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## The Dialectical Syllogism in Aristotle's *Topics*

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**Abstract:** The purpose of this paper is an attempt to delimitate what the dialectical syllogism looks like in Aristotle's *Topics*. Aristotle never gave an example of a dialectical syllogism, but we have some clues spread over books I and VIII of the *Topics* which make it possible to understand at least what within a dialectical debate is a dialectical syllogism. The interpretation advanced here distinguishes the logical order of the dialectical argumentation from the order of the debate. This distinction enables us to have a better understand of what is and how the dialectical syllogism is identified in the debate.

In addition, we can solve some interpretative difficulties other interpretations could not solve, and have a more solid grasp of how endoxa are used in a dialectical debate.

**Keywords:** Aristotle's dialectic, Dialectical syllogism, Endoxa.

**Keywords:** <Estilo Normal; Palavras-chave separadas por vírgula em Inglês; remover se a Língua Principal for Inglês>.

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## I - Introduction

Any<sup>1</sup> reader not quite informed about Aristotle's *Topics* would think, when reading the first paragraphs or the first chapter of this work, that Aristotle would carefully explain what a dialectical syllogism is. After all, this is exactly the agenda presented in the *Topics*' opening lines:

T1 - The goal of this study is to find a method with which we shall be able to construct syllogisms from acceptable premises concerning any problem that is proposed and – when submitting to argument ourselves – will not say anything inconsistent. First, then, we must say what a syllogism is and what its different varieties are, so that the dialectical syllogism may be grasped (for that is the one we seek in the

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present study).<sup>2</sup> (Smith's translation modified.)<sup>3</sup> (I.1 100a18-24)

The following lines give the impression that there would be a solid programme to accomplish what is announced in this first paragraph. Aristotle defines what a syllogism is and then distinguishes some of its varieties, making clear what is a demonstration, a dialectical syllogism, and an eristic syllogism. A dialectical syllogism is defined as: "A dialectical syllogism, on the other hand, is one which deduces from what is acceptable." (I.1 100a29-30). Acceptable premises are described as: "Those are acceptable, on the other hand, which seem so to everyone, or to most people, or to the wise – to all of them, or to most, or to the most famous and esteemed." (I.1 100b21-23). These sentences inform us that dialectical syllogism is a kind of syllogism different from demonstrations, which are also valid syllogisms, due to the quality of its premises. Thus, dialectical syllogisms are:

- i) valid syllogisms
- ii) composed of endoxical premises.<sup>4</sup>

Being a valid syllogism means that the conclusion obtains of necessity from the logical force of the relation between the premises.<sup>5</sup> The relevant differentia between kinds of syllogisms does not rely on the logical inference of the conclusion, but on the quality of their

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<sup>2</sup> All quotations of Books I and VIII are from Smith (1998), except when explicitly otherwise noted. When quoting the *Topics* I will skip mentioning the abbreviation 'Top.'. I am going to mention only the book, chapter, page and lines number.

<sup>3</sup> I am translating 'συλλογισμός' into 'syllogism' instead of 'deduction' as Smith did. I cannot discuss here the philosophical reasons to justify this option and this justification is not relevant to the interpretation I put forward here. My intention in doing so is to make clear to the reader that Aristotle uses the term 'συλλογισμός'

<sup>4</sup> This serves well to establish the difference between the syllogisms in *Top.* I. However, this definition is not expressive enough to distinguish dialectical syllogisms from enthymemes, that is, rhetorical syllogisms, which are also valid and have endoxical premises (*cf. Rhetoric* I.1 155a8-9; I.2 1356b33-25).

<sup>5</sup> On the definition of syllogism and the logical necessity of the conclusion, see Striker (2009, p. 78–81).

premises. A lot has been discussed about endoxical premises.<sup>6</sup> I will not dwell on this. All I need is a minimal extensional reading of what *endoxa* are according to quoted passage above (I.1 100b21-23).

E - p is an *endoxon* iff it is a proposition accepted by a group of people or by wise people.

This extensional account does not say anything regarding the truth-value of p, or whether p involves some sort of truth-degree, i.e, whether it is more probably true as more numerous is the group which accepts it, because this is not what is important for my interpretation. Any proposition that satisfies E is eligible to figure as a premise in a dialectical syllogism, regardless of why it is so. It implies that a proposition may be part of a scientific body of knowledge as well as endoxical. But its being endoxical, according to E, is not due to its being a scientific proposition, but by being accepted by wises or any other group. For the same reason, a false proposition could also be a premise of a dialectical syllogism if it is accepted by wises or any other group. What is pivotal regarding a dialectical premise is its being accepted.<sup>7</sup> On the other hand, demonstrative premises must be true, primary and have its credentials (*pistis*) in virtue of themselves (I.1 100a30-b2). Having its credentials in virtue of themselves is an important difference between endoxical premises and demonstrative premises. The former are premises insofar as they are accepted by an answerer<sup>8</sup> so that their credentials as premises are not in virtue of themselves, but in virtue of something other than their propositional

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<sup>6</sup> See, e.g., Barnes (2011) ; Karbowski (2015) and Smith (1997, 1999).

<sup>7</sup> In I.10 104a8-12, Aristotle is clear about philosophical propositions failing to be premises of a dialectical syllogism because they do not satisfy E. He never considers whether they are false or not. They cannot be premises because they are paradoxical. In VIII.11 161a28-29, Aristotle makes clear that it is not only legit, but sometimes necessary to use false premises, which are *endoxa*, in dialectical debates.

<sup>8</sup> A dialectical syllogism is an argument built with premises accepted by an answerer who answers 'yes' or 'no' to a question put forward by her questioner (*cf.* VIII 2 158a16-17). In this paper I deal carefully with how a syllogism emerges from this question-and-answer regimented process.

content.<sup>9</sup> The latter are premises in virtue of their propositional content.

As Aristotle defines what a syllogism is and some of its kinds, one could expect a carefully characterization of the logical form of a dialectical syllogism. This expectation is not met, however. We are kept with no hint about the quantification of the premises, how many premises a syllogism has, if there is a term playing the middle-term role, etc. Most of the long work dedicated to the dialectical syllogism deals with what a premise is like, how to establish or reject a premises of a certain kind of predicable, and some rules for the debate. My aim in this paper is to discuss some important passages of books I and VIII in order to clarify some aspects of how a dialectical syllogism emerges from a regimented form of debate. To reach this goal, I first must explain how this debate is regimented. Next, I will try to identify what is to be taken as a syllogism among the many premises obtained from the question-and-answer process. After this, I will be able to test the interpretation against a passage of VIII.8, concerning the criticisms to the dialectical argument, that has caused problems for interpreters.

## II – The debate.

A dialectical syllogism is an argument that emerges from a debate characterized by rules ranging over the way questions are advanced, answers are offered, and what resources questioners and answerers have at their disposal to avoid an eristic confrontation. It

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<sup>9</sup> In VIII.1 155b10-16 Aristotle opposes dialectical and scientific arguments highlighting the crucial distinction regarding the main concern in each kind of argument: “But the philosopher, or someone searching by himself, does not care if the (premises) through which his deduction comes about are true and intelligible but the answerer does not concede them because they are close to the initial goal and he foresees what is going to result; rather, the philosopher would in fact probably be eager for his claims to be as intelligible and as close (to the initial goal) as possible, for it is from such that scientific deductions proceed.”

is important to know from the beginning that Aristotle doesn't consider the dialectical syllogism as identical to the dialectical debate. Successful debates result in a syllogism if the questioner is capable of getting the targeted conclusion from the answerer's acceptance of some propositional content put forward as questions. However, due to the difficulties natural to the subject-matter under debate or the incapacity of the questioner (or both), a debate can end with no conclusion reached or reaching a conclusion in a faulty manner.<sup>10</sup>

The mere possibility of the occurrence of a proper dialectical debate with no syllogism emerging from it is enough for not identifying the debate with the syllogism.<sup>11</sup> This makes necessary the understanding of how to get the premises from which the conclusion is inferred and then to grasp, at least to some extent, what a dialectical syllogism is like.

A dialectical debate takes place with two people divided into two specific roles: the questioner and the answerer. These roles are mentioned in T1, which is the *Topics* very first paragraph. The method the work seeks is one that allows a questioner to infer syllogistically about any subject-matter proposed as a problem, and an answerer to avoid inconsistent answers. This debate is not like an ordinary conversation between two interlocutors, but one regimented

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<sup>10</sup> The whole chapter VIII.11 is dedicated to ways an argumentation is faulty either by the questioner's performance, or by formal requirements that are not fulfilled. We are going to deal with one of these failures below.

<sup>11</sup> Some interpreters support a distinction between a dialectical art and the dialectical syllogism, or similar distinctions (see e.g. Smith (1993, 1999), Reeve (1998), Bolton (1999)). A dialectical art would be versatile enough to be employed in some philosophical contexts where Aristotle takes up popular or philosophical opinions for scrutiny. In contrast, the dialectical syllogism is the argument used in dialectical debates. I am not committed to such distinction. I am not relying here on such conception of a dialectical art which can be applied in philosophical disciplines. For my interest here, whether Aristotle conceives such a broad dialectical art or not is not relevant. Interestingly, the distinction I am proposing here is not commonly considered in the literature, what causes several interpretative problems. One of them is the difficulty to delimitate in relatively precise way what is the dialectical syllogism.

by a few strict rules delimitating how questions are put forward, how answers are given and what can be a problem.

A dialectical debate starts with a question put forward as 'Whether X is Y or not?' (cf. 101b31-33). In such a question, the questioner is asking the answerer for an affirmative or negative attitude towards the proposition 'X is Y'. It is in the answerer's power to pick one of these incompatible sides. The one picked establishes the thesis<sup>12</sup> of the debate, what the questioner must accomplish and what the answerer must defend. The answerer's task is not to concede answers which allows the inference aimed by her debater. Aristotle calls 'premises' the questions put forward and they must be formulated as 'Is it the case that X is Y?' (cf. I.4 101b30-32). As Aristotle says, premises and problems are different only in the form (*tropos*) they are formulated (101b29). It means that any propositional content can be put forward as question, either in the form of a premise or in the form of a problem. For example, 'biped terrestrial animal is the definition of human being' might become 'Is it the case that biped terrestrial animal is the definition of human being', so it is a premise, or it might become a problem when presented as 'Whether biped terrestrial animal is the definition of human being, or not?'. When a problem is proposed, the answerer must decide whether she affirms or denies the propositional content in the question. The questioner's task is to infer the opposite of this propositional content on the basis of premises the answerer accepts. Three queries can be raised considering this framework: can problems and premises have any propositional content? How can a

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<sup>12</sup> Aristotle himself uses the term 'thesis' with different meanings across the *Topics*. In one sense, a thesis is an opinion sustained by a famous philosopher in opposition to most people's opinion or an argument (*logos*) we have in opposition to opinions (cf. I.11 104b19-28). The gist of this delimitation of a thesis is that it seems to be contrary to most people's opinion (*paradoxon*). This controversial aspect of the thesis makes it suitable to be a problem, but not every problem is a thesis. In book VIII, however, thesis is the proposition held by the answerer when she picks one of the sides of a problem (cf. VIII 4 159a 18-24, 5 159a39). This is how Alexander of Aphrodisias uses the term (cf. *In Top.* 27,12-14). Here, whenever I use the term 'thesis' I am referring to the proposition picked by the answerer at the debate's start.

question be a premise? Why would an answerer ever accept any premise leading the argument to the conclusion the questioner wants to infer?

Premises and problems have their propositional content constituted of predicables. Aristotle lists four kinds of predicables: definition, genus, proprium and accident (I.4 101b17-18). As the depiction of all of them are widely known, and it is not important for my interpretation, I will not dwell on them. What is important is to know that for Aristotle any premise or problem of a dialectical syllogism must have a predicative tie between the subject term and the predicate term based on one of the predicables. A predicable consists of the specific relation between the terms of the proposition. Books II – VII are entirely dedicated to argumentative strategies (*topoi*) either to establish a premise, or to destroy one. As the predicables consist in propositions with a copula, it seems that Aristotle understands that all premises and problems must be expressed as X is Y, or be easily reduced to this formula.

As for how a question is a premise, we have to assume that Aristotle means that the propositional content assumed by the answerer plays the role of a premise, since a question cannot be a premise in any argument. As this content is embedded in a question-formula as seen above, the answerer's attitude toward it determines whether it will be part of the dialectical syllogism or not. The formula of the premise-question points to negative or affirmative replies, what is made clear in VIII 2 158a16-17. A dialectical debate is thus a game of 'yes' or 'no' answers to strictly regimented questions. On occasion the answerer can ask for clarification when she notices an ambiguity or any obscurity in the question (*cf.* VIII 7 160a17-29) or she can be asked for an objection when she rejects a questioner's premise (*cf.* VIII 2 157a34-36; 158a22-24). Otherwise, her role within the debate is limited to 'yes' and 'no' answers which will determine whether the propositional content in the question-formula is assumed or rejected. As just pointed, the answerer cannot reject at her wish any question to avoid a contradiction, and she is expected to deliver an objection to the question she rejects. This is necessary to avoid the dialectical

debate turning into a cantankerous dispute between the two debaters (VIII 11 1161a23-24). Now, the answers given need to be logically consistent and the answerer needs to accept whatever follows of necessity from what she previously accepted. It implies that she cannot simply reject a question she does not believe in if she had accepted another question from which it follows.<sup>13</sup> This has implications for how we must understand endoxical premises, but this is going to be dealt with later. Summing this up, the acceptance of a question means that the propositional content embedded in it plays the role of a premise in the argument the questioner is trying to build.

The answerer's goal, as stated in T1, is not to assume anything inconsistent. In VIII.4 it is made even clearer. She performs well if the conclusion the questioner must infer is not obtained because of her failure, but because of the thesis (159a22). This clarifies what the inconsistencies in T1 means. The inconsistency Aristotle has in mind has a precise focus as it is relative to the thesis the answerer assumed at the beginning of the debate and the conclusion that follows of necessity from the accepted premises. It is not relative to any proposition accepted in the debate. As the conclusion is a logical consequence of the accepted premises, she has got to accept the conclusion regardless of her belief. It means that the answerer must avoid accepting premises the questioner needs to infer the conclusion. So why would she ever accept something that leads her to assume inconsistent propositions? As already pointed above, the answerer is not free to reject questions. She has to offer an objection when she does so. Furthermore, the propositional content she accepts, as any proposition, has logical implications she cannot reject. Of course, she can object and try to show that there is no implication between two propositions as suggested by the questioner, but, in this

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<sup>13</sup> To the best of my knowledge, Aristotle does not mention the possibility of the answerer's acceptance of inconsistent premises (either voluntarily or not) going unnoticed by the questioner. Nevertheless, this scenario looks plausible, especially if we think of an unskilled or not particularly bright questioner, then it seems to me that there is no reason for setting this possibility aside, despite Aristotle's silence.

case, she rejects a question on the grounds of an objection that it does not follow from the other proposition. In VIII.2, Aristotle gives examples of how the answerer can object to a proposition put forward by the questioner. One instance is in inductive arguments.<sup>14</sup> Inductions in the *Topics* are not generalizations over particular facts, but the obtaining of the acceptance of a generalization based on accepted particular propositions. In I.12 105a13-16, induction is presented as: “Induction, however, is proceeding from particulars up to a universal. For instance, if the pilot who has knowledge is the best pilot, and so with a charioteer, then generally the person who has knowledge about anything is the best.”

Induction is based on the acceptance of similar propositions like ‘x is Y’, where x is an instance of Y. After the acceptance of some similar propositions, the questioner asks whether X is Y, which ranges over kinds. The answerer can only reject ‘X is Y’ if she can object against it by pointing to a x that is not Y. Otherwise, she has to accept ‘X is Y’ even if she does not believe in it or if she anticipates that this proposition is a decisive step for the questioner to infer the conclusion she needs to.

In chapter VIII.2, Aristotle describes many more ways answerers can object to a question or can be asked to raise an objection when rejecting a premise. These rules make the dialectical debate a regimented one, giving it clear delimitation of what is allowed and making it different from any form of ordinary conversation<sup>15</sup> The logical force of accepted propositions makes the answerer committed to the consequences of these proposition so that she cannot simply reject one or more of the consequences at her will. This is why the answerer has to accept questions she knows as conducive to the conclusion she tries to avoid. In the next section, we are going to

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<sup>14</sup> In the next section I will explain how an inductive argument takes place in a debate that seeks for a syllogism.

<sup>15</sup> The method, tools and skills involved in dialectical debate can be, nonetheless, useful for ordinary conversations (see I.2 101a30-34).

discuss in detail how the intricate strategies used by answerer and questioner result in a dialectical syllogism.

### III – The dialectical syllogism.

Despite the prominent role of the dialectical syllogism in T1, Aristotle never ever describes how it is like and not a single example of one is given. Maybe Aristotle assumed that his audience or readers were quite familiar with this matter.<sup>16</sup> To a modern interpreter, only some sparse indications of the general logical structure of the argument the questioner develops are available. My aim is to collect them and try to delimitate what in the whole debate is to be considered the dialectical syllogism, which seems to be a task that has been neglected by most interpreters of the *Topics*.

We already know that a dialectical debate initiates with a problem which is a question asking for the answerer to choose between the affirmation or negation of a proposition P.<sup>17</sup> The questioner's task is to infer the contrary of the proposition the answerer chose. So, assuming that P was affirmed, the questioner's task is to infer non-P. It means that the conclusion aimed in the dialectical syllogism is known from the very beginning of the debate. The whole interchange consists of a game of trying to get premises from which the conclusion obtains. Both debaters have a strategy for how they are going to play. The questioner must envisage as many ways as possible to infer the conclusion needed. A vast array of propositions and deep understanding of what each one entails, and the profile of people who probably would accept them is crucially useful for the questioner's strategy. The more she knows what

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<sup>16</sup> Smith suggests that many gaps in Aristotle's depiction of dialectic could be explained by the familiarity the Lyceum audience had with dialectical practice and culture. This familiarity was mostly lost in later generations, making some gaps unsurmountable for modern readers. (*cf.* Smith, 1997, p.xii)

<sup>17</sup> I have been using the formula 'X is Y' to refer to the propositional content of a dialectical premise or problem in order to highlight that propositions in these questions must have this structure and the predicative relation must be one of the predicables. From now on I will use capital letters to refer to propositions.

logically follows from what and what kind of people is prompted to accept some propositions, the wider the possibilities for her strategy. In I.14 Aristotle says that any dialectician should master some strategies to select premises to be used in a debate. Among techniques like deriving premises similar to what everyone accepts (105b3-12) or taking as premises propositions from the arts and science (105b1), taking notes from books selecting the opinions written and their authors can help the debater in a dialectical exchange (105b12-18).<sup>18</sup> These techniques are useful for the questioner as they enable her to choose from a vast array of opinions those which favour her objective. But they are also useful for the answerer as she can decide to pick the easier side of the question to defend and to anticipate the possible questioner's strategies so that she does not accept propositions which will, by their logical force, lead her to accept what the questioner needs (provided that she can put forward an objection). Debaters with vast knowledge of what a proposition implies, who is most prone to accept them and how to object against them will most likely perform well in a debate.

A dialectical debate should have two opposed sides that can be defended, otherwise it would be excessively easy to defend or to attack a thesis.<sup>19</sup> It is made clear in I.10 104b1-5;12-17. The controversial aspect of the ideal theses implies that not only the contrary proposition taken as the conclusion, but also the premises needed to infer it are also controversial, what makes it possible for the answerer to object against them. Let us suppose that 'war is

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<sup>18</sup> Some interpreters think that in I.14 Aristotle is somehow expanding his notion of endoxical proposition (see Karbowski (2015)). I do not need to commit myself with such a reading. The extensional delimitation E of these proposition is enough to accommodate them in my interpretation as they are *endoxa* inasmuch they are accepted.

<sup>19</sup> It is possible that one debater assumes a known difficult side for training purposes. In such cases, there is no real expectation that the questioner infers the conclusion or that the answerer avoids the conclusion, but this can be part of the dialectical training (*cf.* VIII.11 162a1-8). The real importance of the controversial aspect of a problem resides in keeping the competitive aspect of the game, such that the answerer and the questioner can have the opportunity to display their dialectical competence.

always wrong' is the thesis, then the conclusion sought is 'it is false that war is always wrong'. An easy way to conclude this is getting premises like:

Avoidance of a greater evil is not wrong  
 Some wars are avoidance of a greater evil  
 It is false that war is always wrong.

The answerer could easily object against these premises. She could say that an evil is always wrong and that we cannot know prospectively, that is when decisions matter, that a war is going to avoid a greater evil. The questioner should, then, try to get another way to the conclusion by asking for different premises (*cf.* VIII.2 157b8-11). But the inference of the conclusion would be an almost impossible task to accomplish if the thesis under attack is a controversial one (having arguments for both sides), which makes the premises likely to be controversial and easily to object, turning the answerer justified in rejecting them. This is a short example of how premises are to be asked and accepted, but it portrays how sophisticated a dialectical debate is. It demands the questioner to be able to stretch the debate in order for getting the answerer committed to some premises that would imply the premises she needs for the conclusion or other premises that might lead her to the wanted inference. This stretching of the debate is relevant to the concealment of the conclusion (VIII 1 157a1-2). Of course, it is not the proposition aimed as the conclusion that is concealed, since it is known from the beginning of the debate. The concealment of the conclusion refers to the activity of the questioner asking for premises that, by a chain of logical implication, conduce the argument to the needed conclusion in a manner that the answerer does not notice that the premises she accepted commit her to premises that she would take as undesired, since the conclusion is deduced from them. If she could, she would reject these premises.

The distinction between premises from which the conclusion obtains and premises like the ones for concealment is decisively important for understanding how the debate is organised and what is

the dialectical syllogism. Aristotle names the premises from which the conclusion follows ‘necessary premises’, whose definition reads: “The premises through which the deduction comes about are called necessary” (VIII 1 155b20). In opposition, the premises from which the conclusion is not inferred are non-necessary. This distinction stems from the very dialogical nature of dialectics and it is a pivotal difference from philosophical arguments. Whereas in philosophical arguments one is arguing by herself and does not need to be concerned with whether the premises are going to be accepted, so that in her arguments premises must be as close as possible to the conclusion, in a dialectical debate the arrangement of the premises is a top priority for the questioner (*cf.* VIII.1 155b4-7). Since the answerer may not concede what is close to the conclusion or what she can foresee as leading to the conclusion, the argument must be longer. Different from philosophy, the dialectical debate does not seek knowledge. Whether the premises are true or false, which is the bedrock of knowledge, it is not what is at stake in the arrangement of the premises by the questioner. The arrangement is oriented to maximize her chances of reaching the necessary premises and, then, the conclusion.

Our discussion will make clear what these necessary premises are like and why they are necessary, but the first thing to be clarified is that the necessity here is neither the modality of the proposition nor the necessity of the obtaining of the conclusion by logical necessity. Aristotle is not stipulating that the predicative tie of the proposition figuring as premise must hold for all cases, or that it is always true. The mere existence of contingent proposition as one kind of the accident predicable<sup>20</sup> suffices to show that premises can be modally possible, then Aristotle cannot be focusing on modally necessary propositions as premises. He also cannot be focusing on the necessity of the conclusion obtaining from the premises because he is addressing specifically certain quality of the premises. Of course,

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<sup>20</sup> Accident predicable is described in two ways, as contingent, i.e., what can be or cannot be, or any predicative formula which is not definition, genus or proprium. (I.5 102b4-7)

these necessary premises being accepted, the conclusion would follow of necessity, but Aristotle targets the set of premises as necessary, not the conclusion.

The contrast between the two sorts of premises can shed some light on the necessity of the necessary premises. Aristotle gives a fourfold distinction of non-necessary premises based on the purpose of their use: for the sake of induction and for giving the universal, to make the argument longer, for the concealment of the conclusion, and to make the argument clearer (VIII.1 155b21-24). The most important of them for strategic reasons is the concealment of the conclusion, since this is decisive for getting the necessary premises. The list of the concealment of the conclusion strategies includes: asking (inductively or deductively) for many non-necessary premises but keep their implications suspended for a while to announce many at the same time (156a3-12); keep track of the consequences of the premises accepted (156a12-22); do not ask for the premises in an orderly fashion, but try to alternate questions (156a23-26); get the definition by asking not for what is intended but for their coordinates (156a27-b3); make unclear what a premise is useful for (156b4-9); ask not directly for what is needed but for what is similar to it (156b10-17); sometimes it is useful to make an objection against herself (156b18-24); not be eager to get the premises needed (156b24-30); keep to the end what is most wanted (156b30-157a1); get propositions which will be of no use in the debate (157a1-5).<sup>21</sup> The three other kinds of non-necessary premises can also be used in assistance to premises for the concealment of the conclusion.

These strategies for the concealment of the conclusion are used to challenge how well an answerer is capable of defending a thesis. The questioner should try to put forward questions the answerer is either willing to accept or has to accept because she does not have an objection against them. This overall structure has at least a couple of

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<sup>21</sup> This strategy being taken as legit seems to conflict with VIII.11, where Aristotle says that a dialectical syllogism should not have superfluous premise(s). I will deal with this problem below.

implications with which I want to deal. The first is that the answerer does not have to be committed to her own beliefs. The second is that if the conclusion is inferred, she has likely accepted premises she didn't want to accept.

The answerer's task is to make everything she can to avoid the questioner inferring the conclusion (*cf.* VIII.4 159a20-22). The debate develops with the deployment of many strategies by the questioner to reach the conclusion set at the beginning of the debate by the answerer's choice. Now, she is not constrained to pick the side with which she agrees (if there is one). The debate is indeed a kind of game to test the thesis, but it does not imply that the thesis is a proposition belonging to the answerer's body of beliefs. She can choose to defend something she agrees with, or something she has no opinion about, or she thinks it is false. She can even play the game assuming someone else's opinions on a subject (*cf.* VIII.6 159b36-37). For the sake of training, she can defend particularly difficult theses to enhance her abilities. This implies that the dialectical debate as presented in the *Topics* is not designed to examine one's body of beliefs like Socrates did in some of Plato's dialogues, but the skills it demands and develops can be used for this purpose nonetheless (*cf.* I.2 1030-34; VIII.5 159-25-37). What is at stake is the answerer's attempt to defend a thesis. Her commitment to this thesis is not due to her believing in it but to her choice at the beginning of the debate. It implies that it may be case she tries to refuse acceptance of premises she holds as true. For example, when she defends a thesis she does not believe in, it may be that she believes in the conclusion the questioner needs to infer and she may hold true the premises put forward by the questioner, but she might avoid accepting them. This is the reason the dialectical debate does not demand from the debaters their believing in the propositions they put forward or accept.

This brings us to the second implication I mentioned, that is, the answerer must accept premises she would not like to accept for the conclusion to be inferred. As the questioner knows from the beginning the conclusion she needs to infer from premises the answerer accepts, they both have to try to anticipate the moves their

opponent is likely to take. The answerer will be willing to avoid accepting any premise she sees as entailing the conclusion, as well as any proposition leading to the premises which would entail the conclusion. She must use objections whenever she sees an opportunity for it and deny acceptance whenever it is fair. If this is correct, the consequence is that when she accepts a premise, she does so either because a) she does not see what it implies, b) she sees what it implies but has no objection, or c) because she has to accept it due to the logical force of previously accepted premises. If she did see that an accepted premise would imply an undesirable consequence, she would not accept it if an objection were available. In all these cases, she would not like to accept premises of this sort. On the other hand, this is exactly the kind of premise the questioner needs to obtain to infer the conclusion. She has to conduct the debate in such a way that she gets the answerer in one of the three scenarios above. In a nutshell, the questioner needs premises the answerer would not like to concede, and she only does so either because she did not see the consequences of what she accepted or because she cannot reject the premises due to the dialectical debate's rules.

This overall framework of how the debate is oriented to lead the answerer to accept premises from which the conclusion is inferred put us in a better position to understand the distinction between necessary and non-necessary premises. We saw that the necessary premises are the ones from which the conclusion obtains. As the answerer's task is to avoid the questioner reaching the conclusion, she will try not to concede these necessary premises. As we saw, if the thesis is a controversial one, it is most likely that there are objections that can be easily raised against these premises. It would probably be an infructuous strategy to put the necessary premises forward if they can be denied (*cf.* VIII 1 155b29-31). For this reason, the questioner should make use of non-necessary premises in order to get the necessary ones, and the more skilled she is the richer array of means to manipulate questions she has at her disposal.

Be C a controversial conclusion, P the necessary premises:

P1 – P2

## C

This argument entails the conclusion but considering the general framework of the dialectical debate we delineated above, the questioner would likely have P1 and P2 rejected, as the answerer could anticipate her strategy. She needs to appeal to further premises that, in turn, will lead to P1 and P2. Assuming Q as non-necessary premise, and q as particular proposition in an inductive argument, we can have a scheme of a much longer argumentative chain:<sup>22</sup>

<u>[q1<sup>1</sup>, q1<sup>2</sup>, q1<sup>3</sup>]</u>	<u>Q1-Q2</u>	<u>Q3-Q4</u>	<u>Q5-Q6</u>	<u>Q7-Q8</u>
	<u>Q9-Q10</u>		<u>Q11-Q12</u>	
	<u>P1 – P2</u>			

## C

In this scheme, the answerer accepts the necessary premises P1 and P2 because they are deduced from previously accepted non-necessary premises. At the top of this argumentative chain, there are premises assumed as its logical starting point, since they are not deduced from any other proposition, or are established by induction. These starting points are accepted because it is not obvious that they lead to premises the questioner needs or because no objection could be raised against them. Once they are accepted, their logical force will lead the answerer to the acceptance of what they imply. This is crucial to the understanding of how Aristotle portrays the dialectical debate and what is the dialectical syllogism.

The war argument I presented before will be useful here.

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<sup>22</sup> This scheme is intended to portray the logical structure of an argumentative chain used in a dialectical debate. The actual order of premises put forward by the questioner would not follow this structure, as Aristotle himself says it would not be recommendable, as we saw from his suggestion of the strategies for concealing the conclusion. The questioner, specially a good one, would try to mix the order of her questions, introducing questions for a premise in between questions for another premise so that the answerer gets confused and does not follow the logical structure of the argumentative chain.

P1 - Avoidance of a greater evil is not wrong

P2 - Some wars are avoidance of a greater evil

C- It is false that war is always wrong.

P1 and P2 can be rejected if the answerer comes up with an objection. As seen above, she could reply that an evil is always wrong and reject the premise. Now, if the questioner asks:

Q1 -The best good in any circumstance is the right thing to do.

Q2 - The best good is not wrong.

q3<sup>1</sup> - Using face masks is not a good in itself, but it is the right thing to do to deaccelerate risky respiratory diseases spread, since the spread is a greater evil than using face masks.

q3<sup>2</sup> - Occasionally working until late hours and be deprived of sleep is not a good in itself, but it is the right thing to do to avoid missing a super important deadline, since missing the deadline is a greater evil than working until late and sleep deprivation.

Q3 - Then, actions that avoid greater evils are the right thing to do.<sup>23</sup>

Q4 - The right thing to do is not wrong.

P1 - Avoidance of a greater evil is not wrong.

In the course of the debate, the questioner will not arrange the premises in this order, which only represents the logical structure of the argumentative chain. Her performance will be better if she introduces examples, make the argumentative chain longer, etc. What is important for us is that the answerer, having accepted Q1-Q4, cannot reject P1, as she would do if P1 were put forward without the non-necessary premises.

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<sup>23</sup> Note that q3<sup>1</sup>, q3.<sup>2</sup> and Q3 form an inductive argument in dialectical debate. The lower case 'q' identifies a particular premise, and the upper case 'Q', a universal which is the conclusion of an induction.

The same holds for P2. The questioner might use hypothetical cases to build an argument for P2. Some wars can stop the implementation of ethnic cleansing policies. Ethnic cleansing is a much greater evil than a war to prevent it. Then, some wars (at least this kind) avoid greater evils. Again, the good questioner would appeal to various resources to make the obtaining of P2 easier, as mixing questions for P1 with questions for P2, using particular examples, and correcting herself as a form of building trust (*cf.* 157a14-17; 156b18-24).

This is highly significant, since it puts into a deeper perspective the multiple ways one can form propositions to be used as *endoxa* in *Top.* I.10: propositions similar to *endoxa*, negation of what is contrary to *endoxa*, propositions according to the arts (*technai*). It is useful to have lists organized by themes and by whom stated relevant propositions (I.14 105b12-17). Aristotle exemplifies what one item in a list would be like: “Empedocles said that there are four elements of the bodies” (105b16-17). Considering the general framework of the dialectical debate, there is no reason to suppose that an answerer who is not defending an Empedoclean point of view would accept this proposition easily, but she might be led to accept it if her commitment to other propositions implies it.

Now, we have two uncharted consequences we need to explore. We need to answer why the necessary premises are necessary, and what consequences for a solid conception of *endoxa* this interpretation implies.

As the conclusion to be reached is known from the beginning of the debate, the questioner must come up with some strategies to reach this conclusion. A proposition can be inferred from multiple premises and it is reasonable to think that the questioner, at least a skilled one, will bear this in mind and have strategies for different approaches. If this is the case, why the premises from which the conclusion is deduced are called necessary if other premises would be available? As we said before and should be clear now, ‘necessary premises’ does not mean any qualification in terms of modality, or logical necessity of the deduction. In the examples we gave above, the

entailment of non-necessary premises in deductive steps are possible because of the logical necessity of the inference. There is nothing special in the deductive step that infers the conclusion if compared to the deductive steps used to infer other premises.

*These premises are necessary because they are the ones that make the conclusion be brought about in an actual debate.* They are the necessary premises of a complete argumentative chain that reached the conclusion, what means that they are the immediate logical steps to the conclusion, that is, from these premises no other argumentative step is necessary. So, for the conclusion to be syllogistically deduced, all that is required are the premises that have no logical mediation to the conclusion. Being logically immediate to the conclusion does not mean that in the argumentative order of the debate the necessary premises are going to be asked just before announcement of the conclusion. They can be asked at any moment of the debate depending on the strategy the questioner deploys and what she could get from the answerer. *Then, it is important to have in mind that the logical place of a premise in an argumentative chain does not need to (and likely it does not) coincide with its place within the debate.* The logical order and the order of the debate need to be distinguished and accounted for differently. The sophistication and skills displayed by the debaters may turn the debate into a quite complex game, in which the players must try to anticipate a series of possible movements her opponent has at her disposal and decide to pursue what seems to be the best strategy. Of course, the answerer's role is much more limited, since strict rules delimit her movements, but she still must think of the possible implication of everything she is asked and decide what is worth objecting or asking for clarification. The questioner must, when conceiving her debate strategy, think of a number of premises that might fulfil the role of necessary premises. At this moment, these premises are still only candidates for the necessary premises. As in a chess game, a player must at some point think of how to get the opponent's king checkmated. More often than not, there are many ways to get the king in check, since its movements will depend on how the opponent reacts. The attacking player should have in mind these multiple

scenarios and handle them. Now, her success in actually checkmating the king depends on one's set of movements that defeats the opponent. It only makes sense to speak of a checkmate movement within the context of an actual chess game.

The acceptance of the necessary premises is similar to the checkmate. As the checkmate could have happened differently in a specific chess game, the necessary premises could be different if the questioner or the answerer had played differently. But as things are in a specific debate *that reached the targeted conclusion*, the premises that brought the conclusion about are the necessary, since no other premise or set of premises deployed *in this debate* would logically entail the conclusion. For that specific conclusion, from all propositions the answerer had accepted, only the premises that immediately infer it are the necessary.

Someone might say that this distinction is not a good one since all the premises in a debate are somehow necessary. If it were not for the Q premises in our scheme, P premises would not be accepted. This objection, however important, can be avoided with the distinction we made between the logical order of the premises and the order of the debate. It is the order of the debate that requires multiples premises, including the necessary and non-necessary. From the logical point of view, only the necessary premises are needed for the conclusion to come about. *Accordingly, this set of necessary premises and the conclusion constitutes the dialectical syllogism.* Non-necessary premises and the argumentative steps to establish them may not have deductive structure. It is possible that a questioner has her questions for non-necessary premises accepted using only induction or argumentative steps validated by the answerer. For instance, all steps based on similarity can be used only if validated by the answerer. Once accepted, the answerer is committed to the logical consequences of the premises, but in cases like these, the acceptance is not driven by logical necessity. Besides all this, a questioner who puts forward questions for the necessary premises alone and have they accepted would have deduced syllogistically the conclusion.

If it is correct that the dialectical syllogism consists of the necessary premises and the conclusion, and in the general framework of the debate we portrayed the answerer would deny these premises if she could, how should we understand the characterization of the dialectical syllogism in I.1 100a29-30 as a syllogism from endoxical premises? The interpretation advanced here has some consequences for how endoxical premises should be understood. As seen above, the answerer takes one side of a problem and her choice does not need to issue from her own body of beliefs. She can pick a side against her own beliefs or about which she has no opinion. She might even play the role of defending a thesis according to someone else's beliefs (cf. VIII.5 159b27-29). Be that as it may, premises in a dialectical debate are endoxical even if they are not part of the answerer's own body of beliefs. As we know, any proposition put forward as a question is a premise if the answerer replies 'yes'. It is the actual acceptance of a question that makes a proposition a premise in a dialectical debate, regardless of whether necessary or non-necessary one. As any proposition has logical implications, the answerer commits herself to what the premises she accepts imply. If the questioner wants to explore these implications, she has to ask for them and the answerer, provided the implication is legit, has no alternative but to accept them, turning these implied propositions into premises when they are put forward as a question. As the debate progresses, the answerer will be accepting propositions she would not want to accept, especially when she realises what is coming. This happens because the conclusion is the opposite of the thesis she assumed and the reasons supporting the conclusion in the premises are most likely inconsistent with the thesis, which she must defend. However, her previous commitments make her assume undesired propositions as premises, and inasmuch as they are accepted, they are endoxical. In a dialectical debate, any proposition accepted by the answerer is endoxical, as well as the consequences of any accepted premise is also accepted, which is in accordance with the extensional delimitation E above. The gist of the game resides in the commitment to the consequences

of what one has accepted.<sup>24</sup> As the necessary premises are accepted on the basis of the commitment to previously accepted non-necessary premises, they are endoxical, independently of their belonging to the answer's body of beliefs.

This interpretation identifies precisely what is the dialectical syllogism as the set of necessary premises and the conclusion inferred from them by distinguishing what is logically demanded for the conclusion to come about and what is demanded as a strategy for the debate. As the dialectical debate always involves two people playing antagonist roles,<sup>25</sup> the questioner must put forward more premises than those of which the dialectical syllogism consists. The non-necessary premises can be obtained by deduction, induction or any other kind of argumentative pattern the answer accepts during the debate. In its turn, the dialectical syllogism necessarily is a valid form of deduction.

An interesting aspect of our interpretation is that it can be tested. In VIII.11, Aristotle distinguishes between criticisms to the argument and criticisms to the questioner, since it is possible for a questioner to perform well and deliver a poor syllogism (for instance, when she argues for a very difficult conclusion). I am not concerned here with the criticisms due to the questioner's faults, regardless of their importance to the understanding of Aristotle's conception of dialectic. There are five criticisms to the argument itself and they have caused interpretative problems to interpreters, who see no other alternative than accuse Aristotle of inconsistency regarding the notion of dialectical syllogism.

I cannot explain here each of the five criticisms according to the interpretation we proposed, as it would exceed the limits and purpose

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<sup>24</sup> Aristotle himself use the term '*endoxon*' in this way, e.g. I.18 108b13, where '*endoxon*' qualifies the argumentative step, not the propositional content.

<sup>25</sup> The antagonism between answerer and questioner takes place as a common work (*koinon ergon*, cf. VIII.11 161a17-161b5), which makes the dispute fair, avoiding the debate turning into an eristic one. The collaborative attitude the common work requires is, therefore, relative to a fair game between antagonist players (See Mendonça (Forthcoming)).

of this paper.<sup>26</sup> But it is possible to single out one criticism which has been problematic to interpreters, which, however, can easily be explained by how we interpreted the dialectical syllogism. This is the fourth criticism, which reads:

T2 - Again, if one comes about with certain premises taken away (for sometimes more premises are taken than those necessary [τα ἀναγκαῖα], so that it is not in virtue of their being so that the deduction comes about). (VIII.11 161b28-30)

T2 describes the fourth criticism to a dialectical argument itself. The first three criticisms targeted, respectively, non-conclusive arguments, arguments that reached a conclusion, but a different one than the expected (*i.e.* the contrary of the thesis), and arguments that reached the expected conclusion with added premise(s). The fourth criticism differs from the other three because the expected conclusion is deduced from asked premises. The failure now is neither about the need to add premises for the conclusion to come about, nor about the conclusion.

In his commentaries on this passage, we can see that Brunschwig cannot accommodate it well. The interpreter finds in this criticism a kind of inconsistency in Aristotle's conception of dialectical syllogism, since two different conceptions of syllogism would be in use in *Top.* VIII.<sup>27</sup> The problem for this interpretation emerges

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<sup>26</sup> See Mendonça (Forthcoming)

<sup>27</sup> "S'il y a une ou plusieurs prémisses superflues, la conclusion n'est pas strictement impliquée par toutes les prémisses, et seulement elles; et si cette condition n'est pas satisfaite, Aristote déclare ici qu'on n'a pas véritablement un συλλογισμός. En cela, il endosse une conception du συλλογισμός qui semble différente de celle du début du Livre VIII, où il allait jusqu'à distinguer quatre types de prémisses non nécessaires (155b20-28); mais il est vrai qu'il prenait soin de définir les prémisses nécessaires comme celles «par lesquelles s'effectue le συλλογισμός». En fait, le mot συλλογισμός peut désigner le genre dont les espèces sont le συλλογισμός scientifique, dialectique, etc., mais aussi l'une ou l'autre de ces espèces. Un συλλογισμός dialectique peut ainsi héberger un συλλογισμός non dialectique, qui apparaît si l'on retire du premier ses prémisses non nécessaires." (BRUNSCHWIG (2007, p. 292)) Brunschwig sees an incompatibility between these passages and his

because the use of superfluous<sup>28</sup> premises is criticised in T2, but premises with no use to the argument should be employed by the questioner as Aristotle recommends in VIII.1 157a1-5,<sup>29</sup> and both premises are taken here as equivalent. The superfluous premises are, then, a kind of non-necessary premises. As Brunschwig did not have the distinction between what we called the logical order and the order of the debate, based on how we understood the necessary premises and the dialectical syllogism, he couldn't consequently distinguish superfluous premises and non-necessary premises, so that he did not see a way to avoid attributing to Aristotle a kind of inconsistency.

Our interpretation is resourceful enough to deal with this problem without attributing to Aristotle any inconsistency. To begin with, it seems reasonable to take 'τα ἀναγκαία' in line 29 as referring to the necessary premises for the conclusion to be deduced. If this is correct, in our interpretation it regards debates in which the questioner has obtained argumentative chains which do not issue in one of the necessary premises. A scheme can make it clear:

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suggestion to solve it out is to claim that in VIII 11 Aristotle's conception of syllogism is different from the conception used in VIII.1.

<sup>28</sup> I am following Smith by calling superfluous the premises that need to be subtracted from the argument. (cf. 1997, p. 143).

<sup>29</sup> "Next, stretch out your argument and throw things of no use towards it, as those who draw fake diagrams do (for when there are many details, it is not clear in which the deceit (ψεῦδος) lies). That is also why questioners who proceed surreptitiously (ἐν παραβύστῳ) sometimes get away with (λανθάνουσιν) including premises which, *if put forward by themselves, would never be conceded.*" (I.1 157a1-5, Smith's translation modified)". Smith translates ψεῦδος in line 3 as 'error'. Brunschwig chooses 'falsseté'. Of course, both options are suitable translations of the Greek word, but they miss the important aspect of the intentional use of misleading premises as in fake diagrams. These premises can be true, and the argument can be sound, however the interlocutor (even a geometer) is led to accept as a geometrical demonstration a deceptive argument because she cannot identify what is wrong with it. This is the crucial move here. Using the fake diagrams as examples, Aristotle is saying that in dialectical debate, the questioner can use premises with no use to conclusion in order to make the answerer confused so that she cannot identify what the questioner is trying to obtain. As I going to explain, this is a kind of non-necessary premise. This is the reason I prefer 'deceit' to translate ψεῦδος here.

Q1	Q2	Q3
Q1'	Q2'	Q3'
<u>P1</u>	<u>P2</u>	S
C		

In this scheme, Q premises stand for non-necessary premises, P premises stand for necessary premises, and S premise stands for superfluous premise. It is not important for my point which kind of argumentative steps leads from Q premises to P or S premises. As I said about a previous scheme, the logical order of premises does not need to be the order the questions are asked. The order pictured here highlights the logical structure of the debate. The important point is that the questioner mobilizes an argumentative chain that plays no role for the conclusion to be deduced. The entire string Q3 – Q3' – S has no logical importance for the conclusion. That is the reason why S should be subtracted from the argument together with the argumentative chain supporting it.

As the conclusion is deduced but not from all the obtained premises, the conclusion comes about not by the premises being so [‘οὐ τῶ ταῦτ' εἶναι γίνεται ὁ συλλογισμός' 161b30]. The conclusion does not follow from all premises the questioner got accepted, so it is not because the premises are as they are that the conclusion comes about. The *Prior Analytics* definition of syllogism is similar to the definition in the *Top.*, except for the phrase ‘τῶ ταῦτ' εἶναι’ which is present in the former, but not in the latter.<sup>30</sup> This clause has a deep implication, as the argumentation does not result in a conclusion because all the premises, by being so, is not a syllogism. It is a relevant formal failure in the argumentation. The source of this failure is not explained. Aristotle might be thinking, for instance, of a questioner who mobilized more than the needed premises and all

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<sup>30</sup> “A syllogism is an argument in which, certain things being posited, something other than what was laid down results by necessity because these things are so [τῶ ταῦτα εἶναι]. By 'because these things are so' I mean that it results through these, and by 'resulting through these' I mean that no term is required from outside for the necessity to come about.” (*Apr I 1 24b 18-23* – Striker’s translation (2009))

the argumentative chain it demands expecting the questioner would object to some points she asked. To avoid getting her argument stuck, she might have envisaged as a good strategy to obtain, for example, three argumentative chains, as in our scheme. As the order of the questions should not mirror the logical order of the argumentation, the questioner tends to mix questions from different argumentative chains and she might end up having all of them progressing, causing this problem. Another possible context involves an unskilled or unexperienced questioner who does not know very well what she is doing and asks for more than what she needs, or even an eristic questioner who asks for more than the premises from which the conclusion is deduced in order to unfairly confuse or mislead the answerer. Be that as it may, *the debate does not result in a proper dialectical syllogism*, since the conclusion is not deduced from the premises being what they are. That is the reason the argument is criticised.

As for the alleged inconsistency, our interpretation can solve it out. Brunschwig finds in this fourth criticism a kind of inconsistency in Aristotle's conception of dialectical syllogism, since two different conceptions of syllogism would be in use in *Top. VIII* (cf. Brunschwig (2007, p. 292)). In our interpretation, there is no difficulty to accommodate T2. In this passage, "more premises are taken than those necessary", Aristotle is targeting argumentative chains which are put forward to the answerer approval and plays no role in deducing the conclusion. In VIII.1, however, Aristotle is focusing on the strategy to get the necessary premises accepted by the answerer.

As a means to secure some important premises, Aristotle suggests that the questioner asks for what is of no use for the argumentation in order to confuse the answerer and get accepted premises that would not be if put forward directly. The first aspect to be highlighted is that there is no hint that this is not a legit move in a dialectical debate. This implies that some attempts to confuse the answerer are part of the set of argumentative movements the questioner is allowed to make. The licence to use this sort of

movement raises some questions about the dialectical debate as a game without winners and losers,<sup>31</sup> but, despite their importance, they are out of the scope of this paper.<sup>32</sup> My focus is on the things with no use thrown into the debate. If these things are constitutive of an argumentative chain different from the chains which lead to the necessary premises, we would have inconsistent claims, since the text in the fourth criticism regards exactly what the passage in VIII.1 would be recommending. This passage, however, gives us some breadcrumbs so that we can follow what Aristotle is envisaging in VIII.1.

Aristotle's mention of the fake diagrams in VIII.1 (157a2-3) is relevant. Fake diagrams are mentioned in I.1, when Aristotle is listing the kinds of syllogism in order to delimitate what the dialectical syllogism is. Notoriously, fake diagrams are not examples of invalid or formally faulty arguments. They represent misleading arguments in a scientific discipline.<sup>33</sup> Something similar takes place in the *Sophistical Refutation* (171b13-22). By using fake diagrams, a sophist can embarrass a scientist because she uses not only a vocabulary that belongs to a particular science, but she can also use true premises within this particular science, but her syllogism fails as a demonstration, not as syllogism (*cf. Soph. El.* 8 169b20-23). Fake diagrams make it possible for the sophist to get misleading premises with which the scientist agree. Its deceptive power is the important aspect here. As VIII.1 157a1-5 shows, fake diagrams introduce into

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<sup>31</sup> A game without winners and losers is the way Brunschwig (1986) understood the dialectical debate, in which the argumentative strategies seek to test the thesis, which means that the players have a common task (*to koinon ergon*) (*cf. Brunschwig* (1986, p. 37); VIII.11 161a37-38) that is not the victory, but rather the appraisal of the thesis.

<sup>32</sup> See Mendonça (2023)

<sup>33</sup> "(F)or the person who draws fake diagrams does not deduce from true and primary things, nor from acceptable ones either [...]. Instead, he makes his deduction from premises which are appropriate to the sciences but not true: for he fakes a diagram by describing semicircles improperly, or by extending certain lines in ways in which they cannot be extended." (I.1 101a8-10,13-17). For valid arguments with true premises in the context of sophistical refutations, see Angioni (2012, p.200-208).

the debate many things or details (πολλῶν οντῶν) which, if successful, make the answerer confused about what is relevant and what is not, and then making easier for the questioner the obtaining of the necessary premises she needs to deduce the conclusion. In a dialectical debate, things of no use can be asked in a similar vein as the sophist manipulate false diagrams without being noticed as doing so. Aristotle's point rests not in a similarity between fake diagrams and things of no use, but in the subtle way these things can be used to embarrass the other debater. The way in common is the reliance on the difficulty to identify the misleading premises in the sophistical argument and the useless things for the argument in a dialectical debate due to the lack of clarity about the argument building.

What are the useless things, then? They cannot be argumentative chains which lead to propositions that has no role to play in the deduction of the aimed conclusion, since this is a limit the fourth criticism establishes against deceptive strategies. Despite the complete lack of examples of things of no use, Aristotle may be referring to any strategy that drains the answerer focus by directing it to things like irrelevant aspects of particular cases when the questioner's intention is to get premises about kinds rather than their irrelevant aspects, or to differences between species when what is important for her is the description of the genus to which these species belong. The questioner can spend some time asking about these specifics giving the answerer the impression that they are relevant and by doing so she might get important premises accepted, which, if the answerer were attentive, she could have rejected them. In a dialectical debate, an argument with this kind of strategy can still rely on the answerer's acceptance of the premises. In fact, a good answerer is not one who avoids the conclusion. When the thesis is a difficult one to be defended, the conclusion might be deduced in spite of her best efforts. The good answerer is characterized by not being responsible for the deduction of the conclusion, that is, the deduction is not the result of her failure (*cf.* VIII.4 159a20-22).

Premises that introduce useless things into the debate are not the superfluous premises T2 criticises. They are a kind of non-necessary

premises used by the questioner to get necessary premises accepted. The passage in VIII.1 mentions this: "That is also why questioners who proceed surreptitiously sometimes get away with including premises which, if put forward by themselves, would never be conceded." (157a3-6). Premises which would never be conceded are the ones the questioner needs to deduce the conclusion, and they would not be conceded because the answerer would anticipate that they would make the deduction of the conclusion possible. This is exactly the role played by non-necessary premises. Also, it is important to note that these premises with no use can be premises of an inductive argument leading to a conclusion the answerer would like to reject if she could.

If our interpretation is correct, Aristotle is not confused with two notions of syllogism and, then, being inconsistent. Aristotle is dealing with very different argumentative steps in a dialectical debate. In VIII.1, Aristotle is not advocating the use of superfluous premises in a dialectical syllogism. He is rather clarifying a kind of deceptive, but legit strategy used in dialectical debates which consists in concealing how the conclusion will be deduced. In T2, in turn, Aristotle is focusing on a formal error in the structure of the syllogism itself, which consists of a loose premise and its argumentative chain playing no role for the conclusion to be obtained. This distinction is possible because we delimited what is a dialectical syllogism and distinguished the logical order of the debate from the order of the questioning.

## **Conclusion.**

The main objective of this paper is to shed some light on what a dialectical syllogism looks like and how it is built in a dialectical debate. The very first lines of the *Topics* give us the impression that this kind of syllogism will be explained in detail, consisting in the main subject of the investigation in this work. This first impression does not get confirmed, though. The *Topics* never clarifies important aspects of the dialectical syllogism as its logical form. Most of the

work is dedicated to argumentative strategies to establish or demolish propositions of which the predicative ties consist in one of the predicables. The literature about the *Topics* is mostly dedicated to the epistemological import of the dialectics or to the doctrine of the categories or the predicables. Even in commented translations, the reconstitution of what the dialectical syllogism looks like was not completely done. In this paper, I tried to follow some sparse hints Aristotle gives in book I and mainly in book VIII about this topic. The notion of necessary premises is pivotal. It is what makes us able to delimitate what counts as a dialectical syllogism in a dialectical debate and distinguish the logical order of the syllogism from the many strategies used by the debaters. These distinctions provided some deep insight into the way *endoxa* are used in a dialectical debate. A premise is an *endoxon* if it is accepted by the answerer and it is not necessary that she believes in it. More often than not, the answerer would like to reject the necessary premises, but the rules guiding the debate impose its acceptance. The delimitation of the dialectical syllogism also provides us with tools to get a solid grasp of the criticism regarding the argument without attributing to Aristotle any inconsistency.

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