Dialectic, Persuasion and Science in Aristotle*

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Abstract:

What is dialectic and what is it for, in Aristotle? Aristotle's answer in Topics 1.2 seems surprisingly lacking in unity. He seems to imply that insofar as dialectic is an expertise (τέχνη), it is a disposition to three (possibly four) different kinds of productive achievement. Insofar as dialectic is a method, it is one whose use is seemingly subject to multiple, differing standards of evaluation. The goal of the paper is to resist this problematic "multi-tool" view of Aristotelian dialectic, by explaining how dialectic's contributions to training, encounters, and the philosophical sciences are of the same kind. What unifies them, I argue, is the kind of reasoning that improves the epistemic position of the person that engages with it. The kind of reasoning-based practices in which dialectic is the expertise are, at heart, tools of inquiry, tools for improving people's understanding. This is why dialectic is beneficial for persuasive 'encounters': it is an expertise that enables its possessor to persuade by improving the understanding of their participants.

Keywords

dialectic – science – encounters – rhetoric - persuasion

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I Introduction

This paper aims to elucidate the nature and purpose of the expertise (τέχνη) of dialectic in Aristotle's thought. Dialectic is an method-based expertise[1] seemingly in doing three very different kinds of thing – participating in a stylised kind of 'gymnastic' discussion, dealing well with ordinary people in persuasive 'encounters', and contributing in some way to science. These are potentially disparate, and we need to see how there could be a single, unified expertise for all of these things. What unifies them, I shall argue, is that they are all exercises of a capacity to produce arguments that improve the epistemic position of the person that engages with them. Put simply, the kind of reasoning-based practices in which dialectic is the expertise might be characterised as *first-and-foremost* tools of science, of testing and inquiry, tools for improving people's understanding. This then provides the explanation for why dialectic is beneficial in additional ways, particularly through its use in persuasive 'encounters': it is an expertise that enables its possessor to engage in persuasive encounters that persuade by improving the understanding of their participants. The value of dialectic for science and for encounters then explains why the stylised kind of discussion, 'gymnastic' dialectic, is worth engaging in, in ways that go beyond its value as an amusing game: it is a form of training that improves one's skills in readiness for their real-world exercise in science or in encounters.

If this is right, Aristotle's views on dialectic can plausibly be thought of as contributing to a picture of how a certain important kind of persuasion *should* be conducted. Insofar as they apply to ordinary persuasive encounters, Aristotle's views on dialectic offer a picture of the

1 Aristotle's preferred term in the *Topics* and *SE,* for the kind of thing that dialectic is, seems to be μέθοδος, but it is clear that he does consider dialectic to be an expertise (τέχνη), e.g. from *SE* 11, 172a34-b1, *Rhet* 1.1, 1355a33-5. Arguably, what the *Topics* offers is a method that constitutes a basis for the *technê* of dialectic, cf. (Smith 1999, 45).

ideals and standards that are applicable to (one central kind of) persuasion in everyday life. Since Aristotle sees dialectic as an expertise (τέχνη), he sees these standards and ideals not as *exhausting* what there is to say normatively about how dialogical persuasion should be undertaken, but as showing how it should be conducted, given appropriately favourable conditions, and in those cases where (from an ethical / political perspective) it is called for.

Defending this view of Aristotelian dialectic involves some engagement with recent debates about how Aristotle understood the nature and value of dialectic, its role in the acquisition of understanding (ἐπιστήμη), and the nature of ἔνδοξα (reputable opinions). This view of dialectic also mirrors the view of rhetoric that I have defended elsewhere.[2] On that interpretation, Aristotle rejects a view of rhetoric as simply the power to manipulate people's beliefs and actions; but he does so in a way that does not commit him to supposing that only the truly virtuous can be expert orators. Likewise, on the view defended here, Aristotle does not view dialectic as a skill in using syllogistic argument simply to change people's minds in whatever way you choose. The method underlying the expertise imposes further requirements on how the dialectician should construct and respond to arguments. These requirements do make the method systematically tend to be beneficial to those participating. But they do not make it into a general method for constructing scientific theory in any domain, still less a method that will produce knowledge of the first principles of the sciences. In claiming that dialectic's methods are "first-and-foremost" tools of science and inquiry, I am not disputing the widely-held view that Aristotle's predominant focus in his works the *Topics* and *Sophistici Elenchi* is the carefully-structured kind of debate which he calls 'gymnastic'. The claim is rather one about priority of value: that the *value* of

2 (Dow 2015)

dialectical expertise for training and for encounters is derived from the value it contributes to inquiry.

II The Puzzle: Dialectic is a Capacity for What?

What is dialectic for? What does this expertise[3] enable its possessor reliably to succeed in achieving? Finding a unified answer to this question is much more pressing, and revealing, than one might suppose from the secondary literature on dialectic in Aristotle.[4] The answer must obviously be guided by passages that seem to bear on it directly. But it should also support the kinds of contrasts that Aristotle makes between dialectical and 'philosophical' uses of syllogistic argument, and between dialectic and eristic.[5]

In the opening words of the *Topics*, Aristotle identifies the goal of the *treatise's* undertaking to be 'finding a method by which we will be able to construct syllogisms (συλλογίζεσθαι) about every problem put before us, on the basis of reputable opinions (ἐνδόξων), or if we are the ones defending a view (λόγον) to avoid saying anything that contradicts it.' (100a18-21) He immediately locates his first task as identifying the 'dialectical syllogism' (a22-3), since 'that is what we are searching for in the undertaking that lies before us.' (a23-4). The practice of dialectic consists in the use of certain kinds of arguments, an expertise in this (also called 'dialectic')[6] is what enables this practice to be undertaken with

3 The question arises in relation to dialectic as an expertise or τέχνη (i.e. a capacity, δύναμις, for productive achievements) in a way it does not in relation to the method of dialectic, since a method is simply a procedure that can be applied in pursuit of a variety of purposes. Passages that show Aristotle thinks dialectic is an expertise (and hence a capacity) include: *Top.* 1.3, 101b5-10; *SE* 11, 172a34-36; 34, 183b15-184b8; *Rhet.* 1.1, 1354a1-11, 1355a29-35; 1.2, 1356a30-33, 1356b28-1357a1.

4 The answer to this question can also be expected to contribute to our understanding of Aristotle's view on rhetoric, since he sees rhetoric as an application of dialectic, suitably adapted, in public persuasion. Cf. e.g. *Rhet.* 1.1, 1354a1; 1355a3-18; 1.2, 1356a20-35.

5 Cf. e.g. *APr.* 1.30, 46a3-10; 2.16, 65a35-7; *Top.* 1.14, 105b30-1; 8.13, 162b31-3.

6 The terminology is harder to marshall in English than in Greek, in such a way as to keep distinct the practice of 'dialogue' or 'discussion' (διαλέγεσθαι) from the expertise (διαλεκτική sc. τέχνη). For example,

consistent non-accidental success, and the goal of the treatise is to present a set of methods to constitute the expertise.

About a page later, having distinguished the 'dialectical syllogism' from various other kinds, Aristotle enumerates the three purposes for which he claims his current undertaking will be useful. The passage is worth considering in full.

> Following on from what has been said, the next task would be to articulate how many beneficial uses the current undertaking has, and what these are. They are three: [1.] for training (πρὸς γυμνασίαν), [2.] for encounters (πρὸς τὰς ἐντεύξεις), and [3.] for the philosophical sciences (πρὸς τὰς κατὰ φιλοσοφίαν ἐπιστήμας).
>
> That it is useful for training is obvious from [the facts?] themselves: when we've got a method we will be able more easily to get to attack what is proposed. For encounters because when we have enumerated the opinions of the many we will meet them not with the beliefs of others but with their own, changing their mind on whatever point they might seem to us to speak incorrectly. For the philosophical sciences, because when we are able to deal thoroughly with puzzles on both sides (πρὸς ἀμφότερα διαπορῆσαι), we will more easily see in each issue what is true and what is false.

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the 'dialectical syllogism' of a22-3 means the syllogism that belongs in the distinctive practice of 'discussion' under discussion. In the corpus generally, Aristotle typically signals reference to an expertise by use of the feminine singular of the relevant adjective on its own (-ική), with the noun τέχνη understood, or by speaking of those that possess the expertise –e.g. οἱ διαλεκτικοί. In the *Topics* and *SE*, it is possible that the noun to be understood with διαλεκτική is μέθοδος, not the τέχνη of which it is the basis. Nothing in the argument above turns on this issue.

> Furthermore, [it is useful] for the sake of the first things of each science (πρὸς τὰ πρῶτα τῶν περὶ ἑκάστην ἐπιστήμην). For from the starting points native (οἰκείων) to the science in question it is impossible to say anything about them, since the starting points are first in relation to everything else, but it is necessary to proceed in connection with them through the reputable opinions in connection with each thing. And this is distinctive to (ἴδιον), or most at home in (μάλιστα οἰκεῖον), dialectic: for being the expertise in examining, it offers a way of proceeding (ὁδὸν ἔχει) in relation to the starting points of all enquiries/procedures (ἁπασῶν τῶν μεθόδων). (*Topics* 1.2, 101a25-b4)

The passage can plausibly be viewed as a kind of sales-pitch or boast about the merits of the work, and its superiority to the kind(s) of dialectic on offer in Plato:[7] the *Topics* will, in a single neat package, deliver and perhaps outshine (i) the training in dialectic Plato talks about in (for example) *Republic* and *Parmenides*, (ii) the ability to challenge others in encounters that Plato attributes to Socrates across many dialogues and discusses explicitly in the *Phaedrus*, (iii) a method for better seeing the truth through exploring the consequences of both a given hypothesis and its denial, as recommended most explicitly in the *Parmenides*, and (iv) a "road" to discuss the first principles to set alongside what is offered in the *Republic*.[8]

Although Aristotle is pointing out the purposes for which his undertaking in the *Topics* will be useful, it is clear that what he is elucidating here is the purposes for which the method

7 I am grateful to James Warren for this suggestion. The point holds regardless of whether the Platonic corpus offers one single view of dialectical expertise or many, as famously suggested in (Robinson 1953, 70).

8 Cf. e.g. (i) *Rep.* 7.539d; *Parm.* 135e-136c; (ii) *Phdr.* 269a-272b, 276e-277c; (iii) *Parm.* 135e-136c; (iv) *Rep. 6.*509d-511e, 7.532a-534d.

of dialectic will be useful.[9] He doesn't say that these purposes constitute the 'products' of the expertise of dialectic, and that is not his concern here. But it is natural to think that the central valuable purposes to which a systematic method can be put will be either the products of the expertise, or the grounds on which those products are valuable. If that is right, then the passage suggests Aristotle believes that a unified expertise of dialectic would be one that enables its possessor to achieve consistent, non-accidental success at three valuable things:

(1) at 'practice' – presumably practice at applying the *topoi* of books 2-7, and at the kind of structured question-and-answer dialogue elucidated in book 8,

(2) at 'encounters' with the many, and

(3) at a certain kind of contribution to the philosophical sciences.

A fourth thing for which the expertise is useful is appended:

(4) discussing the first principles of each science.[10]

There is something wholly plausible about this suggestion – success at these things seems precisely to be the province of the expert dialectician, the διαλεκτικός.

And yet, there is also something at least somewhat puzzling about this implication. Dialectical expertise seems then to be something of a Swiss army knife, or multitool – useful for three (or four) rather different things. That is in itself odd, since, for Aristotle, expertises (τέχναι) are rational capacities individuated by what they are capacities for.[11]

9 Cf. Alexander, *In Topicorum* 26.24-27.4; (Smith 1993, 350).

10 Cf. (Smith 1997) *ad loc.*. Or this might be an aspect of the third kind of usefulness for dialectic. Cf. (Irwin 1988, 40).

11 *EN* 6.4 tells us that τέχναι are productive rational dispositions, individuated presumably by what it is they dispose their possessor successfully to produce. As dispositions, they are of course in turn propensities to exercise a capacity (δύναμις) in a certain way (cf. *EN* 2.5), and capacities are certainly individuated by what they are capacities for (cf. *Metaph.* Θ.2). If it turned out that the dispositions to A, B and C consisted

Puzzlement might be reinforced by the simple observation that in general salespeople don't make the best scientists, and scientists don't make the best salespeople: expertise in being persuasive in 'encounters' with the many seems a very different thing from expertise in advancing the sciences, let alone discussing their first principles. Perhaps what has made this issue seem less puzzling to commentators is that clearly underlying all three of the beneficial uses of the expertise is a facility in using a single method. But this does not satisfactorily deal with the heart of this concern for two reasons.

One is that the fact that they use a single method is not enough to make two dispositions the same expertise.[12] Sameness of method is not enough to unify dispositions, and expertises (τέχναι) are dispositions.

Another is that if the product of an expertise of dialectic was simply syllogisms from ἔνδοξα, the unity of the expertise would require a unified account of the standards by which the expertise's product was to be evaluated as good. Shoes are useful not only for protecting feet but for weighting down picnic rugs on the beach, but this does not make filling shoes with concrete an exercise of the expertise of cobblery. The relevant standards for judging a good shoe in a beach context are not those of cobblery. Here, it looks as though the uses for dialectical method that Aristotle highlights imply very different standards of evaluation. Seemingly, a good syllogism in gymnastic dialectic is one that enables you to win, in encounters it is one that enables you to change the other person's mind, and in science it is one that contributes in some way to seeing the truth. Perhaps the criteria for evaluating the products of dialectical method in these three areas can be shown

in the same state of the agent, then this would be a case where three dispositions turned out to be *accidentally* one, and one might perhaps have expected Aristotle to point this out if it applied here.

12 Skill in using deliberation is not *ipso facto*, for Aristotle, a unified disposition: depending on its goal, it can constitute "cleverness" (δεινότης), or "practical wisdom" (φρόνησις), *EN* 6.12, 1144a23-b1.

to be more unified than they at first seem. That is in fact what I hope to show. But it is not a trivial matter to do so.

Let us first consider gymnastic.[13] Gymnastic dialectical contests can be plausibly regarded as those in which one's performance as questioner or answerer is evaluated by reference to the merits and defects in argument that it was intended to develop facility in, and that these are precisely the standards that apply to dialectic's use in encounters and the philosophical sciences. If gymnastic is a training for the use of dialectic in encounters and inquiry, the expertise that yields success in it will coincide with the expertise required for those "real-world" activities.

That directs our focus onto whether a disposition to succeed in encounters could be identical to the disposition to succeed in relation to the philosophical sciences. It is hard to see how the kinds of contribution Aristotle mentions to the philosophical sciences could be reconceived so as to assimilate them closely to persuasive encounters with the many.[14] But

13 This is Moraux's 'joute dialectique' (Moraux 1968). Robin Smith suggests that this kind of training exercise stands to the use of dialectic in earnest as fencing stands to sword fighting in armed conflict (Smith 1993, 342-3), (Smith 1997, xx-xxiii). This is in many ways a helpful analogy (insofar as one's interest in the training game might outstrip and exist independently of one's interest in the thing(s) it was originally designed as training *for*). But it seems to me to overstate the independence of the game from those things for which it was originally conceived as training. Target practice for the military, catching practice for cricketers, or exercises in dribbling or passing (or even "keepie-uppies") for footballers, seem to me nearer the mark. For the stylised dialectical exercises we see referred to in (esp.) *Topics* 8 are still very strongly focused upon precisely the merits and defects relevant to how dialectic might contribute to both the philosophical sciences and to persuasion.

14 There is a hint of such a view in (Smith 1999, 51-3), where the suggestion is that dialectic serves a persuasive function, helping to persuade people to recognise scientific first principles as such, not by providing the epistemic basis on which they are known, but by dislodging misconceptions and contradictions that stand in the way of knowing them. The suggestion is interesting. But it does not seem compelling as an explication of Aristotle's indication that dialectic enables us to 'discuss' and 'say something about' the first principles, and is 'examinative of' them (or provides 'a road to' them) in 101a38-b4. And there is no corresponding suggestion about the first scientific contribution of dialectic through tackling the puzzles on each side, possibly because of the problematic way in which any such

it is not so hard to see how he might have conceived of persuasive encounters with the many in a distinctive way, such that they turn out to be rather similar to the particular procedures of the philosophical sciences that Aristotle highlights. If that could be established, the second and third items in Aristotle's list would have been assimilated. Dialectic would, on this view, turn out to be, *at its essential core,* a capacity for making a certain kind of advance in inquiry, with obvious relevance to the philosophical sciences. Skill in persuasive encounters would deploy that very same capacity because in this kind of persuasion, interlocutors are treated like inquirers, and the persuasive skill is deployed in enabling them to make a certain kind of advance. The case for this position will be made in the sections below.

III Persuasive Encounters as Informal Science

What I am proposing is that when one deploys the expertise of dialectic with a view to persuading others, in what Aristotle is here calling 'encounters' (ἐντεύξεις), one is seeking to promote in the participants to the conversation the same general kind of advance in understanding the subject under discussion as Aristotle says dialectic can contribute to the philosophical sciences. In short, in dialectical encounters, you treat those you are persuading as something like inquirers or scientists, and enable them to advance their inquiries. This is not to suggest that in ordinary encounters, conversation partners are seeking first principles! Rather the suggestion is that in such encounters, people are susceptible to persuasion on the basis that they aim to hold true beliefs and correct intentions based on good reasons, and are open to revising them if the balance of good reasons supports this.[15]

interpretation would put this passage out of line with the very similar passage in *Metaph*. B.1, discussed below.

15 Cf. *An.* 3.3, 428a19-24. Alternatively, it implies (even more modestly) that people should be treated as though this were true of them.

This is, in itself, a natural and attractive view of persuasion quite generally – that is, as a normative view of the kind of persuasion we think is valuable, and the kind we would wish, generally speaking, to see.[16] Although it is not difficult to think of circumstances (an emergency, or dealing with an uncooperative toddler, perhaps) in which coercive or manipulative forms of persuasion might be appropriate, we think that these are problematic and only justifiable because of some significant countervailing consideration. In general we prefer ourselves to be persuaded by being convinced. This is why we structure our collective interactions in ways that allow space for differences of opinion to be heard and for attempts to be made at persuading those of an initially different position.

This view also explains the otherwise puzzling silence in most of the rest of the *Topics* and *SE* about the use of dialectic in persuasive encounters; and it seems to offer a nice explanation for why Aristotle sees the ability to be persuasive in encounters as falling under dialectic rather than sophistic or eristic.

However, the principal basis on which this view must be defended is by showing that, for Aristotle, the kinds of ways in which dialectical expertise contributes to the philosophical

16 Whether it is plausible as a merely descriptive account of persuasion as it actually occurs, or as an explication of the ways in which words and concepts like 'persuasion' are used, depends on whether we adopt the perspective of the persuader, the persuaded, or the wider community. Since we often think of persuading from the point of view of the persuader, we can think of it as entirely a matter of changing minds to believe or intend what the persuader wants. But the aims of the persuaded are to change their mind if and only if there is good reason to do so; and the aims of the wider community in creating social and institutional contexts for persuasion (e.g. lawcourts, political assemblies) are to promote better judgements and improved understanding. Even persuaders often seem to aim at the kind of persuasive success that provides some vindication to their arguments – i.e. others were persuaded because the case had sufficient merit.

sciences are the same as what he has in mind as its contribution to persuasive encounters. This requires looking at each of these in turn to see what is involved.

IV Dialectic's Contribution to Science.

In the passage quoted above (*Top.* 1.2, 101a34-b4), Aristotle seems to identify two kinds of contribution that dialectical expertise makes to the philosophical sciences.

Firstly, this creates a numbering issue! If these are distinct contributions, why does Aristotle not say at 101a26 that there are a total of *four* ways in which the expertise he is conveying will be useful? Perhaps this is a quirky artefact of the process of composition. But it will be more satisfying to suppose that the two kinds of contribution to the philosophical sciences were similar or related to one another in some way.

A. Dealing thoroughly with the puzzles. Firstly, then, dialectic contributes to the sciences through enabling one to deal thoroughly with the puzzles (διαπορῆσαι) on both sides, and thereby to see more easily what is true and false. What is envisaged here seems to be not merely the recognition of puzzles on each side of an issue, but the resolution[17] of some of them, or at least seeing what would be involved in resolving them. For example, in relation to the 'problem' (i.e. the contested question) of whether the akratic acts knowingly, this would involve showing in relation to each side (i.e. to affirming that they do, and to denying this) how there were arguments from reputable premises that supported the rejection of that side, because they were incompatible with it. This is the raising of puzzles.

17 It has been pointed out in (Rossi 2017) that Aristotle's talk of 'resolving' (λυεῖν) puzzles typically involves refuting or finding a fault in one or more of the elements that generates the puzzle. My references to 'resolving' puzzles here are broader (i.e. I am using this term with its English sense, and not as a placeholder for any Greek term of Aristotle's) and include also deciding a puzzle on the basis of weighing the comparative epistemic credentials of the reasons favouring each side.

But this alone does not seem to make what is true and false on this question more visible. It merely deepens the puzzlement, by showing the problems incurred by taking each side. Presumably, 'puzzling through' or 'dealing thoroughly' is the further step needed. The puzzles might be resolved by distinguishing different senses of a particular word or phrase (e.g. of 'knowingly' – distinguishing between having and using knowledge), or restricting the scope of a premise, or qualifying it in some way, so as to open up a way in which one or more of the puzzles might be evaded. Of course, these are precisely the kinds of manoeuvres in which Aristotle is offering instruction in the *Topics.* The upshot of such a process would be a situation in which it became clear what the options are for someone who wanted to take a stand on the 'problem', how precisely they should specify their view, in such a way that it did not incur the puzzles and thereby commit them to denying some reputable premise. In the case where only one such option is available, the suggestion is that this process has helped to bring the truth to light, and has helped to show why other candidate views should be rejected as false. In cases where more than one option is consistent with the reputable premises that the dialectician comes up with, this process has still yielded a better view of the truth insofar as it has narrowed the range of options. In cases where no option can be specified such that it is compatible with all of the relevant *endoxa*, the process of working through the puzzles will at least make clear the costs associated with each option, i.e. which of the *endoxa* it would require rejecting. Given some procedure for weighing these costs against one another, one would be well-placed to use this understanding to come to a view about which option is most likely to be true.

These suggestions fit well with what Aristotle says elsewhere about the value to inquiry of dealing with puzzles.

> For those who wish to get clear of difficulties (εὐπορῆσαι) it is advantageous to state the difficulties well; for the subsequent free play of thought (εὐπορία) implies the solution of the previous difficulties, and it is not possible to untie a knot which one does not know. But the difficulty of our thinking points to a knot in the object; for in so far as our thought is in difficulties, it is in like case with those who are tied up; for in either case it is impossible to go forward. Therefore one should have surveyed all the difficulties beforehand, both for the reasons we have stated and because people who inquire without first stating the difficulties are like those who do not know where they have to go; besides, a man does not otherwise know even whether he has found what he is looking for or not; for the end is not clear to such a man, while to him who has first discussed the difficulties it is clear. Further, he who has heard all the contending arguments, as if they were the parties to a case, must be in a better position for judging. (*Metaph.* B.1, 995a27-b4).[18]

This passage introduces a book that states, but does not resolve, a series of puzzles in the *Metaphysics*, laying the foundation for the advances of the later books. It mirrors the conviction in the *Topics* passage that engaging with puzzles has a vital role to play in making progress (εὐπορῆσαι and cognates) towards understanding. The implication of the last sentence is that once the puzzles have been thoroughly investigated (and perhaps – one might add – the possible means to resolve or evade them explored), a person would be well-placed to judge (πρὸς τὸ κρῖναι) between the possible views to adopt – that is, one would have advanced beyond a situation in which one 'did not know which way to go', and could not recognise what one was looking for even if it had been found (a35-7). The implication seems very similar to the suggestion from the *Topics* that dealing thoroughly

18 Transl. W.D. Ross in (Barnes 1984).

with the puzzles gives a clearer view on the truth. And the echo in this passage of the paradox of inquiry in the *Meno* supports this suggestion: here, as there, progressing from puzzlement to knowledge requires having some criteria for recognising that you have the truth when you have found it.[19] This requires not just a recognition of the problems on either side of an issue, but an evaluation of the comparative difficulty, tractability and weight of these various problems.

The famous methodological passage from *Nicomachean Ethics* 7.1 seems to confirm the suggestions made above.

> We must, as in all other cases, set the phenomena before us and, after first discussing the difficulties, go on to prove, if possible, the truth of all the reputable opinions about these affections or, failing this, of the greater number and the most authoritative; for if we both resolve the difficulties and leave the reputable opinions undisturbed, we shall have proved the case sufficiently. (*EN* 7.1, 1345b2-7)[20]

The passage contemplates two kinds of progress. First, there is the resolution of the puzzles, perhaps by distinguishing different senses of a term, or by qualifying a claim in such a way as to avoid the difficulty. Second, in cases where the difficulties cannot be wholly removed, Aristotle's method involves choosing the option in which the preferable set of 'reputable opinions' (*endoxa*) is upheld. This involves an evaluation of those *endoxa*, according to how many of them are upheld and how many must be rejected on each option, and according to how 'authoritative' or 'important' (κύριος) each is, such that in a situation

19 Cf. *Meno* 80d-e. Thanks to James Warren for discussion of these allusions.

20 Transl. W.D. Ross and J.O. Urmson in (Barnes 1984).

where not all of the *endoxa* can be upheld, one should prefer to uphold the 'most authoritative / important'.

What might make one *endoxon* more authoritative than another, and how does this shed light on the application to the philosophical sciences? If the passages about how resolving puzzles contributes to inquiry are mutally consistent, they suggest a view according to which, when faced with a puzzle or set of puzzles on an issue, seeing which options preserve the best set of *endoxa* is precisely to have made progress in seeing what is true and false on that issue. This is already a contribution to the relevant science. If we can identify the 'most important' (τὰ κυριώτατα) of the *endoxa* with the 'most reputable' of the reputable opinions, referred to in a number of places in the *Topics* and *SE*,[21] then the procedure referred to in the *Nicomachean Ethics* passage is identical with what Aristotle says is the essential task of dialectic quite generally.

> Our programme was, then, to discover some faculty of reasoning about any theme put before us from the most reputable premisses that there are. For that is the essential task of the art of dialectic and of examination. (*SE* 34, 183a35-b1)[22]

Robert Bolton has argued that Aristotle's list of the types of *endoxa* gives an order of priority, according to which the earlier the item on the list, the more *endoxon* it is.[23]

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21 *Top*. 1.1,101a13; 8.5,159b8, 159b23; 8.6,160a14; *SE* 34.183a38, b6; cf. also *APr.* 2.27,70b5; *APo.* 1.19,81b20. The identification is very plausible on a linguistic level, since τὰ κυριώτατα ἔνδοξα can just as accurately be translated 'the most properly *endoxa*', i.e. those *endoxa* that are most properly so called. This brings this phrase very close to, if not identical with, τὰ ἐνδοξότατα.

22 Transl. W.A. Pickard-Cambridge in (Barnes 1984).

23 Cf. (Bolton 1990). He argues (plausibly) for translating τὰ πλείστα to mean most, or (as we would say) the 'vast majority' of the category of people in question.

> On the other hand, those opinions are reputable which are accepted by everyone or by most people or by the wise – i.e. by all, or by most, or by the most notable and reputable of them. (*Top.* 1.1, 100b21-3)[24]

Bolton suggests that this view is adopted on the basis of Aristotle's strongly empirical epistemology. For our purposes, the key claim is that for something to be more reputable than something else is for it to have greater evidential weight as an epistemic reason, such that it is more problematic to reject it. If this is right, then working through the puzzles involves either resolving them by disambiguation of terms and careful qualification of claims, or identifying which option is consistent with the most evidentially weighty set of *endoxa*.

Aristotle's claim in *Topics* 1.2 is that doing so gives a clearer view of what is true and false. He is most naturally taken to be supposing that the more *endoxos* something is, the more likely it is to be true, and indeed at *Rhetoric* 1.1, 1355a14, we find him using the phrase "that which is similar to the truth" as a synonym for *endoxon.*

B. Testing the first principles or starting points of each science. The second contribution of dialectical expertise to the philosophical sciences relates specifically to their first principles.

It is worth noting, as others also have,[25] what this passage does *not* say. It does not say that knowledge of the starting points of the sciences is attained (i.e. that they are known) on the basis of some dialectical process of inference from reputable opinions. It claims that

24 Transl. W.A. Pickard-Cambridge (adapted).

25 Cf. e.g. (Irwin 1988, 37), (Smith 1993), (Smith 1997).

whereas nothing can be said from within each science about the epistemic credentials of that science's starting points or 'first principles' (ἀρχαί), nevertheless, there is a 'way' to 'proceed' (διελθεῖν, ὁδὸν ἔχει) evaluatively in relation to those first principles using dialectic. The reference to a 'way' or 'road' (b4) underlines the same point: it is surely an allusion to the shorter and longer 'roads' in Plato's *Republic*, and we should recall that there this refers to the method that Socrates and his companions should follow in speaking indirectly (through images such as the sun, line and cave) about the various objects of knowledge. It does not refer to the method that the philosophers of Kallipolis will use for attaining knowledge of the first principles, the highest objects of knowledge.[26]

Dialectic, Aristotle, says is useful for discussing the first principles on the basis of dialectic's use in 'examining' (ἐξεταστική). Some have proposed identifying the examinatory use of dialectic with the specific kind of dialectical expertise that Aristotle calls *peirastic*.[27] Whatever the merits of that suggestion, the description, in *SE* 11, of how '*peirastic*' can be exercised offers a plausible option for how we might understand Aristotle's view of how dialectic (in examinatory mode) might be beneficial in relation to the first principles of a science.

> Dialectic is at the same time a mode of examination as well. For the art of examination is not an accomplishment of the same kind as geometry, but one which a man may possess, even though he has not knowledge. For it is possible even for one without knowledge to hold an examination of one who is without knowledge, if the latter grants him points taken not from things that he knows or from the proper principles but from the consequences which a man may know without knowing the

26 Further back than Plato, it may refer to the two roads of Parmenides (B2).

27 As does (Bolton 1990, 213); implicitly also (Smith 1999, 52).

> art in question (but which if he does not know, he is bound to be ignorant of the art). So then clearly the art of examining does not consist in knowledge of any definite subject. For this reason, too, it deals with everything; for every art employs certain common principles too. Hence everybody, including even amateurs, makes use in a way of dialectic and the practice of examining; for all undertake to some extent a test of those who profess to know things. What serves them here is the general principles (τὰ κοινά); for they know these themselves just as well as the scientist, even if in what they say they seem to go wildly astray. All, then, are engaged in refutation; for they take a hand as amateurs in the same task with which dialectic is concerned professionally; and he is a dialectician who examines by means of an expertise in deduction. (*SE* 11, 172a21-36)

What seems to be in view here is the idea that scientific theories have implications that include things that are (as we might say) common knowledge.[28] Thus, they can at least be put to the test of whether their implications are consistent with these items of common knowledge – τὰ κοινά, as Aristotle calls them at a32. Aristotle's characterisation of them is as consequences (ἑπομένων a25) of a true science in the area in question, but also as things that can be known by someone that does not (or may not) possess the science in question, but which someone that professed to know that science could not possibly be in ignorance of. The implication would seem to be that if it turned out that certain purported first principles of a science were consistent with the relevant selection of items of 'common

28 This interpretation of τὰ κοινά here is supported by the uses of this expression two chapters earlier (*SE* 9.170a38-9, b9), which must refer to common knowledge. Here, it seems, the key feature of the 'common things' is that they are widely knowable, such that Aristotle can presume that both participants in the conversation will be able to know them, regardless of the possibility that one or both parties might lack scientific knowledge in the domain in question. It is thus much more plausible that τὰ κοινά here means items of common knowledge, rather than axioms common to many (or all) sciences, cf. (Bolton 2012), *pace* (Fait 2007, 150). Cf. also *EN* 10.2, 1072b36-73a1. Thanks to Jakob Fink for discussion of these issues.

knowledge', this would not yet show that these first principles were true. But if they were inconsistent with it, they would have been shown to be false.[29]

Examples of this are drawn from geometry in the same chapter (*SE* 11), but are not easy to reconstruct.[30] More suggestive is the example invoking Zeno's arguments about the impossibility of motion: here the suggestion is that these are presented as objections to a medical theory according to which it is better to take a walk after dinner (172a8-9), presumably on the grounds that motion is impossible. The basis of the argument is called 'common' (κοινός, a9), and although it is not described as a dialectical argument, it is made clear that it does not belong to the relevant special science (medicine). Presumably what is 'common' here is (at least) the premise in Zeno's argument that in order to go a certain distance, one must first go half-way. The example doesn't exactly fit the pattern suggested in 172a21-36, because the falsity of the argument's conclusion that motion is impossible renders it unable to be an object of knowledge. Nevertheless, it does give some indication of the kinds of 'common' things that might serve as the basis for this kind of peirastic procedure. And, perhaps less problematically, it brings to mind a simpler possibility, namely that the *denial* of the Zenonian thesis – i.e. the claim that motion is possible – might be deployed in 'testing' dialectic, in order to show that a purported first-principle of physics, medicine or any other science was false, if it entailed that motion was impossible,

29 This method can usefully be contrasted with the process set out by Socrates in *Republic* 6 and 7 (511b-c, 534b-c) for testing knowledge of the unhypothetical first principle that explicitly excludes reference to anything visible. Cf. (Benson 2015, 260-63).

30 Cf. (Bolton 2012, 286-88 and 292-4) on Bryson's purported proof that the circle can be squared. The suggestion seems to have been that since in any type where there is an instance greater and an instance less than something, there will be an instance equal to it, and since there are constructible squares greater and less than a circle of a given area (since these can be constructed inside and outside any given circle), one can conclude that there will be a constructible square with exactly that area. But it is not wholly clear whether the first premise is true in the requisite sense.

or – more precisely – if its contradictory could be deduced from the 'common' premise that motion is possible.

There may be a nice example of this kind of 'peirastic' dialectic in *Physics* 1.2, where Aristotle seems to envisage an appeal to 'common' knowledge (e.g. that some things are in motion, that there are more things than one) to reject the physical theories, including and especially their first principles, of Parmenides and Melissus. Here the peirastic dialectician need not know the correct theory of physics, but they can refute one of these Eleatics on the basis of the inconsistency of their first principles with one or more items of common knowledge.

These examples involve testing using items of knowledge that are believed by (virtually) everyone. But it is clear from these passages that peirastic dialectic used quite a range of premises, and from *SE* 34 that the key requirement was to ensure that the premises of arguments were as reputable as possible and (as *Topics* 8.5 suggests for all uses of dialectic) that they be more reputable than the conclusion.

In the situation in which this kind of dialectic shows purported scientific first principles to be inconsistent with 'common' knowledge that is as universally held and solid as that some things move, or that there is more than one thing, then clearly (for Aristotle, at least) those principles are false.[31] The situation will be much more complex, though, in other cases, where the premises used in testing are reputable opinions of varying degrees of 'reputability'. In the latter kind of case, the results of peirastic dialectic might be less clear-cut: still, its benefit would be to make clear the 'costs' of endorsing those principles, by

31 (Bolton 1993) defends the view that in this regard, Aristotle was simply following Socrates.

making clear the number and significance of the *endoxa* that one would thereby be forced to reject.[32]

If this is right, then it highlights an important similarity between the two contributions of dialectic to science that Aristotle highlights in *Topics* 1.2. Both in the presentation and resolution of puzzles and in the testing of purported scientific first principles, dialectic involves a facility in constructing arguments deploying premises that are as *endoxon* as possible, it involves carefully bringing to light which *endoxon* premises are incompatible with each candidate view, and it requires comparative judgements about how *endoxon* each of these premises is relative to the others.[33]

As we look, in the following section, at the use of dialectic in persuasive encounters, I will be seeking to show that what the dialectician is seeking to achieve in such 'encounters' is closely related to the achievements of dialectic in science just described.

V The use of dialectical expertise in persuasive encounters

Recall that Aristotle says in our *Topics* 1.2 passage that his method of dialectic is useful:

32 Bolton's view seems to suggest that this would not count as an exercise of periastic, on the basis that only when the premises are things that so reputable as to be *known* (cf. 172a33) in this widely-accessible way, would an argument qualify as an exercise of peirastic. Arguments whose premises were not sufficiently reputable as to be stricly *known* would still be dialectical, and might plausibly be thought of as featuring in 'examinatory' use of dialectic in relation to scientific first principles.

33 Cf. (Bolton 2012, 292): 'Any support supplied by dialectical argument for any belief must conform to the requirements for all dialectical argument, that the premises must be more ἔνδοξα than the conclusion inferred from them, and that the more ἔνδοξα the premises are the better the argument is (see *Top*. 8.5–6, 11). That is, beliefs and ἔνδοξα acquire weight and authority in dialectic not simply from their consistency or coherence with other beliefs or ἔνδοξα but also from their own independent degree of endoxicality or that of beliefs or premises ... from which they can be inferred.' If this picture is correct, it happily offers an explanation of why Aristotle's "fourth" beneficial use of dialectic was tacked onto the third, and not announced as a fourth item in the list. It is really a special application of the very same thing as is involved in the third, to yield very similar benefits.

> For encounters because when we have enumerated the opinions of the many we will meet them not with the beliefs of others but with their own, changing their mind on whatever point they might seem to us to speak incorrectly. (101a30-34)

The passage is rightly understood as having in view not merely the elucidation and tidying up of the views of the many, but changing their minds, including bringing them to reject claims they previously held.[34]

Robin Smith helpfully draws our attention to the fact that the passage is emphasising the usefulness of the method that Aristotle is conveying – and specifically the practice he urges of 'enumerating' in lists the various *endoxa* on various topics, indexed according to various things, including who holds them (everyone, most people, the wise, Anaxagoras, etc.).[35] These lists can serve to enable the dialectician to increase the likelihood that they use as premises things that their interlocutors will believe. However, Smith holds a view of what

34 Thus, (Brunschwig 1967) has '[Q]uand nous voudrons les persuader de renoncer a des affirmations qui nous paraîtront manifestement inacceptables', although 'affirmations' perhaps unduly restricts the reference of λέγειν. (Barnes 1984) has (rather ambiguously) 'shifting the ground of any argument that they appear to us to state unsoundly.' This seems to confine the scope of the many's utterances to their arguments, and perhaps confines the scope of the kind of change the dialectician brings about (perhaps confining it to the 'ground' of their arguments, as contrasted with other aspects). But the basic thrust seems right – this is about changing their minds. (Smith 1993) glosses it 'replacing our audience's clumsy formulations of their own views with better ones we have worked out in advance.' His translation in (Smith 1997) is 'changing their minds', but in the commentary he insists on his earlier view, citing *EE* 1.6, 1216b28-35 and *Top.* 8.11, 161a29-36. The former does concern the clarification of others' views, but scarcely restricts the meaning of μεταβιβάζειν to this. The latter passage seems to me to count decisively against this, to include within the meaning of this verb (used here specifically to describe the effects of dialectic) the production of the kind of change in belief in which the subject adopts a view they had previously not held and rejects something they previously had held. The echo (surely) here of *Phaedrus* 262b5 also strongly supports this.

35 (Smith 1993, 347-51).

endoxa are such that they are nothing more than 'things that people think'[36] and such that they do not – in virtue of being *endoxa* – carry any particular epistemic credentials. This latter aspect of his view seems to me incorrect.[37] In these brief remarks on how Aristotle's method is useful for encounters, it is taken for granted that the premisses used in encounters will be *endoxa,* since (as we know from the opening of the *Topics*) this is a characteristic feature of all dialectic. The passage says that, among the *endoxa*, the dialectician will be able to identify and select those that the many are likely themselves to believe. It is a necessary condition of successful premise selection that one choose things that the interlocutor will accept. But this passage does nothing by itself to support the view that the *only* concern of the dialectician in the selection of premises is that they be believed by the interlocutor. In fact, closer investigation suggests that epistemic standards that apply to the use of dialectic in inquiry and testing do also apply to its use in encounters.

Firstly, we should notice that Aristotle explicitly says (101a33-4) that this dialectical method is useful for changing people's beliefs *with a view to improving them*. Although this is qualified (whatever they 'seem to us' to be getting wrong), we are still a long way from the Gorgianic and Thrasymachean ambition to possess the ability to change people's minds *in whatever direction we choose*.[38] Aristotle's method is useful for correcting *faulty* beliefs.

Secondly, it is a method that works, not by using someone else's beliefs as starting points, but by using a person's *own* beliefs. What is the point of this contrast? What kind of method would work on the basis of someone else's beliefs? The answer, I think, is knowledge-based teaching. If this is correct, the point being made is that Aristotle's dialectical method is

36 (Smith 1993, 347).

37 Cf. also (Karbowski 2015).

38 Cf. (Wardy 1998), (Dow 2015).

useful for improving the beliefs of others in circumstances where we cannot presuppose that we possess authority as teachers: the person's views can not be corrected on the basis of accepting someone else's – a teacher's – views as authoritative. This interpretation is supported by a closer look at Aristotle's views on 'encounters' with the many.

There are not many passages to look at on this subject directly. The word 'encounters' (ἐντεύξεις) and its cognates are used only 21 times in the whole Aristotelian corpus, mostly meaning simply the meeting of one thing or person with others. Those that refer to the kind of persuasive or argumentative encounter envisaged in *Topics* 1.2 are three in number. Two occur in this passage itself: the one other is from the *Rhetoric*.[39] It is instructive.

> Another reason [why rhetoric is useful] is that with some people, even if you had the most precise systematic knowledge, it would not be easy from that knowledge to persuade them by speaking: this is because teaching is speaking based on systematic knowledge, and this is impossible, you must rather use what is common to all to craft your proofs and your arguments. This is just what we said in the Topics too about encounters with the many. (*Rhet.* 1.1, 1355a24-29)

Clearly in this passage from the *Rhetoric*, Aristotle is envisaging the persuasive use of rhetoric, and – one might naturally think – of dialectic too in the reference to encounters.[40] His contrast here is between understanding-based teaching and the use of 'the common things' (τὰ κοινά) in persuasion, and he claims to have made just the same point in connection with 'encounters' in the *Topics.* His point, as applied to rhetoric, is that

39 One other use, at *Metaph.* Γ.5, 1009a17, certainly refers to an argumentative encounter, but does not shed any detailed light on what Aristotle might have had in mind in the *Topics*.

40 One could evade this suggestion, and take the comparison to be strictly confined to the use of τὰ κοινά, but it does not seem to me the most natural reading.

understanding-based teaching is impossible because even if the speaker had the requisite understanding (a condition that, it is implied, is not in fact met) their audience would not be in a position to receive it, thus requiring the speaker to have recourse to the 'common things'.[41] This point, he claims, matches what he says about encounters in the *Topics.*

But where in the *Topics* could he be thinking about? As may already be clear, there is only one place he could be referring to, and it is our passage from 1.2. Could Aristotle, in this passage in the *Topics,* have been drawing the same contrast as in the *Rhetoric,* i.e. between understanding-based teaching and persuasive use of a more accessible range of premises? The answer, surely, is yes.

Why, according to these passages, is there a problem about the persuasive use of teaching? The *Rhetoric* passage does not say. It could be that orators lack systematic knowledge (and perhaps knowledge is not even attainable on the contingent subject matter they address), or that audiences would not understand the premises required for knowledge-based teaching, or that though they might understand them, they would not accept them in the way that is required in successful cases of teaching, or something else, or some combination of these. But the *Topics* passage *does* say. The problem with teaching is that it would be 'from someone else's opinions' (a31-2) – unproblematic in the situation where, as *Topics* 8.5 reminds us, 'the learner must always grant the opinions, for nobody undertakes to teach what is false' (159a28-30), but problematic in public oratory and problematic in encounters where the teacher-learner relationship is absent.

41 It is not explicitly stated why this is. It could be because they do not believe the premises of the demonstrative syllogisms that be involved. Or – more likely – it could be because they are not disposed to accept the premises on the speaker's say-so, but rather are disposed to be suspicious of what speakers assert, and need to be brought round. Teaching, as Aristotle represents it in the *Topics* rests on assumptions of knowledge and good faith in the teacher, cf. *Top.* 8.5, 159a28-30, quoted above.

If the *Rhetoric* passage elucidates how Aristotle understood the point about encounters being made in *Topics* 1.2, then that point turns out to run something like as follows.

> This method-based expertise in dialectic is useful for encounters with ordinary people because, when you are seeking to improve their understanding, you can't use teaching, as you can't depend on their regarding you as a teacher and accepting your opinions as premises on your authority as a teacher, but you can instead proceed from reputable opinions, and in this case on the basis of premises that they already accept (premises that this method supplies you with, from your lists of the "opinions of the many"). Using them, you are well-placed to correct any mistaken view you find your interlocutors hold. (*Top.* 1.2, 101a30-34, paraphrased)

There is one further curiosity about the cross-reference. Aristotle implies that his recommendation to use the 'common things' in rhetoric repeats an instruction in the *Topics* to use the 'common things' in encounters. But our *Topics* passage does not mention the 'common things'. Could Aristotle be somehow thinking of a different passage in the *Topics*? There is no obvious candidate. In fact the discrepancy between the *Rhetoric* passage's reference to the 'common things' and the *Topics* passage is much less significant than it might seem. In the latter, Aristotle is recommending that, in encounters, the dialectician should use as premisses the interlocutors' 'own views' (οἰκείων δογμάτων, 101a32), and that their method of coming up with premises that are likely to be believed by a person one encounters will involve drawing on their lists of the 'views of the many' (τὰς τῶν πολλῶν ... δόξας, a31). The cross-reference strongly suggests that the views of the

many simply are the 'common things' - things that are (as we say) commonly held, or common knowledge.[42]

This discussion of encounters has thus far provided some grounds for supposing that the use of dialectical expertise in encounters shares with its scientific use a systematic appeal to reputable opinions, and indeed among these to those that are the most reputable of all, the things believed by everyone, or most people.

42 If so, then here (at i.e. *Rhet.* 1.1, 1355a27) is a further passage in which 'τὰ κοινά' means items of common knowledge. This is defended, plausibly, at greater length by (Bolton 1990, 215-8), who – further – identifies these 'common things' with those discussed in *SE* 9 and 11 as the basis for peirastic testing of the first principles of the philosophical sciences. This argument from the comparison between *Rhet.* 1.1 and *Top.* 1.2 seems to be strong grounds for resisting Devereux (1990)'s rejection of this reading of τὰ κοινά in favour of a more technical meaning, at least in these passages (cf. also (Fait 2007, 150)). The more technical reading – i.e. that τὰ κοινά are principles or axioms common to more than one science – might seem to have its best support from *APo.* 1.10 and 1.11. But even this might be doubted: the phrase 'τὰ κοινά' in those chapters is introduced as a sub-division of the 'principles' (ἀρχαί, 76a31) into things that are unique to each science (τὰ ἴδια), and the things that are common (τὰ κοινά). Aristotle is thus not really using (or specifying a meaning for) the *unqualified* phrase 'τὰ κοινά' (the common things). His use of that phrase ('the common ones') is here really implicitly qualified and stands in for 'αἱ κοιναὶ ἀρχαί' (the common principles) or 'τὰ κοινὰ ἀξιώματα' (the common axioms – a phrase that Aristotle actually uses at 76b14). He clearly feels the need to remind the reader that this is how he is using the phrase at 1.11, 77a27-8, distinguishing this use of 'common things' to mean specifically the premises of demonstrations, rather than their conclusions or what their conclusions are about. This shows that he cannot presume that readers can generally be relied upon to understand the phrase in that way. Indeed, it perhaps suggests that the two things he says that the unqualified phrase 'τὰ κοινά' does *not* refer to in that context are things that it might otherwise be presumed to refer to, one of which is things which are the conclusions of scientific demonstrations i.e. what follows from a science's first principles – exactly what Aristotle uses the phrase to refer to in *SE* 11, 172a21-36 (discussed above). Similarly, Aristotle's use in *Metaph.* B.2 of the phrase 'κοιναὶ δόξαι' is (a) not a use of the unqualified 'the common things'; (b) clearly a reference to the axioms of a science; and (c) indicates by the use of qualifier 'common' that those axioms are either common to more than one science, or common to the things that fall within the domain of the science in question, hinting perhaps at the common nature that unites the domain of a single science (cf. *Metaph.* K.3, 1061b18). Hence, it provides scant basis for resisting the view that in these key passages of the *Sophistical Refutations* and *Rhetoric,* the unqualified phrase 'τὰ κοινά' means (as the context suggests) items of common knowledge.

The similarities do not end there. Clearly, like all uses of dialectic, including scientific, its use in encounters will involve a similar concern to deploy arguments that are genuinely syllogistic.

But the most significant similarity would reside in the fact that the use of dialectic in encounters shared with its scientific use the feature highlighted earlier – namely, a concern with assessing *how reputable* the premises are from which the conclusion is inferred, in such a way as to support comparative judgements about reputability.

Does the use of dialectic in encounters share such a feature? There are two reasons for thinking it does. The first is simply that seemingly Aristotle presented such a concern as a feature of all uses of dialectic, and encounters are no exception. Reference to the use of dialectic in encounters pretty much disappears after *Topics* 1.2. This is clearly not – as the reference to encounters in the *Rhetoric* shows – because this aspect of Aristotelian dialectic was forgotten or insignificant. The most obvious explanation is that there are no significant differences between the use of dialectic for encounters and its use in gymnastic and in testing, as regards what is said in the rest of the *Topics* and *SE.* This would then include the insistence in *Topics* 8.5-6 that it is part of the standards of good dialectic that the premisses of syllogisms should be more reputable than their conclusions[43] – which obviously requires the kind of comparative judgements about reputability that I have highlighted. A significant passage is the advice to answerers in *Topics* 8.5.

> If, on the other hand, the [answerer's] thesis is reputable without qualification, clearly the [questioner's] conclusion will be implausible without qualification.

43 Cf. (Wlodarczyk 2000) for a more extended exploration of this feature of Aristotelian dialectic.

> Accordingly, the answerer should admit all views that seem to be the case and, of those that do not, all that are less implausible than the conclusion. For then he will be thought to have conducted the discussion sufficiently well. (159b16-20.)

Why should the answerer, when defending an unqualifiedly reputable thesis, concede things that do not seem to be true simply because they are less implausible than the conclusion (which is not a high bar to meet, since the conclusion aimed for by the questioner will be 'implausible without qualification')? Why should the rule not be that they concede only premises that are more reputable *than their thesis*? The answer seems to be that the purpose of the discussion is to uncover, if possible, the best argument that could be made in favour of any given conclusion – even an 'unqualifiedly disreputable' one. The more reputable the premises are that are used in a given case, the better the discussion will have been conducted, regardless of whether it is still evident at the end that the argument is insufficient to overturn the initial thesis. Indeed, it is surely a part of the proper conduct of the discussion that this come to light. What the discussion uncovers is the strength of the case that can be made in favour of the disreputable conclusion.[44] The answerer has not failed their reputable thesis when they allow the questioner's syllogism to be completed, because what the discussion makes possible is a comparison between how reputable the original (answerer's) thesis is, and how reputable the premises are by which the questioner's conclusion (the contradictory of the answerer's thesis) was derived.

44 It is not clear how Aristotle's instructions to answerers alone would force the questioner to use premises that are *as reputable as possible*, but it would at least serve to require premises more reputable than the conclusion. We should likely suppose that Aristotle envisaged the combination of his instructions to both questioner and answerer (and the existing standards by which their performances would be evaluated) to serve together to elicit arguments from premises that were as reputable as possible.

This is a central part of the basis of how dialectical discussions are evaluated,[45] and it is clear that these parts of *Topics* 8 are most easily read as relating to the 'training' or 'gymnastic' use of dialectic within a philosophical school. *Topics* 8.5-6 are introduced as offering guidance to the answerer in the gymnastic *and peirastic* uses of dialectic, but much of their detail seems more applicable to gymnastic than to peirastic. It is strange that encounters are not mentioned in this context perhaps. But they closely fit the pattern of gymnastic dialectic that these chapters bring to light. In encounters, the interlocutor will change their view only if it is clear to them that the premises from which its contradictory has been inferred are more reputable than their original view (or than premises from which *it* might be inferred).

We might note at this point Aristotle's rather brief account of how he envisages these comparative judgements about reputability being made.

> Moreover, as contributing to knowledge and to philosophic wisdom the power of discerning and holding in one view the results of either of two hypotheses is no mean instrument; for it then only remains to make a right choice of one of them. For a task of this kind a certain natural ability is required: in fact real natural ability just is the power rightly to choose the true and shun the false. Men of natural ability can do this; for by a right liking or disliking for whatever is proposed to them they rightly select what is best. (*Top.* 8.14, 163b9-16.)

It is interesting how little Aristotle has to say about this part of the process. His view, perhaps rather plausibly, is that the most important part of the task of evaluating, as we

45 Cf. *Top.* 8.11, 161b19-33, esp. 31-2.

might say, the epistemic merits and costs of alternative positions, is to set out clearly what those merits and costs are – what the 'results' (or consequences, or entailments) are of each one, so that it is clear where these include the rejection of reputable views. The comparative assessment of just *how* reputable these are, and how heavily they should count against a hypothesis that entails their rejection is just something that a naturally well-adjusted human will have the ability to make.

The second reason for supposing that skill in encounters involves an ability to make comparative judgements about reputability is philosophical. Not only is it the case that, as elsewhere, an argument will look ridiculous in an encounter if its premises are less reputable than its conclusion (how then has the argument improved our evaluation of the conclusion?), but also the aim of changing the interlocutor's mind will not normally be achieved (and should not be achieved insofar as the interlocutor is rational) if the premises by which the dialectician's conclusion is drawn are less reputable than the view they are seeking to dislodge.

VI Dialectic in Gymnastic, in Encounters and in Science

If the above view is right, then dialectical expertise turns out to consist in the abilities to see and *compare* the reputability of a systematic array of reputable propositions, and the ability to see the inferential relationships between these. These abilities stand as the basis for the 'products' that the expertise in dialectic enables its possessor successfully and non-accidentally to produce. These are syllogistic arguments from the most reputable premises possible,[46] and (arguably) evaluations of the elements of these arguments once they have

46 Note here that the suggestion (following A*Po.* 1.19, 81b18-20 and *SE* 34, 183a37-b1) that the exercise of dialectical expertise involves preferring the 'most reputable premises possible' needs to be understood such that what is 'possible' (i.e. what premises are available) is defined by the context of the dialectical exchange, in which it might be understood that what the answerer should assent to is restricted to (say)

been produced (i.e. to determine whether as a result the conclusion or the thesis (perhaps a scientific first principle) against which it was brought should be believed).

This achieves a view on which dialectical expertise has a unified set of products – indeed its products are really all of the same kind. This comes about by thinking of persuasive encounters as cases in which one treats one's interlocutor as an enquirer, and seeks to enable them to see how their present view and alternatives are related inferentially to the *endoxa*, and to see *how reputable* are those claims themselves and the *endoxa* to which they are related. In doing so, the interlocutor is placed in just the same position as the scientist that has worked through the puzzles, or tested scientific first principles.

VII Premises that are 'as reputable as possible'

It is important, however, to clarify the sense in which the exercise of dialectical expertise involves reasoning 'from the most reputable premises possible' (*SE* 34, 183a37-b1, cited below). Here, we might distinguish three different ways in which the reputability of the premises might feature in the assessment of the exercise of dialectical expertise.

It might feature, firstly, as a boundary condition, marking off dialectic from non-dialectic.[47] Thus, if you are reasoning from premises that are not reputable, you are not engaged in dialectic. The premises of an argument do not have to be *as reputable as possible* in order for your arguments to be dialectical, they just need to be reputable. And it is important to stress that even this minimal condition needs to be understood in a nuanced way: for Aristotle emphasises that in some cases, the questioner will have the task of trying to reach a conclusion that is unqualifiedly disreputable (ἁπλῶς ἄδοξον, *Top.* 8.5, 159b16-20), and as a

their own beliefs, or the views of Anaxagoras, cf. *Top.* 8.5.

47 Cf. *Top.* 1.1, 100a29-30.

result the best available premises will also be – from an objective point of view – not reputable. In this situation, the premises that Aristotle says the answerer should concede and the questioner should propose are those that are 'less disreputable than the conclusion'. How can this be a dialectical syllogism if the premises are not (objectively) reputable? The answer, surely, is that this is Aristotle's explanation of what being reputable amounts to in such a context.

Secondly, the reputability of the premises features among the criteria of success for dialectic in *Topics* 8.4-6, 11, such that it is a requirement of having successfully refuted the answerer if the premises of your argument (to which they have agreed) are more reputable than its conclusion (the contradictory of their initial thesis). But success is relative to your goals, often contextually determined. Insofar as the goal is simply the refutation of your opponent, then although your premises must of course be granted by them, this does not imply a requirement that your premises be *as objectively reputable as possible.* And, neither does this goal imply a requirement to make your premises as reputable as possible *even relative to the views of your interlocutor*, so long as they are sufficiently reputable to secure their acceptance.

Notice that both of these two ways in which the reputability of the premises features in the assessment of dialectical expertise require practitioners of dialectic to be able to distinguish what is reputable from what is not, and to judge *how reputable* any given premise is compared to other propositions.

Moreover, dialectical expertise can, in every case, be exercised *better* or *worse*, and this is the third way in which the reputability of the premises features in the evaluation of

dialectical practice. For it is the function of dialectic to reason from the most reputable premises possible in the context (*SE* 34, 183a37-b1), and hence a characteristic mark of all dialectical expertise is to achieve this consistently. To have reasoned from *more* reputable premises is always to have exercised dialectical expertise *better*. It is on this basis that Aristotle can be readily understood as characterising dialectic quite generally (not only its *peirastic* use)[48] as an expertise in reasoning from the most reputable premises possible.

VIII Some final considerations

This view makes good sense of Aristotle's summary in *SE* 34.

> Our programme was, then, to discover some faculty of reasoning about any theme put before us from the most reputable premisses that there are. For that is the essential task of the art of dialectic and of examination (τοῦτο γὰρ ἔργον ἐστὶ τῆς διαλεκτικῆς καθ' αὑτὴν καὶ τῆς πειραστικῆς). (183a35-b1.)

We can see why Aristotle singles out examination (*peirastic*) for special mention here, given the specially significant way in which it requires the use of (objectively) maximally reputable premises. But this does not detract from the generality of this summary statement – dialectic is an ability that includes discernment regarding how reputable any given proposition is, and a preference for what is most reputable. The contexts in which this is deployed determine whether the reasoning in question amounts to the testing of a scientific first principle, the persuading of someone one has encountered, the resolution of puzzles in the service of evaluating rival scientific claims, or competent participation in gymnastic discussions as part of philosophical training.

48 *Pace* (Bolton 1990, §5).

The view also makes much better sense of the distinction between dialectic and eristic than a view according to which dialectic enabled its possessor, in encounters, to change what their interlocutor believed on the basis simply of whatever they were in fact disposed to assent to (regardless of the actual reputability of the propositions involved). For on a view such as the latter, the ability in question seems too close to eristic: there is nothing about such an ability that requires any sensitivity to reputability (or indeed to validity of syllogisms) in the way that seems so central to all the other ways in which dialectic is deployed.

IX Conclusion

This paper has sought to shed light on the nature and purpose of dialectic in Aristotle's thought. I have argued that dialectic is a unified expertise (τέχνη) in participating in 'gymnastic' discussion, contributing to science, and dealing with ordinary people in persuasive 'encounters'. The crucial explanation of how these might constitute some unified thing in which dialectic is the expertise stems from finding its contribution both to encounters and to science to lie in providing the kind of reasoning that improves the epistemic position of the person that engages with it. The most striking aspect of this is seeing the dialectician in persuasive encounters as treating their interlocutor somewhat like an inquiring scientist, and persuading them by improving their understanding. On this basis, 'gymnastic' dialectic turns out to be worth engaging in because it improves one's skills in readiness for their real-world exercise in science or in encounters.

The picture that emerges has interesting further implications insofar as it implies a set of standards applying to persuasive interactions with others, i.e. the standards applicable

when inquiring. Although Aristotle will insist (as would we) that any such exercise of persuasive skill is subject not just to its own standards, internal to the practice, but to broader ethical and political considerations such as those regarding when, where, and to what extent it should be exercised,[49] this does nothing to minimise the importance of correctly identifying the relevant internal standards. If dialectic is a unified expertise in the way suggested here, Aristotle's instructions about how dialectic should be practised align closely with his views on rhetoric, so as to yield a striking view of how persuasive skill should be exercised across those two expertises. Any persuasive expertise will involve persuading, publicly or privately, by improving the understanding of the other parties involved.

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49 *EN* 1.2, 1094a27-b7.

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