

DEFINING TOPICS IN ARISTOTLE'S TOPICS VI¹

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Abstract: I argue that Topics VI does not contain any serious theory about definitions (to be used by the scientist and the metaphysician at their most important tasks), but only a collection of advice for formulating definitions in a dialectical context, namely, definitions aiming to catch what the opponent means. Topics VI is full of inconsistencies that can be explained away by this approach: the inconsistencies reflect "acceptable opinions about definitions" that distinct groups of interlocutors accept. I also argue (as a way to prove my point) that the "topoi" need not be pieces of serious theory Aristotle is committed to. The "topoi" (i.e., the argumentative proto-schemata that Aristotle presents as inference licenses) must also be considered as "endoxa", namely, as accepted opinions about how it is legitimate to draw an inference.

Keywords: dialectic; theory of argumentation; definition; essencialism; validity.

I. INTRODUCTION:

It is common to find scholars believing that *Topics VI* contains a "theory of definition" and is one important piece of Aristotle's overall view on this subject. At such a level of generality, this belief can be taken to be true, for *Topics VI* indeed discusses precepts for formulating and refuting definitions in dialectic discussions. On more fine-grained

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demands, though, that belief can be submitted to serious doubt. The more fine-grained demands include questions such as the following: should the precepts for formulating definitions in the *Topics* be taken seriously by a scientist in her search for explanatory definitions delivering the appropriate principles for their explananda? Should the model (or models) for definitions that can be found at *Topics* VI be taken seriously by the metaphysician concerned with a deep analysis of the ontological structure of their *definienda*? Now, Aristotle develops a powerful theory about definitions in his approach to scientific explanation in *Posterior Analytics* II, as well as develops (if not a theory, at least) some important points about definitions in the central books (VII-VIII) of his *Metaphysics*. In light of these facts, the issues above mentioned can be rephrased: is the theory of definitions expounded in the *Topics* compatible with the theories found in the *Posterior Analytics* and the *Metaphysics*? If it is compatible at least in some sense of "compatible", what are the relations between those three pieces of theory about the same subject? Is it appropriate to compare and to confront these three pieces of theory under the same set of consistent criteria? Or is each of them rather confined to one self-sufficient jurisdiction, with no contribution to give to the other? Besides, from the point of view of a "*paragone*", which one should be declared superior or preferable? Is the theory expressed in the *Topics* inferior or superior to the ones found in *Posterior Analytics* II and *Metaphysics*?

Of course, I will not discuss all these issues in this paper. My aim is more particular. I will have to explain some of my assumptions as well as some of my underlying aims, but my discussion will be focused on two points: first,

the "theory of definitions" which one could extract from the *Topics* is inconsistent – and another way of phrasing the point would be to say that there is no *theory* at all, if "theory" means a body of true and systematically linked propositions about the same subject; second, the inconsistency can be explained away if we correctly understand what Aristotle's purposes are in the *Topics*; but, if one assumes that the theory found in the *Topics* is destined to give some positive outcome or background for the serious role definitions must play in scientific explanation and metaphysical analysis – and by "positive outcome" I rule out *Topics*-models acting merely as a *foil* for the scientist and the metaphysician –, then the inconsistency is a fatal one. I will focus more on the *Posterior Analytics* and the *Topics* than on the *Metaphysics*.

It is important to clarify my assumptions about what role a theory of definitions plays in each of the three works at stake. My next section will present a sketchy outline of the theories found in the *Posterior Analytics* and in the *Metaphysics*.

II. THEORIES OF DEFINITION IN *POSTERIOR ANALYTICS* II AND *METAPHYSICS* VII-VIII:

This section is only designed to provide me with some background assumptions not to be argued for. A reader most concerned with my view about the *Topics* can skip it.

The theory of definitions in *Posterior Analytics* has two interrelated features. On the one hand, since definitions are regarded as principles from which appropriate explanations about the explananda must flow, Aristotle's theory of definitions is part of his view about scientific

principles for appropriate explanations (72a20-24, 73b31, 99a22-23). Furthermore, given Aristotle's claim that scientifically explaining X is the same as knowing what X is (90a14-15, 93a4), and given that knowledge about what X is (about X's essence) is encapsulated in a definition, clarifications about definitions in *Posterior Analytics* II are clarifications about what giving a scientific explanation through the essence of the explanandum amounts to. On the other hand, since definitions are also regarded as starting-points for the inquiry into appropriate explanations, Aristotle's theory of definitions is part of his view about the heuristic method by which, from fixing the relevant features and the identity of explananda as such, one must attain the principles for appropriate explanations.

These two roles to be played by definitions are substantiated by a sophisticated classification of definitions. This subject is not devoid of controversies, but it is enough for my purposes to highlight some of the main outlines of that classification. There are three kinds of definition and scholars discuss whether there is even a fourth type not overlapping with any of the previous types.³ But the main point for my purposes is that Aristotle clearly distinguishes between, on the one hand, a kind of definition which is enough for fixing the identity of the explananda as such and so gives a starting-point for scientific research and, on the other hand, a kind of definition in which the identity-fixing features of the explananda as such are grounded in their appropriate explanatory factor (93b39-94a9)⁴. It is also

3 For discussion, see Ross, 1949, p. 634-5; Bolton 1976; Ackrill 1981; Demoss-Devereux 1988, Charles 2000, p. 26-33, 213-220; Williams & Charles 2013, 123; Charles 2010, 289-296; Angioni 2014b.

4 For a full discussion, see Charles 2000 p. 43-48; 57-69.

important for my purposes to remark that none of these two kinds of definition seem to be explicitly built upon the *Topics*-styles notions of genus and differentia – although one might be tempted to argue that at least the first kind of definition can be built as a *genus-differentia* account according to *Topics* prescriptions.⁵ But it is even more important to stress that the second kind of definition, with its strict dependence on the notion of an explanatory factor equivalent to a "middle term", can be perfectly understood within the *Posterior Analytics* without reference to the *Topics* classificatory notions of genus and differentia.⁶

It is beyond the scope of this paper to give a full discussion of definitions as they are presented in the central books of the *Metaphysics*. It is enough for my purposes to stress that the central books of the *Metaphysics* elaborate on the *Posterior Analytics*' theory. They start with a "logical" approach focused mainly on features such as coextensiveness, non-circularity and elucidativeness (VII 4-6),⁷ then some criteria for the primariness of *definienda* are added (1030a2-17); after this preliminary strategy, Aristotle introduces a hylomorphic approach and discusses how hylomorphism can be squared with those logical features. At *Metaphysics* VII-12, Aristotle employs some specific sort of definitions by genus and differentia (namely, the ones that proceed by an appropriate and gradual division of each differentia taken in itself) and this fact has misled most

5 For discussion of this point, see chapter 12 in Bronstein (forthcoming) p. 283-330; Charles 2000, p. 282-3.

6 See discussion in Bronstein [forthcoming] p. 293-4, and Charles 2000, p. 22-244 for a more conciliatory approach. For the use of *genus-differentia* definitions in *Metaphysics* Z-12, see Code 2010, p. 94-95, Angioni 2008, p. 305-326.

7 I have explored this subject in Angioni 2014c. See also a similar view in Peramatzis 2010.

scholars:⁸ they have taken Aristotle to be prescribing that sort of division as an appropriate tool for the metaphysician, whereas he is rather using that sort of definition just to highlight an important point, namely, how the elements within a *definiens* account must be related to each other.⁹ Once this point is established, Aristotle relies on the triadic explanatory model from *Posterior Analytics* II (cf. 1041a20 ff.) and shows how this model can be accommodated within a hylomorphic account, in which the notion of appropriate matter (cf. 1044a17-18, b3) is one of the key-notions. This matter is to be unpacked into a more complex account in which some identity-fixing features are predicated of a lower level matter. This picture is highly controversial,¹⁰ but instead of arguing for it I will rather emphasize the point that is important for my purposes here: the central books of the *Metaphysics* go far beyond *Topics* VI on the subject-matter of how definitions should be formulated.

III. DEFINITIONS AND THE PURPOSE OF THE *TOPICS*:

As for the *Topics*, in order to understand what role a theory of definitions might play in it, one must first understand what is the purpose of that work. The first paragraph of the *Topics* describes its purpose in a clear way: to begin with, the *Topics* is designed to provide arguers or debaters with a set of rules about how to proceed in a debate. These rules can be understood more loosely as argumentative patterns

⁸ See for instance Bostock 1994, p. 193-4; Pellegrin 1982, p. 70-1.

⁹ See Code 2010, p. 94-95, Angioni 2008, p. 305-326.

¹⁰ For full discussions, see Lewis 2013, p. 173-188; Peramatzis 2011, p. 55-200; Angioni 2008, p. 233-303; Angioni 2014c.

or as pieces of advice about what is most suited to a given circumstance, but it still makes sense to call them "rules". This set of rules is designed to enable debaters to be successful in two procedures: first, to lead the opponent to a contradiction; second, to avoid falling himself in contradiction when submitted to argument or examination.¹¹ So far, there is little controversy, but such an account of the purpose of the *Topics* is still too vague. There is controversy about two further and pivotal points: what is the nature of the argumentative rules by which a debater would be successful in attaining those results, and what are the epistemological boundaries to which such a debate is confined.

About the nature of the argumentative rules in the *Topics*, there is controversy about whether the "syllogism" Aristotle appeals to is the same notion as the one developed and employed in the *Analytics*.¹² This is an exciting question, but I will not focus on it – because it would lead me too far, since it is highly controversial what the notion of syllogism developed in the *Analytics* is.¹³ I will rather focus on other issues about the argumentative rules in the *Topics*. Even with the controversy above mentioned, it is clear that sometimes Aristotle employs in the *Topics* arguments which are very near to what is recognized as a syllogism by the tradition, as well as arguments which are very near to what

11 See Smith 1993, Smith 1997, p. xiii-xvi; Smith 1994, p. 145.

12 See Smith 1994 (especially p. 136, 140, 148-150), Smith 1997, p. 42-43; Brunschwig 1967, p. xxix-xxxvi; Bolton 1994, p. 109-114. There is also a promising work in progress by Marko Malink on this point.

13 Interpretations as those developed by Corcoran 1974 and Smiley 1973 are more accepted nowadays than the axiomatized one proposed by Lukasiewicz 1951 and Patzig 1968, but the debate is still open. See other accounts in Lear 1980, Barnes 2007, p. 362-398. I myself have developed a highly unorthodox account in Angioni 2014.

is recognized as *modus ponens* and *modus tollens*¹⁴ – in short, there is an appeal to (and an employment of) forms of argument which are recognized as logically valid. However, what I want to highlight is that appealing to logically valid schemata is not the end of the story. The argumentative rules in the *Topics* also include some "rules" which go beyond what is encapsulated in those schemata recognized as valid. Before substantiating this claim, let me give my reader an idea of the overall picture I will argue for.

The other controversial and important point for understanding the purpose of the *Topics* is the epistemological boundaries to which such a debate is confined. Again, at a general and vague level, there is little controversy: the kind of debate which is the subject-matter of the *Topics* is what is called the "dialectic debate", namely, that kind of debate in which the starting-point (from which discussion proceeds) and the limiting horizon (beyond which the discussion must not proceed) is what is accepted by or acceptable to the opponent. This starting-point and confining limit is called "*endoxa*": the acceptable (or accepted, or respectable)¹⁵ opinions of one's opponent. This means that an opinion held by the opponent gives the starting-point for the discussion. But this also means that (i) the debate is entirely confined to the consistency of the set of opinions held by the opponent, in the sense that one

14 See *Topics* 111b17-21 (for *modus ponens*) and 111b21-23, 112a 19-21, 124b7-9 (for *modus tollens* arguments).

15 About the meaning and translation of "*endoxa*", I basically follow Barnes 2011, p. 166, and Smith 1997, p. 78-80 (see also Brunschwig 1967, p. 113-4). See a different view in Reeve 1998, p. 42. Owen 1961 has an argument for conflating "*phainomena*" and "*endoxa*", which was followed by Hamlyn 1990 and Nussbaum 1986 (who goes so far as to interpret "*endoxa*" as "conceptual framework" of human beings in general). I agree with Cooper 1999 and his strong criticism against this line of interpretation.

debater must aim at not falling himself into contradiction or inconsistency and the other debater must aim at leading the opponent to an inconsistency or contradiction *with no special concern about whether those opinions must be taken as true or not*,¹⁶ (ii) the debate must also proceed in such a way that each step introduces a premise that the opponent either actually accepts or is likely to accept (or to accept only "for the sake of the argument").

Now, almost all approaches to dialectic in the *Topics* take item (ii) above as concerning exclusively the content of opinions relating to the subject-matter of the debate. The content of each premise introduced in the debate about a given subject-matter must match an opinion held by the opponent about that subject-matter. Inferential steps in a debate, on the other hand, will be controlled or allowed by what is labelled a "location" (*topos*), namely, a rule licensing an inference of a given kind. Now, on the standard interpretation, all these "*topoi*" are pieces of Aristotle's own theory.¹⁷ On the standard picture, "*endoxa*", on the one hand, refers to opinions about the subject-matter which are accepted by (or acceptable to) one's opponent and need not be endorsed by the debater concerned with refuting his opponent; whereas "*topoi*", on the other hand, refers to argumentative rules that not only should be endorsed as such by both debaters but are also understood as serious pieces in Aristotle's overall theory. In contrast to this approach, I claim that there can an overlap between "*endoxa*" and "*topoi*": "*endoxon*" can also refer to some *topos*.

16 I am just repeating what is a well known view, expounded in Barnes 1980. See also Smith 1997, p. xiv-xv. For further discussion, see Irwin 1988, p. 36-50.

17 See Smith 1994, p. 145-6, for a distinction between "*endoxa*" and "*topoi*".

In this case, *endoxa* turn out to be opinions not precisely *about the subject-matter at stake*, but *about how it is legitimate to proceed in the discussion*. Of course, most premises introduced in a dialectical debate are opinions about the subject-matter at stake. What I claim is that there must be also room for premises which carry opinions of a different kind: opinions about the inferential steps themselves, not about the subject-matter. These opinions are inference licenses that allow debaters to proceed in a given way in the debate.

In other words, and to go straight to the point, some *endoxa* will be like the following:

(a) "a *genus* must be in the same category as its *species*"; (cf. 121a5-9).

(b) "there is only one definition of the same thing".¹⁸

If a given debater accepts (a), it would be possible for his opponent to argue along the following lines: you have accepted that *B* is the *genus* of *A*, and you have also accepted that a *genus* must be in the same category as its *species*; now, *A* and *B* are not in the same category; therefore, you cannot maintain that *B* is the *genus* of *A*. (120b36-121a9)

Similarly, if a given debater accepts (b), it would be possible for his opponent to argue along the following lines: you have accepted that *L* is the definition of \mathcal{X} , and you have also accepted that there is only one definition of the same thing; now, it turns out (as a result of other premises) that you also accept that L^* is a definition of \mathcal{X} ; therefore, since you cannot maintain that *L* and L^* are

18 (b) is either implied or presupposed or directly formulated at the following passages: 141a31-b2; 141b34-142a2; 142b35; 151a34; 151b16-17.

both definitions of X , you should abandon either L or L^* " (See 151b12-17).

The lines of argument suggested in the last paragraphs are usually acknowledged in the literature. However, scholars are inclined to take the premises depicted as (a) and (b) not as *endoxa* but as part of a positive theory Aristotle is committed to; in other words, as serious pieces of a theory about the notions (e.g., genus, definition) at stake.¹⁹ I think this is wrong.

I am not claiming, of course, that all *topoi* must be understood along these lines, let alone that all *endoxa* must be taken in this way. I am rather claiming that the concept of "endoxa" also covers these sorts of *opinions about some formal features* of the notions involved, and these opinions work as *argumentative rules* beyond what is encapsulated in "deductive rules" formally recognized as valid (either syllogistic moods or schemata similar to *modus ponens* and *tollens*).²⁰ Thus, dialectic discussion might involve *modus ponens*-like arguments, or *Barbara*-like arguments etc. But, besides these forms of argument, dialectic discussion also depends on those *endoxa* which, describing some "logical" feature of the notions employed in the discussion, allow the argument to proceed along some steps.

IV. INFERENCE LICENSES (OR ARGUMENTATIVE RULES) AS ENDOXA IN THE TOPICS:

Furthermore, *endoxa* concerning logical features of the

19 See Schiaparelli 2011, p. 129; Falcon 1996. More generally, see Smith 1994, p. 145-6, as well as Smith 1997, p. xxiii-xxviii, for a view that keeps *endoxa* and *topoi* apart from each other.

20 See *Topics* 111b17-21 (for *modus ponens*) and 111b21-23, 112a 19-21, 124b7-9 (for *modus tollens* arguments). See Smith 1997, p. xxxiii for an overview of the relationship between "topics" and "valid forms".

predicables are not the only ones to work as an argumentative rule licensing an inference (instead of being an opinion about the *subject-matter* at stake). An *endoxon* might be an inference license depending on formal features of other notions such as contraries, coordinated items etc.

The following text is very enlightening in this respect:

Indeed, it is similarly acceptable to claim that, if every pleasure is good, then every pain is bad, as well as to claim that, if some pleasure is good, then also some pain is bad (119a38-b1).²¹

This passage employs the expression "*endoxon*" to characterize an inferential claim: given that *S* has the attribute *P*, then the appropriate contrary of *S* also has the attribute which is the appropriate contrary of *P* (either with universal or with particular quantification). One might argue that "*endoxon*" just characterizes the claim that every pain is bad (or that some pain is bad), which works as the consequent of the conditional presented in the passage. However, the scope of the verb "claim" is not just the consequent, but the whole inference. Aristotle is presenting an inferential precept to be used in a dialectical discussion. And what is called "acceptable" is precisely this inferential license *as an inferential license*. At the end of the paragraph, this becomes most clear: all similar cases discussed (topics for coordinated items, for declinations, for corruptible agents etc.) are covered by the same label: "the acceptable is similar in all those cases" (119b15-16). Therefore, the word "*endoxon*" at 119a38 refers to an argumentative rule that can

21 My translation reads "καὶ τὸ" instead of "τῷ" in 119b1 (with one manuscript and Boethius's translation). My point will still stand with the reading "τῷ", but the result would be much more complicated, for Aristotle would then be combining the topic about subordination (119a34-36) with a topic about opposites.

be formulated in this way:

(c) "if S has the attribute P , then the appropriate contrary of S also has the attribute which is the appropriate contrary of P ".

This topic (c) enables a dialectician to argue against someone who (say) agrees that pleasure is the appropriate contrary of pain but then does not accept that pain has a given attribute F contrary to the attribute G which is predicated of pleasure.

Another important passage is the following:

Indeed, it is fair to expect ("*endoxon*") that [there are intermediates] similarly for both cases [sc. the genera and the species of contraries]: as there is one for virtue and vice, there is also one for justice and injustice: indeed, in both cases the intermediate is given by negation (123b20-23).

This *endoxon* is explicitly prescribed as a rule for refuting that something is the genus of a given thing: in order to see if G is the genus of S , take the appropriate contrary of G and the appropriate contrary of S and check whether there is an intermediate in the same way for each pair of contraries. This *endoxon* can be formulated along the following lines:

(d) "if G is the genus of S and both G and S have their appropriate contraries, then there should be an intermediate between the contraries in the same way for both cases".

Now, I have purposely translated "*endoxon*" at 123b20 as "fair to expect" just to provoke scholars inclined to say that the word has not its technical meaning in this occurrence. I claim that "*endoxon*" in 123b20 means precisely the same thing as it means elsewhere in the *Topics*. There is a relevant difference according to context: "*endoxon*" might refer either

to the topic itself (i.e., to the argumentative rule which gives an inferential permit before an opponent) or to the sentences used in the inference according to the topic. But the core-meaning is always the same.²²

Besides, there is another important remark. Premises such as (a)-(d) describe some logical or epistemological features of the predicables and correlated notions. Now, I am not claiming that all premises of this kind found in the *Topics* cannot be taken as part of Aristotle's positive theories. Some of those premises might be taken as equivalent to Aristotle's positive view on the subject – actually, most of what is presented in Book I of the *Topics* correspond to a very general level of characterization of Aristotle's positive views about the predicables.²³ Besides, other premises from the *Topics* can be taken as innocuous to Aristotle's positive theories. But a significant number of them are such that they have their origins and their boundaries confined by the theory of dialectical discussion in the *Topics*. This means that those premises are *intended as acceptable opinions about the logical features of the predicables, which an opponent is likely to accept, apart from the issue of whether they are true or not.*

There are three more pieces of evidence in favour of my view: first, some of the premises formulated by Aristotle

22 Of course, if the topic is used to generate a sentence accepted by the opponent, "accepted" or "acceptable" is a good translation for an adjective applied to that sentence; on the other hand, if the topic is used to refute a sentence advanced by the opponent, "it is fair to expect" might turn out to be a better translation ("you have said that G is the genus of S, but it is fair to think that it is not"), as it is in 123b20.

23 Some points Aristotle expounds in *Topics* I are quite general and vague, but generality in this case is a safeguard against controversy: first, a definition (i.e., the predicable named "definition", the *definiens* account) must be coextensive with its *definiendum*; second, the definition must tell what being is for its *definiendum* (no matter how hard it is to specify what the concept of being-for-X or essence amounts to); third, a definition is a complex expression (i.e., no definition is a one-word expression).

about logical features of the predicables are actually incompatible with each other;²⁴ secondly, Aristotle advises a dialectical debater to appeal to any of these incompatible premises according to the opponent he is dealing with in each circumstance ("one [sc. a dialectician] must know all such topics, but must employ them as it seems convenient" 142a31-33);²⁵ thirdly, in some of those pieces of advice, Aristotle clearly acknowledges the topic at stake as "false", i.e., as incapable of delivering a sound inference.²⁶ Thus, instead of charging Aristotle with inconsistency, or instead of saying that each of the pieces of advice belongs to different stages of his intellectual development,²⁷ or instead of saying that Aristotle was not aware of the incompatibility between the premises,²⁸ my claim is that the incompatibility between those premises is in accordance with the purpose of the *Topics*, namely, to provide a set of argumentative rules enabling one debater to avoid falling in contradiction and to lead the opponent to contradiction *from the premises accepted by the opponent*. Now, sometimes the opponent will be someone who believes that the genus always belongs to the same category as its species; but sometimes the

24 Compare 121a5-9 (genus and species must be in the same category) and 124b15-22 (genus and species in different categories). This is a list of passages where one can find pieces of advice opposite to each other: 123b30-37; 124b28-34; 146b13-19; 149a14-24; 150b14-18; in some cases, Aristotle actually presents (as a result of those opposite topics) concrete premises which are incompatible with each other: "having soul is not a correct *proprium* of animal" (132a14-16), "having soul is the *proprium* of animal" (132b16-18); "pedestrian biped is not the *proprium* of human" (133a3-5), "pedestrian biped is the *proprium* of human" (133b7-8, 136b20-21). Besides, some topics are based on linguistic tricks and are then corrected (124b35-125a4; 125a14-24).

25 See also 140b6-7; 142a112-13. In addition, for topics particularly prescribed for one dealing with Platonists, see 137b3-14; 143b23-24, 29-30; 148a20-22.

26 Aristotle actually uses the expression "false topic" to refer to those topics that do not yield a sound inference: see *Topics* 111a23-27, 29-32; 133b11-14; 136a35-37. Besides, it would be ridiculous to suppose that Aristotle had taken seriously the topics based on equivocation of the genitive at 145a37-b11, which are clearly "false" too.

27 Most developmental proposals are incredibly low-sensitive to context.

28 This will be a charge in the style of Le Blond 1939.

opponent will be someone who believes that the genus might not belong to the same category as its species. Thus, the incompatible premises (P1) that *the genus belong to the same category as its species* and (P2) that *the genus does not belong to the same category as its species* are not part of any serious theory of Aristotle's about the real features of the predicables, let alone about the logical and ontological features of Porphyrean trees or about the inner metaphysical structure of the world;²⁹ (P1) and (P2) are just part of the dialectical handbook: they are "locations" or "topics" that a debater might indifferently choose according to the beliefs of each opponent in a given circumstance, i.e., "topics" that a debater might choose if it is accepted by his actual opponent. The good debater will choose, among (P1) and (P2), the one which proves more useful against the opponent in question. And the *Topics's* purpose is just to present a comprehensive handbook full of advice that will enable the good debater to make the right choice in each circumstance. Besides other advantages, my view explains why "we do not find instances in the *Topics* in which [Aristotle] argues for the *validity* of a rule" (Smith 1997, p. xxxiii), nor do we find Aristotle asking how "topical rules themselves are established" (*ibidem*). The reason is that those "topical rules themselves" are destined to pick up what an opponent is likely to accept as an inference license.

Therefore, one might say, as I said at the beginning, that the "theory of definition" in the *Topics* is inconsistent. But, from what has been argued in the previous paragraphs,

29 For these reasons, I am very sceptical about Malink 2013, p. 114-167 at this particular point: he takes *Topics* theory of the predicables to be furnishing a semantic for the apodeictic syllogistic developed in *APr* I 8-22. Malink's results are very impressive, but I doubt whether there is a real "theory" developed in the *Topics* to appeal to.

I hope it is clear that the inconsistency of that theory means the following:

(i) that actually there is no theory at all, if "theory" is understood as a set of organized and systematically related true propositions Aristotle seriously holds about definitions;

(ii) that the "theory", if there is one, is rather to be understood as a collection of different and even mutually incompatible opinions about logical and epistemological features of definitions – opinions which, being acceptable to an opponent in a given circumstance, can be used as premises in arguing with that opponent.

As I have promised, point (ii) somehow "explains away" the inconsistency: from the standpoint of the purposes of the *Topics*, that sort of inconsistency should be there (i.e., it should be displayed in the handbook of dialectical discussion), because there are opponents with contrary opinions, and a good dialectician might be prepared (by his acquaintance with that handbook named *Topics*) to argue against *both* kinds of opponents.³⁰

One might argue that my proposal risks transforming some dialectical arguments into invalid inferences, and this result clashes with Aristotle's insistence that every dialectical argument is valid. Suppose that a premise like (c), far from being true, is just accepted as true by an opponent. From

30 For these reasons, I disagree with approaches such as the one developed by Barnes 1970. Barnes's results are formally irreproachable and his embracing aim is impressive, but his project is rooted in what I believe to be a mistaken assumption about a need for consistency. A very good approach can be found in Falcon 1996: he examines the inconsistency between what he labels as Rule R and Rule R* (p. 378-9, 381); he argues that Aristotle chooses R*, as more elaborated than R (p. 384-5), and I think he is right *if some option should be preferred*. I add, however, that *Topics* must include R as well as R* because the aim of this work is to provide a debater with rules to be used according to the opponent's acceptance. In order to contradict an opponent in a dialectical debate, rule R is enough *if the opponent accepts R* (instead of R*).

this does it follow that any argument coming from (c) against that opponent will be only "seemingly valid" and then will turn out to be a sophistic argument (cf. 100b25)? If premise (c) is itself an inference license and it is only seemingly true, will any inference resulting from it also be only seemingly valid and so fallacious? This objection is very appropriate, but I have two reasons to think it is not compelling. First, what a dialectician should observe is whether his opponent accepts (c) or not as an argument permit. It is immaterial whether a logical theory would certify (c) or not as a valid rule. But what makes an argument eristic or sophistic is rather a deceitful strategy attempting to make the opponent accept (c) when in fact he would not accept it. Such a deceitful strategy will make any inference from (c) only *seemingly* valid. But insofar as the dialectician has not employed any trick to obtain acceptance from his opponent, the inference is not an eristic one.³¹ Secondly, scholars inclined to take all "locations" in the *Topics* as Aristotle's inference rules delivering valid conclusions will face the same problem I face: would they say that conclusions drawn from topics such as the one proposed at 111a23-27 (see also 111a 29-32; 133b11-14, 136a35-37, 145a37-b11) are valid ones? If they are not valid ones, are they eristic ones?

In the next sections, in order to substantiate my claims, I will focus on two points in the initial chapters of *Topics* VI. The first point is the inconsistency between, on the one hand, the controlling premise that "there is only one definition of the same *definiendum*", and, on the other hand, the distinction about *defining* and *defining well*. Here is the

31 See something along these lines in Smith 1997, p. xv, 49.

second point: in the discussion about failures in defining well, Aristotle suggests that the "theory of definitions" (or at least the notion of *defining well*) in *Topics VI* is confined to the aim of attaining definitions that capture what the opponent means – for those are the definitions that favour the dialectic procedure of leading to (or avoiding) contradictions from what the opponent accepts. *Topics VI* is just a handbook compiling pieces of advice that will enable a dialectician to get definitions expressing her opponent's views.

V. A CLASH BETWEEN ASSUMPTIONS MADE AT TOPICS VI:

Let me first argue how the premise that "there is only one definition of the same *definiendum*" clashes with Aristotle's distinction between *defining* and *defining well*. For ease of reference, let me label these two items as follows:

(A) "There is only one definition of the same *definiendum*";

(B) "There is a distinction between defining and defining well".

It goes without saying that, given (B), it follows that:

(B*) "given a *definiendum*, it is possible not only to define it, but also to define it well".

Aristotle's discussion of the distinction (B) in *Topics VI* 2-3 focuses on cases in which a given *definiendum* is presumably defined, but not well defined. But before examining this discussion, let me stress a prior issue which is independent of Aristotle's assessment of particular cases. The prior issue is whether (B) is compatible or not with (A).

Now, (B) and (B*) presuppose and imply the possibility

of a definition *D* which, although it defines (somehow) its *definiendum*, does not define it well – or does not define it in the most appropriate manner. This definition *D* is to be contrasted with a definition *D**, which not only defines its *definiendum* but also defines it in the most appropriate manner. A difficult issue is how the appropriateness of a definition (i.e., of a *definiens* account) should be understood: by what criteria one definition should be evaluated as an appropriate definition etc. But there is no need to discuss these criteria in order to see that (B) is incompatible with (A): if, on the one hand, there is a definition *D** which defines its *definiendum* in the most appropriate manner and, on the other hand, there is another definition *D* which, acting as a foil for *D**, defines (somehow) its *definiendum* but does not define it in the most appropriate manner, then (A) cannot be true. If both *D* and *D** are acknowledged as definitions of the same *definiendum* (even if deserving different appraisals etc.), then it cannot be true that there is only one definition of the same *definiendum*.

Note that (A) is not to be conflated with a similar but different thesis saying that, for the same *definiendum*, there is only one fully appropriate definition. Aristotle's appeal to (A) makes it clear that (A) should be rather understood as saying that there is only one definition for the same *definiendum* full stop, with no special adjective modifying "definition". Aristotle makes this clear at 141a32-34. Let *D** be the definition through the prior and more knowable items, and let *D* be the definition which does not pick out those items (and presumably defines the same *definiendum* through items that are posterior and less knowable). Aristotle's point is that *D* does not define at all – in other

words, *D* is not a definition. Here is the passage:

It is clear that a man who does not define through terms of this kind has not defined at all. Otherwise, there will be more than one definition of the same thing; for clearly he who defines through terms that are prior and more knowable has framed a better definition, so that both will then be definitions of the same object. Such a result, however, is not acceptable [*ou dokei*]. [...] Clearly, then, any one who has not defined a thing through terms that are prior and more knowable has not defined it at all (141a31-34, b1-2).

Aristotle is arguing that, if one takes *D** as "a better definition", he will thereby be committed to say that *D* is still a definition (even if it is "the worse" one) and this clashes with assumption (A): it is not accepted that there can be two definitions of the same thing.

Furthermore, this is Aristotle's first step as he starts his discussion of failures in defining full stop as distinct from failures in defining well (141a23-25). If assumption (A) should be understood in the sense that there is only one *good* or *appropriate* definition of each thing, it will be open to him to say that definition *D* defines, but not well – in other words, that definition *D* is still a definition, although not a good one. But Aristotle is expressly rejecting that option in that passage.

One might be tempted to object that there is no clash between (A) and (B) because definition *D* is only a provisional account: once definition *D** is attained, definition *D* should be abandoned. Definition *D* should be called a "definition" only during the time in which *D** has not yet been reached. However, if this line of argument were correct, point (B) would collapse into a most infelicitous formulation. If John has attempted to define *X* with the provisional definition *D*, which is destined to lose its title of "definition" once *D** is attained, it would be a

mistake to describe John as "defining X , but not well". To say about John that he has defined X would be equivalent to say that he has *attempted* to define X but was not successful. Such an understanding of "defining" will be possible in many other contexts, given that Greek language (as many other languages) has the conative present. However, it is highly implausible that Aristotle in formulating (B) had employed "defining" in the conative sense in its first but not in its second occurrence, as if (B) could be transformed into "there is a distinction between attempting to define and being successful in defining". Such an interpretation would conflate the criteria for merely successful definitions with the criteria for successful definitions that define well. Now, such a conflation is highly implausible in the context. Of course, criteria for defining full stop and criteria for defining well are related: failure in defining entails failure in defining well but not vice-versa. However, Aristotle has based the structure of the whole book VI of the *Topics* on this distinction. *Topics* VI 2-3 addresses failures in defining well, whereas *Topics* VI 4 starts the discussion of failures in defining full stop. Given Aristotle's emphasis on this distinction, one might reasonably expect to find him discussing each kind of failure from the standpoint which is most peculiar to it.

Thus, there being an incompatibility between (A) and (B), what is the end of the story? I do not see any appeal in attempting to explain away the incompatibility by saying that (A) and (B) belong to different periods of Aristotle's development, or by saying that Aristotle was not aware of the incompatibility. My proposal is that the incompatibility should be explained away by showing that thesis (A) is not part of any serious theory of definition (i.e., a truth-

committed theory to be positively used by the scientist and the metaphysician) and should rather be taken as an *endoxon* to be used in a dialectical discussion with no commitment as to whether things are so or not. The pivotal point is the following: if you are a debater, see if your opponent believes thesis (A); if he does, then, for each definition he accepts in the debate, one line of argument open for you will be to present another account which has equal or better claims to be called a definition of the same *definiendum*; thus, if your opponent is not able to refute your definition and still accepts (A), either he will fall in contradiction – his acceptance of both definitions will contradict (A) – or his attempted definition will be thereby refuted – he will endorse your definition instead (see 151b12-17). In this way, far from being a serious piece of theory aimed at catching the truth about definitions, thesis (A) in *Topics VI* turns out to be a mere topic to be used in a dialectical strategy against adversaries that accept it.

VI. DISTINGUISHING DEFINING AND DEFINING WELL:

My second point against the assumption that *Topics VI* contains a serious theory of definition comes from an examination of Aristotle's discussion of failures in defining well or, more precisely, of the first part of it, which occupies *Topics VI 2*. Aristotle's discussion is far from being coherently conducted, since he ends up presenting failures in defining instead of failures in defining *well*. I will examine below one case in which such confusion occurs, but my main target is that the very notion of defining well, besides being incompatible with thesis (A) as already noted, is designed with the aim of securing the acceptance of a

debater. First, let me spell out what I mean when I say that Aristotle's discussion conflates failures in defining well with failures in defining.

In general, for any activity ϕ , merely ϕ -ing and ϕ -ing well are related: ϕ -ing well entails ϕ -ing, being capable of ϕ -ing well entails being capable of ϕ -ing etc.; furthermore, failure in ϕ -ing entails failure in ϕ -ing well, but not vice-versa. Now, these relations of entailment do not prevent someone from focusing on the specific conditions that determine ϕ -ing well. Take the activity of guitar playing as an example. One thing is to play a guitar full stop. One will say about John that he plays guitar if John masters certain abilities etc. Suppose (for the sake of argument) that John is an average guitar-player making his modest way in the business. He is to be contrasted with two figures. On the one hand, John is to be contrasted with someone like Jim, who either has not even intended to give his first steps in learning the skill or is a beginner who does not yet master the relevant abilities in an acceptable way (Jim's skills are enough to receive encouragement from his instructor and his family, but he is still out of tune most of the time etc.). On the other hand, John is to be contrasted with someone like Eric Clapton, who not only masters the relevant abilities but also exercises them in a most impressive way etc. Now, who will be better described by the phrase "he does play guitar, but not well"? Not Eric Clapton, of course. The phrase will be better applied to John than to Jim, because it says or implies that John (even if he is not Eric Clapton) masters the relevant abilities in a way that Jim does not. Now, since failure in guitar playing entails failure in playing guitar well, it will be true to say of Jim that "he does not play well". However, not everything true is also the

most appropriate to its context. First, we would be inclined to say about Jim that "he is not yet able to play the guitar" rather than "he does not play it well". Second, we would be inclined to apply the phrase "he plays, but not well" (or maybe "he plays, but not so well as") to John in contrast to Eric Clapton rather than to Jim in contrast with John. Even if there are contexts in which one might apply the phrase "he plays, but not well" to Jim, there are contexts in which one would not. I argue that the context of *Topics* VI 2-3 is more similar to the last one.

Suppose a celebrated lecturer announces a post-graduate seminar in the Faculty of Music with the following title: "How to play guitar well (and how to avoid failures in playing well)". Suppose that, instead of discussing the special techniques of Eric Clapton, Jeff Beck, Jimi Hendrix etc., he delivers a set of basic instructions about the first steps in learning to play guitar – basic instructions most suited to beginners like Jim than to average players like John. Now, attendants of such a post-graduate seminar would not have reasons to be disappointed? Will they be justified in protesting that the lecturer have promised a discussion about abilities related to playing *well* rather than about basic abilities involved in the first steps of learning? If the lecturer defended himself saying that failure in exercising the basic abilities entails failure in playing well, will this excuse be appropriate? Now, my point is that Aristotle's discussion of failures in defining well in *Topics* VI-2 is similar to the disappointing seminar of such a lecturer.

Now, failure in defining a given *definiendum* X must be understood in terms of failure at delivering what a *definiens* account is most expected to deliver: a *definiens* account is

expected to guarantee coextensiveness with its *definiendum* and to show what is the essence of its *definiendum*.³² On the other hand, failure to *define well* a given *definiendum* X cannot be understood merely as a failure in guaranteeing coextensiveness or in showing the essence of the *definiendum* – for, otherwise, the distinction between defining and defining well would collapse. Failure to *define well* must be understood in terms of failure at performing in an appropriate manner the job a *definiens* account is expected to perform. To take back my story: John would like to learn from my lecturer why he is not Eric Clapton and what he must become capable of doing if he is willing to match Eric Clapton's skills etc. Similarly, *Topics* VI-2 has promised to focus on those special abilities that make someone define well (not only define full stop). Thus, Aristotle can be depicted as similar to my lecturer addressing Jim's rather than John's expectations.

One might wonder what defining well amounts to. In fact, it is not clear what "performing in an appropriate manner the job a *definiens* account is expected to perform" amounts to. There is no degree in satisfying coextensiveness, in relation to which a given *definiens* account could be said to be *more* or *less coextensive with its definiendum* than a rival account. If a given *definiens* account is not coextensive with its *definiendum*, it is not a definition of it *full stop*, there being no sense in saying that such account "defines but does not define well" its intended

32 Coextensiveness insures that every given thing named as "X" has the features introduced in the *definiens* account and, conversely, that the *definiens* account itself is predicated only of things of which "X" is the correct name. Coextensiveness itself, though, is not enough for showing what is the essence of the *definiendum* (cf. 101b19-23). Failure of coextensiveness can also be assessed from the topics of the *proprium* (cf. 139b3-5).

definiendum. There is some sense in saying that a *definiens* account *D1* shows the essence of its *definiendum* better than a rival account *D2*, especially if "better" is taken in reference to the understanding of the opponent in a dialectical debate (more on this below). But before exploring this idea, let me first consider that a *definiens* account can also be refuted if it does not fulfill even some minimal requirements *presupposed* by the stricter requirements for being a definition: if an attempted *definiens* account is not true of every case of the *definiendum*, it does not qualify as a *definiens* account (cf. 139 a36-b3).³³ In this case, it will make sense to say that such a *definiens* account *does not define well* its *definiendum*, because it does not define it *at all*, but it is more appropriate to say that it *does not define it full stop*. Now, in discussing some cases of failure in defining well, Aristotle's discussion conflates these different sorts of failures. Aristotle behaves like if he was addressing Jim's (not John's) expectations for the lecture.

Let me consider the example given in 140a6-17: the case in which someone attempts to define "law" as "measure or image of the things naturally just". Aristotle describes this example by saying three things: it does not involve any homonymy; it does not involve a proper metaphor because it does not advance a clear similarity on which a metaphor could rest; it does not intend to use the terms (or expressions) in their currently standard sense ("*kurios*", 140a7). It is enlightening how Aristotle develops this last remark. He says that, on the one hand, if the expressions were meant in their currently standard sense, then the

³³ Similarly, if an attempted *definiens* account does not put the *definiendum* in its appropriate genus, it does not qualify as a *definiens* account (cf. 139b3-5)

account "measure or image of the things naturally just" could never be the definition of law *because it is false about* its intended *definiendum* (140a15): it is not true that every (or any) law is a measure or image of the things naturally just; on the other hand, if the expressions were not meant in their currently standard sense, then the account will block the discussion: any debater will hesitate to say "yes" or "no" because he will not even understand what the expression means (see a parallel case in 160a17-22). If a debater asks whether "measure or image of the things naturally just" is the definition of law, his opponent will rather be inclined to reply "what do you mean by that?" The attempted definition requires rephrasing, without which the predication cannot even be evaluated as true or false, let alone as a correct definition.

Now, in both cases the account "measure or image of the things naturally just" fails in defining law, instead of delivering an acceptable definition failing only in defining well. Aristotle can be depicted as similar to my lecturer addressing Jim's rather than John's expectations. On the one hand, if the account is taken according to the standard sense of the expressions, it delivers a false sentence: it is not true that law is a measure or image of the things naturally just. Being false, the sentence cannot present the definition of its subject. On the other hand, if the account is *rephrased* in the way indicated above (in order to allow truth-evaluation or at least in order to allow a definite answer in terms of "yes" or "no"), what one gets is a *different account* and the original one just vanishes, so that it does not even make sense to say that it defines, but not well. The rephrasing at stake would not be a mere replacement of synonymous expressions (as it might be in relevant cases I

will consider below). The rephrasing will rather be the formulation of a new sentence. If someone says "I meant that law picks up what is naturally just as a guiding-reference for prescribing what we must do or not do", one thereby ends up with a new formula far from being synonymous with the previous one, since picking X up as a guiding-reference is far from being the same as being a measure or an image of X . Aristotle is addressing a lower-level set of conditions which are necessary for defining well (since they are necessary for defining full stop) but do not capture any specific feature of defining well as defining *well*. One might wonder, then, why such a discussion appears in *Topics* VI 2-3 rather than in the subsequent chapters devoted to defining full stop. The failure discussed at 140a6-17 entails failure in defining well, but it is far from being a specific case in which the account "defines, but not well". Since this discussion was promised as a specific discussion of accounts that "do define, but not well", it shows that Aristotle conflates failures in defining and failures in defining well. Or - if one is willing to be charitable with Aristotle - it shows at least that the discussion of the intended subject in *Topics* VI 2-3 is really disorganized.

VII. DEFINITIONS FOR THE SAKE OF MAKING (WHAT IS MEANT) KNOWN:

The most important feature in *Topics* VI-2 discussion is that both debaters must understand what the expression means. Mutual understanding is the key notion around which the distinction between defining and defining well should be understood. Let me examine the following key passage:

One part of not defining well consists in employing unclear expressions; for, indeed, the definer must employ the clearest expression possible, given that the definition is advanced for the sake of making known (139b12-15; my translation).

The key expression in this passage is “for the sake of making known” (τοῦ γνωρίσαι χάριν, 139b14-15). Scholars might feel an inclination to take this expression rather in the sense of “making *the thing defined* to be known” and, consequently, as favouring the idea that a definition must capture the essence of its *definiendum* in a metaphysically serious way.³⁴ There is a parallel sentence in *Topics* VI-4: “the definition is given in order to make what was said known” (141a27-28), in which “what was said” can be taken either in the sense of what is the meaning of the expressions employed or in the sense of the thing referred to by the expressions. Now, what prompts scholars to prefer the latter option is their willingness to understand (what they believe to be) Aristotle's vexing thesis that dialectical discussion should provide us with a way to the principles of scientific knowledge (*Topics* 101a36-b4):³⁵ since definitions

34 See Schiaparelli 2011, p. 128-9.

35 I cannot discuss this vexing point here, but my view is that the misinterpretation can be diagnosed in terms of the following fallacy: “(a) every dialectical discussion is limited to examining the consistency of a set of beliefs; (b) every dialectical discussion uses the argumentative tools depicted in the *Topics*; (c) therefore, every discussion using the argumentative tools depicted in the *Topics* is limited to examining the consistency of a set of beliefs”. The problem is that scholars believe that (b) is convertible, so that it is also true that (b*) “every discussion using the argumentative resources depicted in the *Topics* is a dialectical discussion” (See such a tacit assumption in Gregoire 2001, p. 423-4 ff., but see her discussion p. 408-419). Since the discussions found in the *Metaphysics* use the argumentative tools depicted in the *Topics*, Aristotle's statement at *Topics* 101a36-b4 is puzzling: how can a discussion confined to assess the consistency of beliefs help one to find the first principles of sciences? Of course, (b*) together with (a) will guarantee a sound deduction of (c), but the fact is that (b*) is *false* and consequently (c) is false too. Imagine a coroner, or a judge, using the tool depicted at 106a1 ff.: is this enough to infer that their examination is limited to examining the consistency of a set of beliefs and does not care for the truth? Now, since (c) is false, it is open for a discussion found in the *Metaphysics* to use the argumentative resources depicted in the *Topics* and at the same time to aim the truth (not only the consistency of a set of beliefs). This might still not solve all the problems found in *Topics* 101a36-Cont.

must be counted among those principles, passages like the one quoted above should help us to understand how dialectical discussion will fulfill that purpose.³⁶

But there is no evidence that Aristotle's discussion of definitions in the *Topics* VI confirms that noble purpose that scholars ascribe to dialectic. The expression "for the sake of making known" should be rather understood in the sense of "for the sake of making understood [by your opponent] what you mean", as is clear in 141a27-28: "for the sake of making what was *meant* known". The point is also clear from the parallel passages of *Topics* V, in which Aristotle says that "the *proprium* is given for the sake of comprehending (or understanding, μαθεῖν)" (130a4-5, repeated almost literally at 131a1).³⁷ In all those occurrences, the verbs "*gnorissai*" and "*mathein*" (in the aorist) have the same force, although they characterize the same thing from different but complementary standpoints of each debater: "*gnorissai*" means "to make understand", whereas "*mathein*" means "to understand" – and understand or make understand what one means with his words, not what is the essence of things or the deep structure of reality. Aristotle is relying on the distinction between understanding the meaning and accepting as true, which can be found in many passages.³⁸ He is just remarking that your opponent must understand what you mean if there is

b4, but at least puts the debate in more reasonable terms.

36 For an interpretation along these lines see Schiaparelli 2011, p. 129, 140-1.

37 I admit that the Greek is neutral between possible interpretations: nobody can refute the rival interpretation on purely grammatical grounds: "*lechthen*" at 141a27 can be understood in many ways etc. However, I submit that my interpretation is simpler, more straightforward and delivers a more consistent story.

38 See *Posterior Analytics* 71a12-13; 71b 31-33, 76b36-38. See also an enlightening passage at *Topics* 160a17-22.

to be a real (i.e., not entirely eristic) dispute. Thus, if you employ unclear or homonymous expressions, your opponent will waver in understanding what you mean (cf. 129b30-130a5).

Moreover, "the clearest expression possible" must also be taken in reference to the opponent's understanding. The opponent's acceptance is required for each step of the discussion, but there is no acceptance without understanding the meaning of what one accepts; therefore, the opponent's repertoire is the range confining what can be the clearest expression possible. Mutual understanding is the point, full stop. Aristotle is not suggesting anything about how definitions should be phrased in order to make us come to know how things are. He is just giving advice about how a debater should phrase definitions in order to be understood by his opponent *with no commitment to the truth of them*. After all, a definition *D* in such a context might be formulated by a debater (say, Jerry) just in order to give expression to what his opponent (say, Peter) accepts in a given circumstance about the subject-matter *X*, and in order to lead Peter to contradict himself about that subject-matter, without implying that Jerry takes *D* to state the truth about *X*.³⁹ Actually, there is no need for Jerry to heed the truth about *X* in a dialectical discussion.

A case discussed in the same chapter of the *Topics* is an enlightening example. Aristotle remarks that Plato has

39 Examples can be found in Plato's dialogues: it is part of Socrates's practice to rephrase his interlocutor's definitions (or parts of them) in order to secure that discussion starts from what was really meant. In *Meno* 77b6-7, for instance, Socrates rephrases "to desire beautiful things" into "to desire good things". I need not discuss whether Aristotle's picture in the *Topics* is suited to Socrates's practice or to Plato's views. All I need is to highlight that the concern with what the interlocutor means (as prior to discussing whether it is correct/ consistent or not) can be found in Socrates's practice.

given some definitions by means of terms not well established in ordinary language or not currently or usually employed. It is not clear whether the definitions at stake were intended as one-term *definiens* accounts, but it is clear that Aristotle is talking about the employment of an expression such as "the-brow-shadowed" (ὄφρυόσκιον) as equivalent to the commonly employed and ordinary term "eye" (140a3-5). Now, definitions using such expressions will not be understood by an opponent not introduced into the mysteries of pedantic neologism. However, nothing prevents such a definition from being a definition – guaranteeing coextensiveness with its *definiendum* and making its essence clear (at least at the level appropriate to the discussion) –, but it will not be a good definition for the discussion with that kind of opponent. Actually, one need not go as far as pedantic neologism, since there are synonymous expressions in a given language and it is possible that one and the same person does not know all of them. Think of Jerry discussing with Peter and defining "nook" somehow poetically or pedantically as "cosy lazing-place". Peter is not acquainted with those terms, so Jerry changes his definition to "snug relaxing-place". Peter then understands the second definition. In such a circumstance – even if one is caught with Quinean skepticism about the possibility of synonymy –, it is plausible to argue that *at least for the purposes of the discussion at stake* both definitions have the following common features: both guarantee the coextensiveness with their *definiendum*, and both state what the *definiendum* essentially is. At the same time, there are relevant differences between them: the latter has employed language which is *clear to Peter* and, consequently, has made known to him what was meant, while the former,

employing language *not clear to Peter*, was not capable of making known to him what was meant.

One might raise objections against my claims from what Aristotle says at 141b34-142a11. At a first reading, Aristotle seems to reject the picture I am suggesting: if a dialectician takes seriously the precept of defining by means of the expressions clearest to his opponent, he will end up with a different definition for each individual he discusses with (141b34-142a2). Such a result conflicts with thesis (A), i.e., with the assumption that there can be only one definition for a given *definiendum*. Furthermore, even for one and the same individual what is clearest might change along his lifetime or even during the same day, so that the dialectician will end up with as many definitions as his opponent's moods. Thus, if one wishes to observe the assumption that there can be only one definition for a given *definiendum*, one should dismiss those definitions by means of what is clearest to his opponent and stick with what is *simpliciter* clearest and more understandable.⁴⁰

Now, this objection does not stand if one takes into account what comes next in Aristotle's text. Here is the passage:

(i) *we* should give more accuracy to each topic of this kind, (ii) and to employ them when discussing as is convenient [*sumpheron*]; (iii) but a definition can be refuted with maximum agreement [*sc.* from the opponent], if the definer phrases its account not from what is *simpliciter* most understandable nor yet from what is so to *us* (142a11-16, my translation).

I have put "we" and "us" in italics because these moves in my translation are crucial. Step (i) introduces an

40 See Schiaparelli 2011, p. 128-9 for an understanding along these lines.

appraisal of the topics Aristotle has just advanced. It can be understood in (at least) two ways: either Aristotle is saying that his discussion in the *Topics* about topics of this kind should be improved with more accurate theoretical remarks; or is he giving advice for each dialectician: in each debate, the debater should employ those topics with more accuracy, i.e., observing what is most suited to each occasion and thus hitting exactly his aim. Both ways of taking step (i) are good for my interpretation, although I have a slight preference for the last one, since it will be more in tune with the next step in the passage. Step (ii) gives a piece of advice about how to employ topics of this kind: they should be employed in view of what is advantageous, or expedient, or fitting to each particular situation in a debate. The dialectician should take into account what are the beliefs of his opponent in order to employ those topics in the most suited way to his advantage. Thus, if the occasion is such that your opponent (for instance) accepts thesis (A) and also believes that definitions should be formulated in terms of what is *simpliciter* most intelligible, the dialectician might lead him into trouble by finding another definition with better claims to have been cast in terms of what is *simpliciter* most intelligible. But step (iii) introduces the other side (if not the last word) in this picture:⁴¹ a dialectician can refute a definition with the utmost agreement from his opponent if he dismisses not only what is *simpliciter* more understandable but also what is more understandable to *him* – focusing on what is most understandable to his

41 Pickard-Cambridge's translation splits (ii) and (iii) into different paragraphs, which I find very misleading.

opponent. Thus, in my translation of the passage 142a11-16, the pronoun "us" at the end is in line with "we" at the beginning: they mark the point of view of the dialectician. What Aristotle means is that the dialectician must guide his discussion by what his opponent understands and takes to be the most understandable, not by what *he* as a dialectical cross-examiner takes to be the most understandable, nor by what is *simpliciter* most understandable. This is in line with the main purpose of the *Topics*. After all, the *endoxa* – what the opponent accepts and, *a fortiori*, understands – is the starting-point and the confining limit of every dialectical discussion.

VIII. CONCLUSION:

My point from this sketchy outline of Aristotle's discussion is that the scientist and the metaphysician have little to learn from *Topics* VI. Of course, employment of understandable expressions is a necessary condition for whatever sort of definition. The scientist and the metaphysician would gain nothing if they use mysterious expressions with hidden meanings or an entire cyphered code. However, Aristotle's discussion at *Topics* VI is not focused on the conditions which will make expressions clear and understandable from a scientific standpoint. In order to see this, consider again a plausible situation: Pieter is a Dutch poet who has studied many languages in his career; he has studied a lot of Portuguese and is even able to understand some of the Portuguese poets; but as his acquaintance with the language comes only from his literary experience, he has little mastery over the Portuguese language really employed in everyday life; he will have

difficulties getting what he wants in a Lisbon street market as well as in catching a tram to reach his intended destination. A good dialectician might give assistance to the tram-driver or to the dealer in the market: if Pieter does not understand such and such definitions of the traffic-rules or of the market goods (phrased in the everyday language of the streets), the dialectician might advise them to try those other definitions phrased in Camões's or Bocage's language.⁴² In giving this assistance, the dialectician will be proceeding according to the precept given in 139b13-15. Bocage's language will be, in this case, "the clearest language possible", for the repertoire of the opponent or interlocutor is what sets the border of clarity. Now, it is clear that the scientist and the metaphysician cannot be satisfied with such assistance from the dialectician trained in the *Topics* – even if such assistance might prove useful for the dissemination of scientific and metaphysical knowledge. But doing science (or metaphysics) is not the same as disseminating science (or metaphysics).

Therefore, my conclusion is that scholars should be very careful about their inclination to extract from *Topics* VI rules or precepts for formulating definitions in contexts in which what matters most is not the acceptance of the debater, but truth itself. The scientist and the metaphysician in their most important decisions would have little profit from the advice found in *Topics* VI. This, of course, does not mean or imply that every topic presented in *Topics* VI is doomed to be completely useless

42 I cannot substantiate this case with an example from Aristotle's text, but note that at 149a5-7 there is the reverse case: someone rephrases the definition with terms unclear and less understandable than the original ones, and Aristotle describes this as a "greater mistake".

in scientific or metaphysical inquiry. Nothing prevents a given topic from being useful even for the scientist and the metaphysician. However, this usefulness should rather be argued for, since the topics presented in *Topics VI* are designed to promoting or favouring success in a dialectical debate. Besides, as already noted, it is important to stress that Aristotle's presentation of the predicables in *Topics I*, being more general and neutral, cannot be charged with the same wariness. Most (if not all) of what Aristotle says in *Topics I* about definitions still stand for the scientist and the metaphysician: a definition is a complex expression that must be coextensive with its *definiendum* and display its essence (whatever the concept of essence might mean in a more fine-grained perspective). But I hope to have made a compelling case against the unchallenged assumption that the precepts for definitions advanced in *Topics VI* are by themselves useful for the most important activities to be performed by the scientist and the metaphysician.⁴³

Resumo: Defendo que Tópicos VI não contém nenhuma teoria séria sobre definições (que pudessem ser usada pelo cientista e pelo metafísico em suas tarefas mais importantes), mas apenas um conjunto de conselhos para a formulação de definições em um contexto dialético, ou seja, definições com o objetivo de captar o que o adversário quer dizer. Tópicos VI está repleto de inconsistências que podem ser bem explicadas por esta abordagem: as inconsistências refletem “opiniões aceitáveis sobre definições”, opiniões que grupos distintos de interlocutores aceitam. Defendo também (como uma maneira de provar o meu ponto) que os “topoi” não são (ou não precisam ser em todos os casos) partes de uma teoria séria proposta por Aristóteles como sua. Os “topoi” (isto é, os proto-esquemas argumentativos que Aristóteles apresenta como permissões para uma inferência) também deve ser considerados como “endoxa”, ou seja, como opiniões aceitas sobre como é

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legítimo fazer uma inferência.

Palavras-chave: dialética; definição; teoria da argumentação; validade lógica; Aristóteles; endoxa.

REFERÊNCIAS

ACKRILL, J. L. [1981]. "Aristotle's Theory of Definition: some questions on *Posterior Analytics* II 8-10" in Berti, E. (ed.), *Aristotle on Science: The "Posterior Analytics" – proceedings of the eighth Symposium Aristotelium*, Padova: Editrice Antenore, 1981, p. 359-384.

ANGIONI, L. [2008]. *As Noções Aristotélicas de Substância e Essência*, Campinas: Editora da Unicamp, 2008.

_____. [2014]. "Aristotle's definition of syllogism" (unpublished draft).

_____. [2014b]. "Demonstração, silogismo e causalidade", in Angioni, L. (ed.), *Lógica e Ciência em Aristóteles*, Campinas: Phi.

_____. [2014c]. "Definition and essence in *Metaphysics* vii 4", *Ancient Philosophy* 34, p. 75-100.

BARNES, J. [1970]. "Property in Aristotle's *Topics*", *Archiv für Geschichte der Philosophie* 52, p. 136-155.

_____. (ed.). [1984]. *The Complete Works of Aristotle*, 2 vols. Princeton University Press.

_____. [1980]. "Aristotle on the Method of Ethics", *Revue Internationale de Philosophie* 34, p. 490-511.

_____. [2007]. *Truth etc.* Oxford: Oxford University Press.

_____. [2011]. *Method and Metaphysics. Essays in Ancient*

Philosophy I, Oxford: Oxford University Press.

BOLTON, R. [1976]. "Essencialism and semantic theory in Aristotle: *Posterior Analytics* II 7-10", *Philosophical Review* 85, p. 514-544.

_____. [1994]. "The problem of Dialectical Reasoning in Aristotle", *Ancient Philosophy* 1994, 99-132.

BOSTOCK, David. [1994]. *Aristotle's Metaphysics – Books Z and H*. Oxford: Oxford University Press.

BRONSTEIN, David. [forthcoming]. *Aristotle on Knowledge and Learning: The Posterior Analytics*. Oxford: Oxford University Press.

BRUNSCHWIG, Jacques. [1967]. *Topiques, Livres I-IV*, Paris: Les Belles Lettres.

CHARLES, David. [2000]. *Aristotle on Meaning and Essence*. Oxford: Oxford University Press.

_____. [2010]. "Definition and Explanation in *APo* and *Metaphysics*", in *Definition in Greek Philosophy*, Oxford: Oxford University Press, p. 286-328.

CODE, Alan. [2010]. "An Aristotelian puzzle about definition: *Metaphysics* Z.12", in Lennox, J. & Bolton, R. (edd.), *Being, Nature and Life in Aristotle*, Cambridge University Press, p. 78-96.

COOPER, John. [1999]. "Aristotle on the Authority of 'Appearances'", in *Reason and Emotion*, Princeton: Princeton University Press, p. 281-291.

CORCORAN, J. [1974]. "Aristotle's Natural Deduction

System", in Corcoran, J. & Kretzman, N. (edd.), *Ancient Logic and its Modern Interpretations*, Reidel: Dordrecht, 1974, p. 85-131.

DEMOSS, David & DEVEREUX Daniel. [1988]. "Essence, Existence and Nominal Definition in Aristotle's *Post. Analytics* II 8-10", *Phronesis*, vol. 33, p. 133-154.

FALCON, Andrea. [1996]. "Aristotle's Rules of Division in the *Topics*: The Relationship between Genus and Differentia in a Division", *Ancient Philosophy* 16, p. 377-387.

GREGOIRE, Stephanie. [2001]. "The Four Tools of Dialectic: Their Nature and their Use in *Metaphysics* ix", *Ancient Philosophy* 21, p. 403-43.

HAMLIN, D. W. [1990]. "Aristotle on Dialectic", *Philosophy* 60, p. 465-476.

IRWIN, Terence. [1988]. *Aristotle's First Principles*, Oxford: Oxford University Press.

LEAR, Jonathan. [1980]. *Aristotle and Logical Theory*. Cambridge: Cambridge University Press.

LEWIS, Frank A. [2013]. *How Aristotle gets by in Metaphysics Zeta*, Oxford: Oxford University Press.

LUKASIEWICZ, Jan. [1951]. *Aristotle's Syllogistic from the standpoint of Modern Formal Logic*, Oxford: Clarendon Press.

MALINK, Marko. [2013]. *Aristotle's Modal Syllogistic*. Harvard University Press.

NUSSBAUM, Martha. [1986]. *The Fragility of Goodness*, Cambridge: Cambridge University Press.

OWEN, G. E. L. [1961]. "Tithenai ta phainomena", in Mansion, S. (ed.), *Aristote et les problèmes de méthode*, Louvain: Presses Universitaires de Louvain, p. 83-103.

PATZIG, G. [1968]. *Aristotle's theory of the syllogism*, trad. J. Barnes, Dordrecht: Reidel.

PELLEGRIN, Pierre. [1982]. *La classification des animaux chez Aristote*. Paris: Les Belles Lettres.

PERAMATZIS, Michail. [2010]. "Essence and *per se* predication in Aristotle's *Metaphysics Z4*", *Oxford Studies in Ancient Philosophy* 39, p. 121-82.

_____. [2011]. *Priority in Aristotle's Metaphysics*. Oxford: Oxford University Press.

PICKARD-CAMBRIDGE, W. A. [1984]. *Topics, Aristotle*, in Barnes, J. (ed.), *The Complete Works of Aristotle*, 2 vols. Princeton University Press.

REEVE, C. D. C. [1998]. "Dialectic and Philosophy in Aristotle", in Gentzler, J. (edd.), *Method in Ancient Philosophy*, Oxford: Clarendon Press, p. 227-252.

ROSS, W. D. [1949]. *Aristotle's Prior and Posterior Analytics*, Oxford: Oxford University Press.

SCHIAPARELLI, Annamaria. [2011]. "Epistemological Problems in Aristotle's Concept of Definition: *Topics VI.4*", *Ancient Philosophy* 31, p. 127-143.

SMILEY, T. J. [1973]. "What is a syllogism", *Journal of*

Philosophical Logic 2, p. 136-154.

SMITH, Robin. [1993]. "Aristotle on the uses of Dialectic", *Synthese* 96, p. 335-358.

_____. [1994]. "Dialectic and the Syllogism", *Ancient Philosophy* 14, p. 133-151.

_____. [1997]. *Aristotle: Topics, Books I and VIII*. Oxford: Oxford University Press.

WILLIAMS, S. & CHARLES, D. [2013]. "Essence, Modality and the Master Craftsman", in Feser, E. (ed.), *Aristotle on Method and Metaphysics*, New York: Palgrave Macmillan, p. 121-145.