RESEARCH ARTICLE

How to Defend the Law of Non-Contradiction without Incurring the Dialetheist's Charge of (Viciously) Begging the Question

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Abstract: According to some critics, Aristotle's elenctic defence (elenchos, elenchus) of the Law of Non-Contradiction (Metaphysics IV) would be ineffective because it viciously begs the question. After briefly recalling the elenctic *refutation* of the denier of the Law of Non-Contradiction, I will first focus on Filippo Costantini's objection to the elenchus, which, in turn, is based on the dialetheic account of negation developed by Graham Priest. Then, I will argue that there is at least one reading of the elenchus that might not be viciously question-begging. In doing so, I will leverage, reinterpret and adjust the distinction between two senses of epistemic dependence, offered by Noah Lemos and originally based on some thoughts about George Edward Moore's 'proof of an external world.' The key point of my counter-objection to recover the elenchus is to use the distinction between a necessary-condition relation between propositions (p only if q) and a grounding relation between facts (the fact that an epistemic agent S believes that p is grounded in the fact that S believes that q), where p and q are the content of S's beliefs.

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This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International Public License (CC BY-NC 4.0). *Keywords*: Aristotle's elenctic refutation; Epistemic dependence; Grounding; Law of Non-Contradiction; Moore, G.E.; Question-begging arguments.

1. Introduction

1.1. The Elenctic Strategy to Defend Both the Traditional Principle of Non-Contradiction and the Modern Law of Non-Contradiction

In this paper, I intend to show in what sense the elenctic strategy (elenchos, elenchus)1 to claim the truth of the Law of Non-Contradiction (hereinafter 'LNC') is not a fallacy of petitio principii. In doing so, I will also show why these considerations might reply to the dialetheist (i.e., the partial denier of LNC) without viciously begging the question (cf. §1.1 infra and §1.2 to understand the link between the alleged failure of elenchus and the consequential alleged success of dialetheism, as well as my reply through §§ 2.1-2.3).

Within the debate about the (necessary) truth of LNC, charging the elenctic strategy of being a vicious circularity is Costantini's (2018; 2020) ingenious objection, which, in turn, is based on the dialetheic account of negation developed by Graham Priest (1979), Priest (1998, 117-119). Indeed, according to Priest—who especially appeals to (Routley and Routley 1995)—'One may distinguish between three accounts of the relationship between negation, contradiction and content' (Priest 1998, 117).

The first account understands negation as cancellation: the operator 'not' deletes the content of the formula which is applied to.

¹ I use the phrases 'elenctic strategy', 'elenctic argument', 'elenchus', 'elenctic refutation', and the like as substantially equivalent. Further, unless otherwise stated, where I just mention the elenchus (and the like), I am referring to the elenctic refutation of the denier of LNC. Although the elenchus was used by Aristotle to defend his principle (cf. especially, *Metaphysics* IV.4, 1006a11-1006b34; and *infra* §1.1) later called "Principle of Non-Contradiction" — for the sake of this paper I am going to assume that the key move of the elenctic strategy can also be invoked to defend the modern LNC ($\neg(\alpha \land \neg \alpha)$). I will return to this point below, within §1.1.

The second account, called 'complementation account', understands negation as in (modern) classical logic: the operator 'not' always and only excludes the content of what is denied (Costantini 2018). I will focus on this account later (see §1.2), since Costantini points out that such an account of negation, namely the classic account of negation, is the hidden assumption that turns the elenctic strategy into a vicious circularity. If we dropped out of the complementation account, the elenctic strategy in defence of LNC would not work (see §1.2). Moreover, I will read Costantini's criticism against the elenchus especially through Bardon (2005), according to which there are *self-refuting* or *self-defeating* propositions, and among them the negation of LNC (viz. <LNC is false>),² but such a self-refutation takes place only if one holds certain theoretical background assumptions or background presuppositions (cf. §§.1.2-2.1). Combining (Bardon 2005) with Costantini's objection, we will see that the putative self-refutation of a proposition like <LNC is false> would work only if we are prepared to assume the complementation account of negation.

The third account of negation belongs to paraconsistent logics, and it can be called 'dialetheic' account. Appealing especially to (Priest 1979), Costantini reads this account by leveraging the fact that negation *does not* always and only express exclusion: there are peculiar situations where the operator 'not' both excludes *and* accepts the formula which is applied to (see below §1.2).

Contra Costantini's objection against the elenchus, the aim of this article is to argue that there is at least one reading of the elenctic strategy in defence of LNC that *is not a vicious circularity, even assuming* the complementation account of negation. In doing so, I will leverage and adjust the distinction between two senses of epistemic dependence, offered by (Lemos 2004) and originally based on some thoughts about G.E. Moore's 'proof of an external world' (1939; 1953)—see §2.2.

Indeed, my counter-objection aims to recover the elenchus in favour of LNC, whilst maintaining a complementation account of negation. In doing so, I will use a distinction between a necessary condition relation between propositions (p only if q) and a grounding relation between facts (the fact that an epistemic agent S believes that p is grounded in the fact that S

 $^{^2}$ Throughout the rest of this article, I use brackets < ... > to indicate propositions.

believes that q)—where p and q are the content of S's beliefs, and, respectively, an argument's premise (for the sake of this paper: the elenctic argument for LNC) and its conclusion (see §§ 2.2-2.3). While the above-mentioned Lemos' distinction between two senses of epistemic dependence refers to the relations between propositions in both cases, I will propose to read the second sense of epistemic dependence in terms of grounding relations between facts, understood as a metaphysical and epistemic explanation (cf. §2.2). Such an adjustment can defuse Costantini's objection, leaving space to at least one reading of the elenchus in favour of LNC that is not viciously circular *and* assumes the complementation account of negation (cf. §2.3).

LNC states that no contradiction is true. By 'contradiction', I refer to either the *conjunction* between a proposition and its negation $(\alpha \land \neg \alpha)$ or to the negation of the *identity* between a thing and itself: x: $x \neq x$. The latter turns out to be a sentence that denotes a (impossible) contradictory object, i.e., a non-self-identical thing (or entity), that is what Severino (1981, ch.4, §14) considers the *content* of a contradiction, namely nothing at all. Similarly, Oliver and Smiley (2013, 602) introduce a paradigmatic empty term, called 'zilch', 'stipulating its impossibility of referring to something as a "logical necessity". Indeed, they formally define 'zilch' as $x: x \neq x$. Assuming that everything is self-identical, they conclude that 'zilch' is a term that necessarily fails to denote anything (cf. *ibidem*). We might say that 'zilch' picks up a contradictory object, i.e. a non-self-identical thing; but Oliver and Smiley—as well as Severino—do not accept contradictory objects in their ontology. Therefore, any term denoting a contradictory object is an empty term, i.e., a term that denotes nothing at all. According to Severino, the content of a contradiction is ultimately what results from a negation of the Law of Identity (insofar as, for unrestrictedly everything, x is an entity if and only if x is self-identical).³

³ To sum up, when 'contradiction' refers to the conjunction between a proposition and its negation, we obtain the classic formulation of PNC: $\neg(\alpha \land \neg \alpha)$; when 'contradiction' refers to the negation of the identity between a thing and itself—or better: when we refer to the putative *content* of a contradiction -, *de facto*, we speak about (impossible, absolutely nonexisting) contradictory objects. In the latter case, the formulation of PNC might be something like: $\nexists x(x \neq x)$, where the domain of x is

Although the modern LNC differs from the Aristotelian 'principle' later known as the 'Principle of Non-Contradiction' (hereinafter: 'PNC') the classical treatment of a contradiction's negation can be traced back to Aristotle's works (Horn 2018), especially Metaphysics IV.3-6, e.g., Metaph. IV.4, 1005b19-22.⁴ In their turn, both ontological and logical formulations of PNC '[are] traced in the writings of Parmenides, Gorgias, Plato' (Thom 1999, 153), with relevant differences and affinities pointed out by Thom (1999) but beyond the scope of this paper. In order to respond to Costantini's (2018; 2020) objection, according to which the elenctic method by Aristotle, and those who were inspired by it, especially Severino [1964] (1982; 2016), would be viciously question-begging (i.e., falling for a fallacy of *petitio principii*).⁵ it is sufficient to consider the presence (explicit or implicit) of *negation* in both ontological and logical formulations of PNC. as well as in the modern LNC. As Thom (1999, 153) notes, 'The principle of non-contradiction received ontological formulations (in terms of "being" and "non-being") as well as logical formulations (in terms of affirmation and denial) in early Greek philosophy'. Now, as Costantini writes, 'What is essential to our ends is the presence of contradictory elements, and therefore of negation. [...] The whole game is played on the notion of negation' (2018, 850, translation mine). Indeed, the critical observation of Costantini on the elenctic defence of LNC focuses on the equivalence between negation and exclusion and on a certain way of understanding this (operation of) exclusion (cf. $infra, \S1.2$). Sure, the Aristotelian conception of negation is different from modern (post-Fregean) ones, insofar as the former ranges primarily over *terms* and the latter over propositions and in any case never on subsentential units. Yet, both options are included under the so-called

unrestrictedly everything. A similar interpretation of PNC in terms of denying the existence of contradictory objects can be found in (Irwin, T. 1988).

⁴ Cf. Kirwan's translation, (Kirwan 1993², 7): 'For the same thing to hold good and not to hold good simultaneously of the same thing and in the same respect is impossible (given any further specifications which might be added against the dialectical difficulties).'

⁵ In the course of this paper, I use the phrases 'vicious circular argument', 'vicious circularity', '(fallacy of) *petitio principii*' (or simply: '*petitio principii*'), 'vicious question-begging (argument)', and the like as substantially equivalent.

'complementation' or 'classic' account of negation: cf. supra §1.1; infra §1.2; and (Priest 1998, 117 ff.). According to Costantini (2018), this account conceives negation only and always as *exclusion*. I would like to stress, together with Costantini, that what is at stake is not so much the object of the negation (either sub-sentential units, or propositions) but the negation as such.

It is also known that PNC has a special status for Aristotle, who claims it to be 'the firmest principle of all' (*Metaph.* IV.3, 1005b11-22). To him, PNC is not grounded in any hypothesis, being 'the principle of all the other axioms' (*Metaph.*, IV.3, 1005b32-34); it is the basis to build proofs and which in turn cannot be proved itself.⁶

We know, finally, that Aristotle proposes several strategies to defend PNC, notwithstanding the impossibility of proving it. According to Kirwan (1993²), in Aristotle's Metaphysics IV there are seven arguments in defense of PNC, but I will restrict my focus on the most known elenctic refutation (elenktikos apodeixai, also known as elenchus from Latin); therefore, the background of the following suggestions is Metaphysics (IV.4, 1006a11-1006b34).⁷ Following, broadly speaking, the so-called Italian Neo-Scholasticism's general understanding of the elenchus,⁸ I assume that the elenctic refutation consists in showing that, given a thesis, the negation of this thesis implies the thesis itself. In this regard, Pagani (1999, Part I, Ch. 2) points out that the relationship between the negation of PNC and PNC is not a relationship of presupposition but rather a relationship of implication. This important observation is also taken up by Costantini (2018; 2020), who applies it to the modern LNC as well, as we will see.⁹ In the case of PNC,

⁶ About the notion of *the firmest* principle and PNC as the firmest principle *of all*, cf. Wedin (2009, 133 ff.).

⁷ Although the present article is not intended to be a commentary of Aristotle's works: cf. *infra* why and in which extent I appeal to Aristotle's elenctic refutation.

⁸ Italian Neo-Scholasticism has been mainly developed around the Italian review *Rivista di Filosofia Neoscolastica* (founded in 1909, still existing: ISSN 0035-6247). Some scholars, either belonging to this tradition or coming from it, are mentioned across this article, like: Emanuele Severino; Sergio Galvan; Paolo Pagani. Bibliographical references are found across the text.

⁹ Costantini (2018, 849 footnote, translation and emphasis mine) writes: 'What Pagani is saying here is that the denial of the Law of Non-Contradiction [LNC]—

the denier of PNC, that is, the one who intends to affirm the falsity of PNC, is forced (by the force of the *logos*, so to speak) to affirm the truth of PNC

is forced (by the force of the *logos*, so to speak) to affirm the truth of PNC to the extent that she intends to say to herself and to others something that has at least one meaning (cf. Aristotle, *ibidem*). This strategy allegedly works both against she who claims that *all* contradictions are true (absolute negation of PNC) and against she who claims that *some* contradictions are true (partial negation of PNC). If the denier of PNC *actually* wants to declare precisely the negation of PNC *and not something else* (in either way), then—here is the elenctic refutation—she must in spite of herself affirm the truth of PNC. Otherwise, she would not deny PNC effectively: her negation would not be a negation, or would have no meaning, or she would be forced to remain silent, giving rise to no negation. The denial of PNC is therefore *self-refuting* (Bardon 2005 and cf. below §1.2), entailing a sort of self-negation (Severino [1964] 1982).

Now, I assume that the same Aristotelian elenctic strategy can be used to defend the modern LNC.¹⁰ Indeed, following (Galvan 1995), (Pagani 1999), and (Costantini 2018), the key move of the elenctic strategy is the fact that the denial of LNC *necessarily implies* its truth; and—recall—I can switch from PNC to LNC because I have assumed—following (Costantini 2018)—that both of them *ultimately* share the view of negation as *exclusion*.

without the Law itself—would be not only self-contradictory, but even inconceivable. In this sense, the Law is a *condition of meaningfulness even for its own negation*'.

¹⁰ See especially (Galvan 1995, 111): 'In the Aristotelean philosophical tradition, elenctic argumentation (*elenchus*) is conceived as a form of dialectical foundation of a thesis. It takes place in the context of discussion for and against a given thesis and consist in showing that, as the denier of this thesis argues against the opponent, he is unable to maintain his position unless he presupposes the thesis itself, which thus prevails and is consequently proven'. Here, Galvan uses the verb 'to presuppose', whilst Pagani (1999) and Costantini (2018)—and me, as well—insist on the fact that the key elenctic move is an implication. However, Galvan (1995, 112, emphasis added) himself states that a *stronger* application of the elenctic argument deals with implication: 'Elenctic argument is *more powerful when the implication between negation of the thesis and its assertion is necessary*; that is, when the opponent of the thesis in the end finds himself *necessarily obliged* to affirm it'. I will turn back to this key point in §2.1, Schema- $\hat{\epsilon}$, steps (2) and (3).

Therefore, *unless otherwise indicated*, from now on I will refer to the elenctic strategy as applied to the modern LNC.

The elenctic strategy was extended by Severino [1964] (1982; 2016), who, taking advantage of the defense inaugurated by Aristotle,¹¹ outlined two figures involved the elenchus. The first has as interlocutor, a hypothetical *absolute* denier of LNC. Meanwhile, the second is addressed to a supposed *partial* denier of LNC. Again, the absolute denier claims that LNC is always false, while the partial denier argues that there are situations in which LNC is false (or rather, as we will see in §1.2, situations in which LNC is both true and false—if she is a 'clever' denier). The two denials thus produced give rise to *trivialism* and *dialetheism*, respectively, two different philosophical positions according to which: '*Trivialism*: all contradictions are true (which implies that every proposition is true, since, for every proposition, we can consider its negation). *Dialetheism*: some contradictions (called 'dialetheias') are true' (Costantini 2018, 851, translation mine).¹²

The first figure of the elenchus shows that the absolute negation of LNC is *self-refuting* for the reasons already indicated above. To act as an absolute negation of LNC, the claim in question must mean *something*, precisely: the absolute negation of LNC and not something else (e.g., not the partial negation or the affirmation of LNC). Yet, in order for it to signify *something*, the absolute negation must confirm the truth of LNC (again, the negation of LNC) implies LNC). The first figure of the elenchus, therefore, rules out trivialism.

The second figure of the elenchus, which is more properly attributed to (Severino [1964] 1982), shows that even a partial denial of LNC is *self-refuting*. Presenting the prodromes of Severino's second elenctic figure, Priest (2020, 54-55, emphasis mine) writes:

¹¹ But perhaps a similar defense was already introduced by Socrates and then by Plato (Gottlieb 2023, in particular par.3 and par.9). It should be noted, however, that the elenchus differs from a *reductio ad absurdum*, the latter assuming the *impossibility* that contradictions are true, thereby already assuming LNC to be true (Perelda 2020, 13).

 $^{^{12}}$ To deepen the position of the dialetheist, in particular that of Graham Priest, in the relevant sense, I refer the reader to the bibliographical references quoted by Costantini (2018) and to the author himself. See especially the references given in (*ibidem*, 853, footnote).

Severino asks us to consider the following diagram:



The lefthand circle contains those statements that are true; the right-hand circle contains those that are false (i.e. whose negations are true). The area of overlap is C2, *which contains things that are true and false*. The rest is C1. In the left part of this, things are true but not false; in the right, they are false but not true.

C2, therefore, is that *part* of language—so to speak—in which LNC is not true,¹³ that is, where statements, propositions, or any *truth-bearer* is both true and false. This equals the *part* of reality where there are contradictory objects, i.e., non-self-identical things. Hence a *partial* denial of LNC, whereby the falsity of the law is attributed only to a *part* of language or reality (C2): *some* contradictions are true; *some* objects are contradictory. This is roughly the denial advanced by the dialetheist (although further clarifications are necessary; cf. §1.2). The elenctic method of (Severino [1964] 1982), in the case of C2, consists of pointing out that, for C2 to be the part of language or reality in which LNC does not apply, C2 must still respect LNC, that is, be *consistently itself and not* C1. The relation between C2 and C1, in short, also exemplifies a state of non-identity between two *different* positions (the partial denier of LNC *does not mean the same as the defender* of the absolute truth of LNC, *nor does she mean the same as the absolute denier* of LNC). However,

¹³ We will see in §1.2, however, that, if the dialetheist were to describe the diagram, she would say that LNC in C2 is *true and is also false*. For further information, see Costantini (2018; 2020) and Priest (2020).

the non-identity between different positions is exactly an instance of LNC. So, even the partial denial of LNC is *self-refuting*: 'The first conclusion drawn from this is that the partial negation of LNC is self-contradictory' (Costantini 2018, 859, translation mine).

At this point, Severino grants a further chance to the partial denier of LNC, who is also—as we will see—doomed to failure (from Severino's point of view). Although C2 as such, that is, as a portion of language or reality, does not violate LNC (being a consistent part of language or reality), the content of C2 might be contradictory. In fact, the partial denier wants to affirm that there are (within C2) truth-bearers both true and false, or contradictory objects.¹⁴ Among the examples of contradiction of the latter type, Severino ([1964] 1982) mentions the identification of two distinct items. For example, claiming the identity between the colour red and the colour green, attributable to the logical form $\langle x=y \rangle$, i.e., $\langle x$ is identical to $y \rangle$, where indeed 'x' denotes the colour red and 'y' denotes the colour green.¹⁵ Now, let us consider the identity between x and y. Severino distinguishes two interpretations to which the partial denier of LNC could allude.

In the first interpretation, 'x' and 'y' are two terms that both refer to the same object, for example, to a certain electromagnetic radiation of a certain wavelength, which—in the language used by the supposed denier—is referred to indifferently by 'red' and 'green'. In short, in this case the two

¹⁴ With this strategy, Severino introduces a questionable theoretical assumption, namely, that we can quantify either on C2 in itself (the domain of dialetheias or contradictory objects) or on the content of C2 (the dialetheias or the contradictory objects). The first part of the disjunction (C2 in itself, i.e., C2 as a domain of quantification) is different from its members, therefore Severino formulates his elenctic strategy in the way we have just seen. However, Severino does not speak in terms of domains of quantification. Rather, he speaks (or would speak) in terms of parts of language or parts of reality. This exceptical and theoretical issue, however, can be overlooked as out of the scope of this paper.

¹⁵ To be an effective identity between different terms, the term 'y' occurring in $\langle x=y \rangle$ is supposed to denote an object that is not identical to any object denoted by 'x'. So, $\langle x=y \rangle$ turns out to be a conjunction of $\langle x\neq x \rangle$ and $\langle y\neq y \rangle$, where the contradiction is not due to the conjunction but to the negation of the Law of Identity in both conjuncts. Severino calls this (impossible) logical situation 'esser-diverso-da-sé' (being-different-from-itself).

terms are *synonyms*, and it is evident that a denier of LNC is not producing an effective contradictory identity (if anything, she is using an anti-conventional use of the words 'red' and 'green'). In fact, given the reference to the same thing (the specific electromagnetic radiation of a certain wavelength), $\langle x=y\rangle$, $\langle \text{red} = \text{green}\rangle$, $\langle \text{the colour red } is identical to the colour green}\rangle$ are all true propositions, with no problems in classical logic.

In the second interpretation, 'x' and 'y' refer to two *different* things: 'red' and 'green' refer to a single electromagnetic radiation of two different wavelengths (at the same time and in the same respect). Here, the use of the terms 'red' and 'green' is no longer bizarre; rather, the identification between the colour red and the colour green is what is bizarre, generating precisely—a contradictory identity picking up a contradictory object. In this interpretation, the identity $\langle x=y\rangle$, $\langle x is identical to y\rangle$ gives rise to an *authentic* contradictory identity. What has changed with respect to the first interpretation is that the two terms are *not synonyms*, that is, they do not refer to the same thing, but to two different things (namely, two electromagnetic radiations of different wavelengths), despite them being identi*fied.* And here Severino's trap is triggered: if x and y must be originally different (x must be itself and not y; y must be itself and not x; <red is identical to red>, <green is identical to green>, $\langle x=y\rangle$, $\langle y=y\rangle$) to finally denote a contradictory object, then the identity between x and y is based on their difference. Thus, the (partial) denial of LNC, exemplified by the proposition $\langle x$ is identical to y >, is *self-refuting*, as it is based on the *difference* between x and y, which expresses exactly the deepest meaning of LNC according to Severino, that is, asserting the distinction between different items (and, conversely, the identity of what is self-identical). Explicitly or implicitly, the (partial) denier of LNC must affirm that x is not identical to $y, \langle x \neq y \rangle$, when she really intends to refer to a *genuine* contradictory object, as opposed to appealing to a simple equivalence between synonyms that refer to the same self-identical object. If 'x' and 'y' are not synonyms, then the proposition $\langle x=y\rangle$ ($\langle x \text{ is identical to } y\rangle$) is based or is grounded in the proposition $\langle x \neq y \rangle$ ($\langle x \rangle$ is different from $y \rangle$, $\langle x \rangle$ is not identical to y>). Talking about (relations of) grounding¹⁶ is very useful for

 $^{^{16}}$ In §2.2 I will introduce and assume an account of grounding that might be fit for the sake of this paper: see also (Thompson 2019) and (Audi 2012). For

the purposes of this article and for comparison with what I will call the 'Moore-Lemos account' (cf. §2.2). In this regard, I will present an illuminating passage by Costantini (2020), which reconstructs the most important elenctic method of Severino, i.e., the last passage of the second figure of the elenchus in (Severino [1964] 1982, 49) in terms, exactly, of *grounding* (cf. §2.1).

1.2. The Objection (or Argument) by Costantini-Priest

In this section I reconstruct the argument by Costantini (2018; 2020) aimed at showing that the elenctic strategy in defence of LNC—analysed in the previous section—gives rise to a *petitio principii* (i.e., a vicious *question-begging* argument). Priest (1998; 2020) also raises a similar objection, or at least we can say that Costantini's objection is based on certain aspects of Priest's (1979; 1998).¹⁷ Therefore, I will refer to these collectively as 'Costantini-Priest's argument' or 'Costantini-Priest's objection' or 'objection (or argument) by Costantini-Priest'. My counter-objection, proposed in §2.3, is mainly directed toward Costantini's formulation, but I believe that it *may* also be effective against Priest's (1998; 2020) under some respects, as both charge the Aristotelian elenchus of viciously begging the question. However, discussions of this hypothetical extension of my counter-objection are beyond the scope of this article.¹⁸

To reconstruct Costantini-Priest's argument against the elenchus, I use the concept of *self-stultifying proposition*, which we find in (Bardon 2005). According to Bardon (2005, 69 ff.), *self-refuting* or *self-defeating* propositions¹⁹ are: (i) *self-referential* propositions, that is, they refer to themselves,

an overview of the notion of grounding, cf. (Bliss and Trogdon 2021) and (Raven 2015).

¹⁷ On the link between Costantini's objection and the dialetheic account developed by Priest, cf. Costantini (2018, 849 footnote). See also *infra* §2.1.

¹⁸ Costantini (2018; 2020) and Priest (2020, 49-59) mainly address the elenctic figures developed by Severino ([1964] 1982), based on the original Aristotelian strategy. There are, however, similar objections addressed *directly* to the Aristotelian defense: see especially (Priest 1998; 2020, 46-48).

¹⁹ Bardon also deals with self-refuting *statements*. For the purposes of this article, I think I can overlook the distinction between propositions and statements, unless

to some aspect of the sentences that express them or to the performative acts (statements, utterances) of affirming them; and (ii) they can be expressed by *self-falsifying* statements, for example, the statement 'I do not exist' (*ibidem*, 70-71). Now, given the set of *self-refuting* propositions and statements, one might think that the denial of LNC (the proposition <LNC is false> or the statement that expresses it) falls within the typology of self-falsifying propositions or statements. But Bardon is keen to point out that self-refuting propositions, of the type just seen above, and *self-stultifying* propositions, which include – here's the point – the denial of LNC. Bardon (2005, 73 ff., emphasis mine) distinguishes self-falsifying propositions from self-stultifying propositions as follows:

Unlike a self-falsifying proposition, the [self-stultifying] proposition itself does not imply that its own affirmation should be impossible, and the affirmation of this proposition does not itself demonstrate that it is false. Rather, what the proposition says or implies is inconsistent with one's being epistemically entitled to affirm it. [...] It is inconsistent to affirm a self-stultifying proposition because that one is justified in making a claim is a pragmatic implication of making that claim.

Among the examples of self-stultifying propositions indicated by Bardon (2005, 74), we find the denial of LNC (<LNC is false>).²⁰

Why is it interesting and useful to start from here to reconstruct the objection by Costantini-Priest? It is because, in the definition of self-stulti-fying propositions (as well as in the definition of self-falsifying propositions), Bardon (2005, 73-74) clearly specifies that there must be *theoretical back-ground assumptions* or *background presuppositions* for the 'mechanism' of

clearly necessary, as well as the distinctions between propositions, sentences, and utterances. In fact, my focus is more on propositions proper and on the belief in propositions than on their linguistic formulations, but, again, I do not think this is a topic of interest for the sake of the argument.

²⁰ Bardon uses 'Principle of Non-Contradiction" (PNC), whilst I use 'Law of Non-Contradiction' (LNC) for the reasons I have already pointed out in §1.1.

self-stultification (as well as that of self-falsification) to take place.²¹ Now, the defender of LNC (the one who appeals to the self-stultification of the proposition <LNC is false>) is accused of viciously begging the question by Costantini-Priest's objection precisely because – among the presuppositions or assumptions of her theoretical background – she holds '[...] that account of negation which is challenged by the friends of contradictions like Priest' (Costantini 2018, 849, abstract, emphasis mine).

At this point, to continue the exposition of Costantini-Priest's objection, it is necessary to identify what conception of negation occurs both in the assumptions of the defender of LNC and in the conclusion of the elenctic defense of LNC, that is, the conception that allegedly generates a vicious circularity. Costantini (2018, 854, translation and emphasis mine) identifies this conception in the classical meaning of negation as *exclusion*:

[t]hose who deny LNC by claiming that there is at least one true contradiction are questioning the fact that *denial* is always able to *exclude* (the truth of) what is negated. *When you deny* LNC, you are therefore denying the equivalence between negation and exclusion.

What is challenged is that negation is *always and only* able to exclude what is negated. According to Costantini, this account of negation is, in fact, the one *theoretical background assumption* that the elenchus aims to ascertain as true. This classical account of negation is also known as the *complementation account*: cf. *infra* and (Priest 1998, 117 ff.).²² Therefore, using that

²¹ It is interesting to note that Galvan (1995, 115, emphasis mine), in one of the most rigorous formalizations of the elenctic strategy, affirms: 'Elenctic argumentation *presupposes* the specification of a *common basis* of understanding between the denier of the thesis in question and its proponent'. This common basis is represented by a set of shared 'rules of logical deduction' (*ibidem*, 113 ff.) and 'a number of rules of *negation*' (*ibidem*, 114, emphasis added). *Mutatis mutandis*, in my reading of Costantini's (2018) treatment of the elenchus, I will understand the presence of the classic account of negation as the common ground shared by both the denier of LNC and the defender of LNC, where that common ground might be an exemplification of what Bardon (2005) calls 'theoretical background assumptions'.

²² Alongside the classic or complementation account there are at least two other accounts of negation: the so-called 'cancellation' account, according to which $\neg \alpha$

assumption to trigger the 'mechanism' of self-stultification of the proposition <LNC is false> (i.e., using that assumption *among the premises* of the elenctic argument) viciously *begs the question* (a point we will return to in $\S2.1$).²³

The complementation or classic account of negation can be expressed by the logical equivalence below:

(1) $T(\neg \alpha) \leftrightarrow \neg T(\alpha)$

cancels the content of α (Priest 1998, 117); and an 'intermediate' account from paraconsistent logics (*ibidem*), according to which 'the content of $\neg \alpha$ is a function of the content α , but neither of the previous kinds [namely, the complementation and the cancellation accounts]' (*ibidem*), as far as, for this account, a contradiction 'entails some things but not others' (*ibidem*). Besides, the complementation or classic account of negation is such that the content of a contradiction is *total* and 'entails everything' (*ibidem*), based on the *ex falso quodlibet* principle. Indeed, one of the main differences among the three accounts of negation—complementation or classical, cancellation, and paraconsistent accounts (especially the dialetheic one)—is linked to which content a contradiction $(\alpha \wedge \neg \alpha)$ generates: respectively, everything, nothing, or something. However, as Priest (1998) notes, 'Though the cancellation and complementation accounts are quite distinct, some modern writers have run them together' (*ibidem*). I think that Emanuele Severino might be included among those writers, as far as he seems to use a classic account of negation, but, at the same time, he holds that the content of a contradiction is nothing at all. I leave this question open because it is beyond the scope of my paper. Furthermore, Severino's account of nothingness is more complex than what might seem (Severino 1981, ch. IV). However, about this specific topic, I just need to assume that a phrase like 'x: $x \neq x'$ denotes nothing at all, like the empty term 'zilch' in (Oliver and Smiley 2013); cf. §1.1, regardless exceptical issues of Severino's works.

²³ One could object (to Bardon and consequently to my way of introducing the argument by Costantini-Priest) that the denial of LNC is not a *self-stultifying* proposition but rather a *self-falsifying* one. Even if this were the case—and Bardon also contemplates this case, although he does not welcome it in (Bardon 2005, 90-91, footnote)—this would not compromise the key mark of the elenctic strategy that I intended to highlight in this section. Indeed, what interests me here is that, according to Bardon, to make both the *stultification* of a self-refuting proposition and the *falsification* of a self-refuting proposition work, theoretical *background assumptions* are needed.

where *T* is a truth predicate such as '...is true' or 'it is the case that...', and α is any truth-bearer (sentences, propositions, beliefs, etc.). Therefore, informally, (1) establishes that the negation of α is true if and only if α is not true. As Berto (2007, 6, emphasis mine) recalls, this idea 'expresses the semantics of *classical* negation, or the so-called *exclusion condition* of classical negation'.²⁴

To complete the exposition of Costantini-Priest's objection, two other considerations are necessary. The first is that a true contradiction for the dialetheist, that is, a 'dialetheia', is not an *arbitrary* conjunction between contradictory propositions (the conjunction of a proposition and its negation). If so, we would be considering the position of the trivialist (cf. *supra*) and not that of the dialetheist. Costantini (2018, 862, translation and emphasis mine) explains this point very well:

[accepting a contradiction, i.e. the conjunction of a proposition and its negation, as true] does not depend merely on the fact that [the dialetheist] wants to identify different items [or arbitrarily conjoin a proposition with its negation], as we can understand from an example of contradiction that Priest *does not accept*: I get on the bus and I don't get on the bus. [...] Whenever it is asserted that 'x is y' is a dialetheia *there must be a very specific reason that accounts for this assertion*. But this reason is not always present [...].

²⁴ To be more accurate, (1) should be rendered by a sentence's (or another truthbearer's) name, as Berto (2007) does: $T([\neg \alpha]) \leftrightarrow \neg T([\alpha])$, where $[\alpha]$ is exactly the name of α . Furthermore, Berto correctly distinguishes $T([\neg \alpha]) \leftrightarrow \neg T([\alpha])$ from $F([\alpha]) \leftrightarrow T([\neg \alpha])$, namely, 'Sentence (or any truth-bearer) α is false if and only if its negation is true' (Berto 2007, 6). Although $T([\neg \alpha]) \leftrightarrow \neg T([\alpha])$, namely, the equivalence between falsity and untruth, is more controversial than $F([\alpha]) \leftrightarrow$ $T([\neg \alpha])$, namely, the idea that 'false' means just '...has a true negation' (*ibidem*) (F being a falsity predicate), I will appeal to (1) when I refer to the classic or complementation account of negation throughout this paper, because, as Berto recalls, $T([\neg \alpha]) \leftrightarrow \neg T([\alpha])$ expresses the exclusion condition of classical negation, that is exactly what Costantini (2018) points out as what makes the elenctic strategy for LNC a vicious question-begging argument.

There must be, therefore, a specific *reason* to affirm the truth of a contradiction, and that reason must be different from the mere willingness to contradict oneself or from the idea (naïve or not) that reality (or our representation of it) is contradictory. Indeed, as examples of dialetheias, Priest quotes logical or ontological scenarios in which, even if we try to deny the existence of contradictory objects or the conjunction of contradictory propositions (i.e., even if we try to apply LNC), we do not succeed (or rather, we succeed and not succeed; cf. infra and ibidem). We do not succeed because, in those specific logical or ontological situations, 'Negation fails to exclude the specific denied content' (Costantini, 862 footnote, translation mine). Priest's examples are well known in the scientific literature: the paradoxes of self-reference, transition states, paradoxes in set theory, borderline cases of vague predicates, etc.: see, e.g., (Priest and Berto and Weber 2022, par.3). Each of them defies LNC, that is, 'resists' the mere function of exclusion, thus showing that negation does not always and only express exclusion, that is, 'it does not work as expected by classical logic' (Costantini 2018, 855, translation mine).

The second consideration, useful for completing the exposition of Costantini-Priest's argument, consists of noting that 'the claim that there are true contradictions is not made from a consistent perspective. Rather, that very claim is a true contradiction' (Costantini, 855, translation mine). From the standpoint of the partial denier of LNC (the 'clever' or 'dialetheist' denier of LNC), even the partial negation of LNC is a dialetheia. So, the proposition <LNC is false> does not exhaust the content of the dialetheic negation of LNC, which *instead also* affirms the truth of LNC: <LNC is always true, but in some cases it is both true and false> (These are the aforementioned cases of logical or ontological scenarios in which the application of classical or complementation account of negation does not work because it fails to express *exclusion only*.)

2. How to Reply to the Dialetheist without (Viciously) Begging the Question

2.1. A Schema of Petitio Principii to Read Costantini-Priest's Objection

In this section, I propose an argumentative schema (I will call it 'Schema- $\hat{\epsilon}$ '), of which the objection of Costantini-Priest to the elenctic strategy could be an example. Schema- $\hat{\epsilon}$ will lay the ground for showing—in section §2.3—how one might reply to the partial denier of LNC without falling into a vicious circularity.²⁵

The textbook definition of a question-begging argument is represented as follows:

· A · ·

That is, it is an argument that contains its conclusion among its premises. However, we might have a question-begging argument even though the conclusion—say *B*—was not identical to one of the premises—say *A*, where *A* entails *B*: see, e.g., (Iacona-Marconi 2005, 22 ff.).²⁶ At the same time, the textbook definition of *petitio principii* is controversial: I will come back to this topic at the end of §2.2.

Priest (1998; 2020) points out that Aristotle's elenctic defence of PNC or LNC (viciously) begs the question. For example, in (2020, 47, emphasis added), Priest writes the following:

God created the Universe.

God exists.

²⁵ By this, I do not intend to exhaust all the possible schemas of *petitio principii* exemplified by Costantini-Priest's argument. However, I believe that it is more than sufficient to show (in §2.3) how to 'defuse' the charge of viciously begging the question.
²⁶ Coming from (Iacona-Marconi 2005, 20), the following argument, is an example

of *petitio principii* where the conclusion is different from the premise:

Accepting that $\neg(A \land \neg A)$, or the stronger $\neg \diamond (A \land \neg A)$, does not rule out accepting $(A \land \neg A)$. Of course, to do so is a contradiction. But one cannot rule this out without supposing that one cannot accept a contradiction—which is exactly what is at issue in disputes with the dialetheist.

Costantini (2018) argues that LNC is already one of the premises of the elenctic argument (therefore, making it a vicious question-begging argument) because the appeal to elenctic *refutation* is based on a *certain account* of negation, that is, the classical negation (or what has been called the 'complementation account', cf. supra §1.2). We can read Costantini's objection to the elenchus as a sort of focus on the reason why LNC is already assumed among the premises of the elenchus itself.²⁷

As I anticipated in the previous section, let us indicate with '(1)' one of the premises of the elenctic refutation, specifically the above-mentioned classic account of negation, that is, the *theoretical background assumption* that negation *always* expresses *only* exclusion (cf. §1.2). Then, we can obtain the following schema for the elenctic strategy:

Schema-é

(1) $T(\neg \alpha) \leftrightarrow \neg T(\alpha)$ [Assumption] (2) $(\alpha \land \neg \alpha)$ [Assumption] (3) $(\alpha \land \neg \alpha) \rightarrow \neg(\alpha \land \neg \alpha)$ [By self-refutation of (2)]²⁸ Therefore, (4) $\neg(\alpha \land \neg \alpha)$ [2,3, Modus Ponens]²⁹

²⁷ I think (although I am not sure) that Priest would agree with Costantini's criticism of the elenchus. Costantini's (2018; 2020) criticism is substantially based on (Priest 1979; 1998). Further, the charge of vicious question-begging assigned to the elenctic strategy already occurs in (Priest 1998) (although with several differences that are beyond the scope of this paper). Again, that is why I have chosen the term 'Costantini-Priest's objection' rather than simply 'Costantini's objection'.

²⁸ With 'self-refutation' I refer to the idea by (Bardon 2005)—cf. §1.2—and the *implication* between contradiction and LNC (cf. §1.1).

²⁹ To get the conclusion (4), one might alternatively appeal to the propositional *reductio* such that, if $p \vdash \neg p$, then $\vdash \neg p$. But this line of reasoning, which is essentially equivalent to the well-known *reductio ad absurdum*, already presupposes the truth of LNC, as noticed in §1.1, echoing (Perelda 2020, 13). Therefore, the use of

Assumption (1) represents the *complementation* account of negation, according to which $\neg \alpha$ has whatever content α does not have, i.e., α means *something different* from $\neg \alpha$ (Priest 1998, 117, and 2020, 52). The same assumption (1) can also be expressed as Costantini (2018, 857) claims: 'Negation is an operator behaving consistently', i.e., 'Negation always and only expresses (or means or implies) exclusion'.

Assumption (2) is what the denier of LNC intends to state. We need to assume (2) precisely because the elenctic strategy is supposed to be a defense against the *denier* of LNC.

The implication occurring in (3) is the core of the elenctic strategy. It is reasonable to infer (3), by self-refutation of (2), as far as the necessary condition of $(\alpha \land \neg \alpha)$ is the *difference* between what α and $\neg \alpha$ respectively mean. Indeed, if α meant the same as $\neg \alpha$, then their conjunction would not be a real contradiction. As we have already seen (cf. supra and §§1.1-1.2), the *complementation* account of negation reads negation always and only as exclusion, such that $\neg \alpha$ has whatever content α does not have. From the elenctic strategy standpoint, the negation of LNC (the antecedent of the implication occurring in (3)) *implies* LNC itself (the consequent), as I already pointed out (cf. §1.1). That means that who in actu signato claims any contradiction is *in actu exercito* denving the contradiction itself, therefore affirming the truth of LNC. In a nutshell, the denial of LNC is self- refuting. In §1.2, I accounted for this 'mechanism' of self-refutation following Bardon (2005, 73 ff.), who better clarifies this self-refutation in terms of self-stultifying propositions, whereby the *implication* between $(\alpha \land \neg \alpha)$ as antecedent and $\neg(\alpha \land \neg \alpha)$ as consequent could be *epistemically* understood.

that rule would not be fit to account for the elenctic strategy. Furthermore, I prefer to use *modus ponens* because I am fairly convinced that it is one of the most intuitive and universal rules of inference we can appeal to. Azzouni (2013, 3177) includes *modus ponens* (in its sentential version: [α and (α only if β) only if β]) in a set of logical steps and principles that 'any ordinary person will find intuitively unexceptionable'. Of course, someone could challenge them (and indeed it happened). Yet, if those principles are *introduced to an interlocutor in an appropriate manner*, then she/he should accept them (Azzouni 2013, 3178). Azzouni's standpoint looks even more interesting if compared to the elenctic defense of LNC, as far as he famously holds that natural language is logically inconsistent: see, e.g., (Azzouni 2013).

Conclusion (4) comes from *modus ponens*.

Let us focus again on the implication occurring in (3), the key step of the elenctic strategy. Appealing to Costantini's approach, one can object that the proponent of the elenchus affirms that $\neg(\alpha \land \neg \alpha)$ is the *necessary* condition of $(\alpha \land \neg \alpha)$ because she has already assumed what she needs to prove, i.e., the complementation account of negation, that is, that no proposition can be true and not-true (untrue) at the same time and in the same respect.³⁰ Indeed, the self-refutation of (2), resulting in the step (3), needs some theoretical background assumptions or background presuppositions, as Bardon (2005) notes about self-refuting propositions in general: cf. §1.2, where I proposed to read Costantini's objection by including the complementation account of negation—represented by (1) in my Schema- $\dot{\epsilon}$ among the theoretical background assumption of self-refutation.³¹ What justifies the key step of the elenctic strategy is the idea that the necessary condition to hold a contradiction is the LNC itself. But the entire Schema- $\dot{\boldsymbol{\epsilon}}$ is viciously question-begging: assumption (1) and the conclusion (4) refer to the same idea. Generally, they say that it is the case that α is different from it is the case that $\neg \alpha$. In (1), this idea is expressed as a logical equivalence between *exclusion* and *negation* (cf. $\S1.2$), whilst in (4) the same idea is expressed by denying the conjunction of α and $\neg \alpha$. Yet, both (1) and (4) somehow express what LNC essentially affirms, i.e., that $\neg \alpha$ always and only excludes α . If what premise (1) refers to is the same idea what conclusion (4) refers to, then the Schema- ϵ viciously begs the question. As Costantini (2018, 867-868, translation mine) says:

[I]f it is already assumed [...] that negation always behaves only consistently [i.e., that *negation* always and only expresses or means *exclusion*], then the elenchus proves that there can be no true contradictions. Yet, if one wants to avoid such a *petitio principii* (for example by trying to prove exactly the assumption that negation always behaves only consistently), then the elenchus

 $^{^{30}}$ I use the terms 'not-true' or 'untrue' due to the equivalence between falsity and untruth in the classic account of negation (cf. §1.2).

 $^{^{31}}$ Therefore, step (3) also depends on (1), i.e., the exclusion condition of classical negation (cf. §1.2).

cannot bring any additional contribution to the defense of LNC, which is not already present in LNC itself.

For a better understanding of Schema- $\dot{\epsilon}$ and why it viciously begs the question, I would focus further on (3):

$$(3) \qquad (\alpha \land \neg \alpha) \to \neg (\alpha \land \neg \alpha)$$

Now, let us consider an instance of α , such that ' α ' stands for $\langle x=y \rangle$ and ' $\neg \alpha$ ' stands for $\langle x\neq y \rangle$, as far as, in light of the classic account of negation expressed by (1), 'it is true that *it is not the case that* $\langle x=y \rangle$ ' is *logically equivalent to* 'it is not true that *it is the case that* x is identical to y.' As the reader will remember, $\langle x=y \rangle$ or $\langle x$ is identical to $y \rangle$ can be understood as an act of identifying two different items, ultimately referring to an (impossible) contradictory object x: $x\neq x$ (see §1.1).

Therefore, we obtain:

Schema- $\dot{\epsilon}$ with ' α ' standing for $\langle x=y \rangle$

$$(1^*) \quad T(\langle x \neq y \rangle) \leftrightarrow \neg T(\langle x = y \rangle) \text{ [Assumption]}$$

(2*)
$$(\langle x=y \rangle \land \langle x\neq y \rangle)$$
 [Assumption]³²

(3*) $(\langle x=y \rangle \land \langle x\neq y \rangle) \rightarrow \neg(\langle x=y \rangle \land \langle x\neq y \rangle)$ [By self-refutation of (2*)]

Therefore

$$(4^*) \quad \neg(\langle x=y \rangle \land \langle x\neq y \rangle) \ [(2^*), \ (3^*), \ Modus \ Ponens]$$

Let us consider the following notable excerpt by Costantini (2020, 102-103):

The key point in Severino's argument is that the sentence 'x=y' is an authentic negation of LNC only if x and y are not synonyms, i.e. only if 'x=y' is grounded in ' $x\neq y$ '. In other words, to have a

³² It might be interesting to note that two contradictions occur here. The first is due to the main conjunction. The second is 'internal' to the left conjunct because $\langle x=y\rangle$ should be read as an identification of two different items, so that the left conjunct turns out to be $\langle x\neq x\rangle$ and $\langle y\neq y\rangle$, as I pointed out in §1.1, following (Severino [1964] 1982), and—to some extent— (Oliver and Smiley 2013). Of course, $\langle x\neq x\rangle$ and $\langle y\neq y\rangle$ are, in fact, two violations of the Law of Identity, namely, $\forall x(x=x)$, and their 'content' is given by (impossible) contradictory objects (nonself-identical things).

contradiction, one must claim that x and y are distinct $(x\neq y)$ and not distinct (x=y). The relation between the two contradictory sentences is one of grounding $(`x\neq y`$ grounds `x=y`). This means that there is an asymmetry: $`x\neq y`$ may be true without `x=y`being true, but not vice versa: in order to claim `x=y` to be true (and to be an authentic negation of the LNC), the claim $`x\neq y`$ must be true too. The verb 'must' in the last sentence indicates that the truth of $`x\neq y`$ is a necessary condition for the truth of `x=y`. According to Severino, acknowledgement of the last point is enough to show that the denier of the LNC is wrong: her denial is grounded on what she is denying, and consequently the denial cannot be true.

Here, I want to anticipate and emphasize that—for the purposes of my paper—the relevance of this passage consists of its use of both the *grounding* relation and the *necessary condition* relation (*only if*). These are exactly the two points that my counter-objection will rely on (see §2.3). For the moment, though, let us just recall that, according to Severino, the act of identifying two different items *implies* the original difference of those two items (see §1.1). As Costantini (2020) correctly represents:

 $\langle x=y \rangle \rightarrow \langle x\neq y \rangle$

To obtain this implication within the above application of Schema- \pounds , we just need to apply conjunction elimination to (2^*) and then reiterate the self-refuting 'mechanism' for contradiction (already used in (3^*)), assuming that $\langle x=y \rangle$ is ultimately a contradiction such that x is not identical to x and y is not identical to y:

- (5^*) $\langle x=y \rangle$ [(2^{*}), conjunction elimination]
- (6*) $\langle x=y \rangle \rightarrow \langle x\neq y \rangle$ [By self-refutation of (5*), assuming that $\langle x=y \rangle$ is a contradiction under specific conditions (cf. §1.1)]

$$(7^*) < x \neq y > [(5^*), (6^*), Modus Ponens]$$

Following (Severino [1964] 1982) and (Costantini 2018; 2020), I read (5^*) as a contradiction of the sort of $\langle x \neq x \rangle$ (as well as $\langle y \neq y \rangle$). Therefore, (6^*) is exactly what Costantini points out as the core of Severino's elenctic strategy. The antecedent occurring in (6^*) is a way to deny LNC as far as 'x' and 'y' do not refer to the same object, yet they are *identified* (e.g., <the

color red is identical to the color green>). This identification can also be thought as a denial of the Law of Identity because, if y 'picks up' a different object (say, the color green) from what x denotes (say, the color red), then identifying x and y means affirming that x is not itself (e.g., <the color red is not identical to the color red>), since 'y' is supposed (by Severino) to denote an object that is not identical to any object denoted by 'x'. In a nutshell, we can also think of the antecedent occurring in (6^{*}) as $\langle x \neq x \rangle$ (and, ceteris paribus, $\langle y \neq y \rangle$).

The consequent occurring in (6^*) might be thought as an instance of LNC. Indeed, as we have seen in §1.1, according to Severino [1964] (1982), a way to express LNC consists in recognizing the difference of those items that are, de facto, thought of as different. In a nutshell, the essence of a contradiction is the *identity* between (or, better, the act of identifying) two different items that are originally thought of as different. That's why Severino holds that the difference of any two different items is the necessary condition of any contradictory act of *identifying* them. This necessary condition relation can be exactly expressed by an *implication* between the identification of two different items ($\langle x=y \rangle$) and their difference ($\langle x\neq y \rangle$). As Costantini (2020, 103) points out, 'x=y' requires the truth of ' $x\neq y$ ' implies that 'x=y' is simply false' (*ibidem*). Yet, as Costantini (2020, 103, emphasis mine) notes,

In classical logic, of two contradictory statements [viz. in our case 'x=y' and ' $x\neq y$ '] only one can be true. But *if negation is to be understood as classical*, then the argument is a *petitio principii*, because the dialetheist will argue that negation does not behave classically when dealing with true contradictions.

Therefore, following Costantini's line of reasoning, we can conclude that Severino's elenctic strategy against the existence of contradictory things (any object x such that $x \neq x$) is viciously question-begging, as far as the elenchus already assumes as true the complementation account of negation that shall be proved. Indeed, the 'culprit' of vicious circularity is that *the*oretical background assumption, i.e., (1) or—in this specific case—its exemplification (1^{*}), conveying the classic account of negation, which (implicitly) is at work in (6^{*}) in the form of a necessary condition relation for an authentic act of identification between two terms denoting two originally different items. As we have seen for the general Schema- $\hat{\epsilon}$, also in this specific instance of the schema *petitio principii* occurs: what (1^{*}) refers to is essentially what (4^{*}), namely, an exemplification of LNC, refers to. That is, broadly speaking, the idea that *it is the case that* $\langle x=y \rangle$ is different from *it is the case that* $\langle x\neq y \rangle$.

In the last section of the article, we will examine in detail how to prevent the elenctic strategy from raising to a *petitio principii* (namely, how to reply to a dialetheist without viciously begging the question). First, however, it is necessary to introduce (in §2.2) the account that I will apply to better understand the elenctic strategy (in §2.3), which consists of some thoughts by Moore (1953) and the relevant comments by Lemos (2004) about Moore's famous 'proof of an external world',³³ also charged with vicious circularity. I call this interpretive model the 'Moore-Lemos account'.

2.2. The Moore-Lemos Account and My Adjustments in Terms of Grounding

In response to those who charged Moore of vicious circularity for his 'proof of an external world', Moore ([1953] 1993, 77) writes:³⁴

Obviously, I cannot know *that* I know the pencil exits, unless I do know the pencil exists; and it might, therefore, be thought that the first proposition can only be mediately known—known *merely* because the second is known. But it is, I think, necessary to make a distinction. From the mere fact that I should not know

Here is one hand. Here is another hand.

Therefore, there are external objects.

Cf. (Moore 1939):

(1) Here are two hands.

(2) If hands exist, then there is an external world.

So there is an external world.

³³ As is known, Moore's argument for proving the existence of an external world goes as follows. I use the version that appears, e.g., in (Lemos 2004, 85):

 $^{^{34}~}$ In the quote, the external object is a pencil. In the best-known version, the external objects are Moore's own two hands.

the first, *unless* I knew the second, it does not follow that I know the first *merely* because I know the second. And, in fact, I think I do know *both* of them immediately.

Setting the content of the argument about the external world aside, what I want to stress here is Moore's distinction between knowing a proposition p (which works as a premise) only if (viz. unless) you (already) know the proposition q (which works as a conclusion) and knowing that same proposition p because you (already) know q. According to Lemos (2004, 90, emphasis mine):

Moore denies that the proposition 'S knows that p only if S knows that q' implies 'S knows that p because S knows that q'. From the fact that one knows that p only if one knows that q it does not follow that one knows that p on the basis of one's knowing that q or that q is one's reason for believing that p.

As we will see shortly, Lemos speaks both in terms of knowledge and in terms of belief. In fact, knowledge is traditionally treated as justified true *belief.* For the sake of this paper, then, I just need to consider belief. We therefore have the first tenet of what I call 'the Moore-Lemos account': one believes that p only if one believes that the proposition that q neither implies (*non sequitur*) (i) that the belief that p is based on the belief that q, nor (ii) that q is the reason why one believes that p. Regarding this tenet, one should keep in mind that the occurrence of 'only if exemplifies a necessary- condition relation, and that the occurrence of 'being based on' is equivalent to the use of 'because'. In a little bit, I will argue that the latter might exemplify a grounding relation, provided we introduce some appropriate adjustments (cf. *infra*). For the moment, though, let us focus on Lemos' account.

Lemos (2004, 90, emphasis mine) distinguishes two senses of epistemic dependence:

Let us distinguish two senses in which one proposition can be 'epistemically dependent' on another. In the first sense, p is epistemically dependent₁ on q just in case one is justified in believing (or knows) p only if one is justified in believing (or knows) q. [...] But in a second sense, p is epistemically dependent₂ on q just in case one is justified in believing (or knows) p on the basis of one's being justified in believing (or knowing) q.

The fact that p is epistemically dependent₁ on q does not imply that p is epistemically dependent₂ on q. Let us clarify this difference with an example by Lemos (2004, 90) himself. Consider the argument, 'I think; therefore, someone thinks':

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p = \langle I \text{ think} \rangle
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- $q = \langle \text{Someone thinks} \rangle$
- S is an epistemic agent who might believe p or q.

According to Lemos, the proposition $\langle I \text{ think} \rangle$ is epistemically dependent₁ on the proposition $\langle Someone \text{ thinks} \rangle$. S believes $\langle I \text{ think} \rangle$ only if S believes $\langle Someone \text{ thinks} \rangle$. Yet, the proposition $\langle I \text{ think} \rangle$ is not epistemically dependent₂ on the proposition $\langle Someone \text{ thinks} \rangle$: S does not believe $\langle I \text{ think} \rangle$ because she believes $\langle Someone \text{ thinks} \rangle$.

Another example might be extracted by the following argument: 'God created the Universe; therefore, God exists' (Iacona-Marconi 2005, 20). Applying Lemos' above-mentioned distinction, S believes \langle God created the Universe \rangle only if she believes \langle God exists \rangle : there is an epistemic dependence₁ relation between the premise and the conclusion of the argument. Yet—using Lemos' account—S does not believe that God created the Universe because she believes that God exists.³⁵

To better understand this distinction, I think we need to introduce some adjustments to Lemos' (2004) account *in terms of grounding*. We will see that, in my reading, the epistemic dependence₂ does not hold between propositions (as does the epistemic dependence₁) but holds between (metaphysical and epistemic) facts. Hence, the epistemic dependence₂ becomes a kind of grounding relation. In doing so, I am going to change Lemos' conception of epistemic dependence₂ slightly but quite substantially. Let us see how. Indeed, neither Moore nor Lemos speak in terms of (metaphysical) grounding as the most recent literature does in the treatment of phrases, operators, or relations such as: 'because', 'in virtue of', 'on the basis of', and the like.

³⁵ Another example from Moore himself is exactly the perceptual knowledge that this is a pencil, which I have already recalled before (cf. *supra* §2.2.).

Before proceeding, I need to clarify which account of *grounding* might be suitable for the sake of this paper. As it is known, grounding is usually taken to be a 'a form of constitutive (as opposed to causal or probabilistic) determination or explanation' (Bliss and Trogdon 2021, introduction) between entities (e.g., facts). There are two broad understandings of grounding, according to one's attitude to either determination or explanation. Raven (2015, 326) calls them, respectively, 'separatism' and 'unionism', because the former separates grounding from metaphysical explanation, whilst the latter *unifies* them. Theorists of unionism, indeed, conceive grounding as a form of (metaphysical) explanation: $\langle x \text{ grounds } y \rangle$ means $\langle x \text{ explains} \rangle$ y. Theorists of separatism conceive grounding as a form of (metaphysical) determination: $\langle x \text{ grounds } y \rangle$ means $\langle x \text{ determines } y \rangle$, namely, $\langle x \text{ non-}$ causally generates, produces, or brings about y >: see (Bliss and Trogdon 2021, §1.1); (Thompson 2019, 99-101). For the sake of this paper, I assume a unionist account of grounding, as far as Lemos' (2004) treatment of the original Moorean distinction (between 'because' and 'only if': see above §2.2) is explicitly *epistemic*, and the notion of (metaphysical) *explanation* seems to be exactly an epistemic affair as well (Thompson 2019, 101-103;). Moreover, I assume that grounding relations hold between facts, namely, obtaining states of affairs, rather than between truth-bearers (propositions, statements, or whatever).³⁶ As Raven (2015, 326) notes, 'Somehow, ground is *metaphysical* because it concerns the phenomena in the world itself, but also *explanatory* because it concerns how some phenomena hold in virtue of

³⁶ For example, Audi's (2012) account of grounding establishes that the relation of grounding holds between facts, not between propositions (or other truth-bearers), where facts are what make propositions (or other truth-bearers) true. Audi's account belongs to so-called separatism because it understands grounding in terms of determination that backs explanation, whereas in this paper I have assumed a unionist approach. I think the reader might overlook this incongruity, since a fine-grained treatment of grounding is beyond the scope of this paper. Furthermore, we should remember that unionism and separatism might be intertwined if we conceive grounding as explanation (unionism) as *backed by* grounding as determination (separatism). However, as Bliss and Trogdon (2021, §1.1) notice, even if we agree that grounding is both *explanation* and *determination*, 'there still may be substantive reasons to go with one view rather than the other' (*ibidem*).

others.' Therefore, although I chose an epistemological approach to grounding to be closer to Lemos' (2004) reading of 'epistemic dependence₂', my choice could be compatible with a metaphysical approach, as far as the *epistemic* relation between facts is exactly a relation between *facts*, holding between *worldly* phenomena.

When speaking of grounding and explanation, this combination of metaphysics and epistemology is wisely treated by Thompson (2019). According to her, although metaphysical explanations concern worldly (objective) relations (in my assumption: relations between worldly *facts*), they should not be isolated by our (subjective) epistemic constraints: see especially (Thompson 2019, 101-103; 108). In particular, Thompson's (2019, 102, emphasis mine) approach to metaphysical explanation, namely, to what I assume grounding relations are,³⁷ introduces the above-mentioned epistemic constraints in forms of 'background beliefs and theoretical commitments of the explanation seeker (and perhaps also of the explanation giver)². The reader should note the relevant agreement between what I called *theoretical* background assumptions or background presuppositions, following (Bardon 2005)—see above §§1.2; 2.1—and what Thompson (2019) calls 'background beliefs and theoretical commitments.' For the sake of this paper, the most important theoretical commitment in question is the classic account of negation (see above §§1.2; 2.1). I will come back to this point later.

Finally, I assume that grounding relations are always (or almost always) transitive, irreflexive, and asymmetric. 38

Provided with this account of grounding, or at least with these minimal *desiderata* for a hypothetical account of grounding, we can reinterpret Lemos' (2004) distinction between epistemic dependence₁ and epistemic dependence₂ as follows:

³⁷ Thompson (2019) does not make this assumption, developing her own account of metaphysical explanation regardless any particular view of grounding.

³⁸ There are other properties usually assigned to grounding relations (e.g. hyperintensionality, non-monotonicity, etc.) that are beyond the scope of this paper. Also, there are accounts of grounding relations that excludes such a relation to be irreflexive or asymmetric, for example. Again, these issues are beyond the scope of this paper.

(Epistemic dependence₁): the proposition p is epistemically dependent₁ on the proposition $q =_{def} p$ only if q, where p, q are the contents of S's beliefs.

(Epistemic dependence_{2*}): the fact that S believes that p is epistemically dependent_{2*} on the fact that S believes that $q =_{def}$ the fact that S believes that p is grounded in the fact that S believes that q.

Propositions p and q are the contents of S's beliefs; the grounding relation occurring in the *definiens* of the epistemic dependence_{2*} should be read through the lens of the account of grounding assumed before. The reader should notice the relevant difference between the two epistemic relations: the epistemic dependence₁ is a relation that holds between *propositions* that are believed by an epistemic agent; instead, the epistemic dependence_{2*} is a relation that holds between *facts* (whilst Lemos' (2004) account conceives epistemic dependence₂ as a relation between propositions). In a nutshell, the epistemic dependence₂ concerns a material implication between propositions, whilst the epistemic dependence_{2*} concerns a grounding relation (as metaphysical explanation) between facts (where the metaphysical explanation is at the same time epistemically constrained, since I partially assumed Thompson's (2019) account: see above).

In §2.3, I will apply these relations (epistemic dependence₁ and epistemic dependence_{2*}) to our relevant case, namely, the elenctic strategy (as for Schema- $\hat{\epsilon}$).

The second tenet of the Moore-Lemos account is a *definition of petitio* principii: an argument is circular (in the vicious sense) if the belief in one of its premises is *based on* the belief in its conclusion. This definition³⁹ seems adequate to understand the basic idea of the vicious circularity argument exemplified by the Schema- $\hat{\epsilon}$ of the elenchus as exactly a *petitio principii* (cf. §2.1). Following the Moorean distinction between 'only if' and 'because', or, better, the *non sequitur* already mentioned above, it is necessary to distin-

³⁹ Cf. Lemos (2004, 88-89, emphasis mine): 'Suppose we say that an argument begs the question if knowledge of a premise *is based* on knowledge of the conclusion'. Lemos here speaks in terms of knowledge but he immediately after speaks in terms of beliefs too (see *ibidem*, 90).

guish in turn between a) an argument whose logical form establishes a *nec*essary condition relation between conclusion (q) and one of the premises (p), such that the necessary condition for believing that p is (already) believing that q; and b) an argument that has a logical form such that an *asymmetric* relation holds between the fact that an epistemic agent S believes the conclusion and the fact that S believes one of the premises: in other words, the belief that p is based on the belief that q. Lemos (2004) proposes that the argument of kind (b) is viciously question-begging, as opposed to that the argument of kind (a). Moore's 'proof of an external world' was discredited as being a pe*titio principii* precisely because it was traced back to the argument of kind (b) by some of its critics (see *ibidem*). (In the next section, I will show how even the elenctic strategy—represented by Schema- $\dot{\epsilon}$ —can avoid the charge of vicious circularity precisely because of this distinction between (a) and (b)). According to my adjustment of Lemos' (2004) epistemic dependence₂ in terms of a certain understanding of grounding relations (see above: epistemic dependence_{2^*}), we might state that the argument of kind (b) is viciously circular as far as the fact that S believes the conclusion (q) grounds the fact that S believes one of the premises (p).

We assume (following Lemos) that epistemic dependence1 does not give rise to a *petitio principii*, whereas epistemic dependence2*, namely, my reading of Lemos' (2004) epistemic dependence2 in terms of grounding relations, does give rise to a *petitio principii*.⁴⁰

In summary, the tenets that comprise my reading of Moore-Lemos account (hereinafter 'ML account' or just 'ML'), handy for the next section, are the following:

⁴⁰ Lemos (2004, 91) uses this assumption to defend Moore's 'proof of an external world'. For the sake of completeness, note that Lemos also hypothesises the objection that an argument could (viciously) beg the question even if one of the premises epistemically depended1 on the conclusion. Even then, he argues, Moore's 'proof of an external world' might *not* be a *petitio principii* (cf. *ibidem.*). However, here I do assume that an argument viciously begs the question when a grounding (asymmetric) relation holds between the *fact* that an epistemic agent believes one of the premises and the *fact* that the very same epistemic agent believes the conclusion, whereas there is *no petitio principii* when the relationship between the conclusion and premise is a necessary condition relation between propositions (*p* only if *q*).

(ML1) If the premise of an argument is epistemically dependent on the conclusion of that argument, then the epistemic dependence can be either a *necessary condition relation* between *propositions* (understood as contents of beliefs), or a *grounding relation* between *facts*.

(ML2) From the fact that one believes the proposition that p only if (*necessary condition relation*) one believes the proposition that q, it does not follow that the fact that an epistemic agent S believes that p is grounded in the fact that S believes that q.

(ML3) An argument in which one of its premises p is epistemically dependent on its conclusion q is viciously circular (i.e., a *petitio principii*) when the epistemic dependence exemplifies a *grounding* (asymmetric) relation between facts (what I have called 'epistemic dependence_{2*}') but not when the epistemic dependence exemplifies a *necessary condition relation* between propositions (what Lemos calls 'epistemic dependence₁).

Before moving forward, it is worth considering the relationship between valid arguments and instances of *petitio principii*. As for example Iacona and Marconi (2005) point out, the philosophical literature does not undisputably place the border between *valid* arguments and *invalid* arguments in the case of question-begging arguments. Indeed, 'Although it is uncontroversial that there is something wrong with begging the question, it is not clear from those definitions *what* is wrong' (Iacona and Marconi, 2005, 19). Since the ML account deals with *petitio principii* in terms of *epistemic* dependence, I assume that question-begging arguments should be assessed *epistemically*, as Lemos (2004) does, and in accordance with my above reading in terms of grounding whereby the relation of grounding is both a sort of metaphysical and *epistemological* explanation. Iacona and Marconi (2005) clearly summarize this kind of approach into *petitio principii*, originally based on (Sanford 1972), as follows (although they propose a different approach in the *pars construens* of their article):

According to a rather popular line of thought [...] begging the question is to be defined in terms of some epistemic relation between one or more premises and the conclusion. One way of putting things consists in saying that the relation involves the actual beliefs of the person to whom the argument is addressed. In this vein, a question-begging argument may be defined as an argument addressed to someone who believes one or more of the premises *only because* he already believes the conclusion, or to someone that would believe one or more of the premises *only if* he already believed the conclusion (Iacona and Marconi 2005, 25, emphasis mine).

About this definition, it is worth underlining that both a sort of epistemic grounding relation ('[...] only because [...]') and a necessary condition relation ('[...] only if [...]') are mentioned: the reader can easily note that these may be those kinds of epistemic dependence relations that we have found in the ML account, and especially in my reading of Lemos' account (in my reading: epistemic dependence_{2*}, rather than Lemos' own epistemic dependence₂). This parallels the claim that an argument begs the question when the epistemic dependence exemplifies a *grounding* (asymmetric) relation but not a *necessary condition* relation (ML3). For the sake of my argument, this is a relevant difference between Sanford's definition of (putative vicious) question-begging arguments (where *grounding* or *necessary-condition* relations between a premise and a conclusion might generate a *petitio principii*) on the one hand, and both the original ML' definition and my reading of it (where only *grounding* might generate a *petitio principii*) on the other hand.

2.3. A Reply to the Partial Denier of the Law of Non-Contradiction

In this section, I will apply the ML account to reinterpret Schema- ϵ (occurring in §2.1) which expresses Costantini-Priest's objection, that is, the thesis that the elenctic strategy is a *petitio principii*. Using the ML account, we will see in what sense the elenctic refutation of LNC's denier does not give rise to a *petitio principii*. This means providing a non-question-begging reply to the denier of LNC.

Let us recall Schema- $\dot{\epsilon}$:

- (1) $T(\neg \alpha) \leftrightarrow \neg T(\alpha)$ [Assumption]
- (2) $(\alpha \land \neg \alpha)$ [Assumption]
- (3) $(\alpha \land \neg \alpha) \to \neg (\alpha \land \neg \alpha)$ [By self-refutation of (2)]

Therefore,

(4) $\neg(\alpha \land \neg \alpha)$ [(2), (3), Modus Ponens]

We can apply the ML account to read Schema- \pounds , focusing on the epistemic relation that holds between the premise (1), i.e., the classic account of negation, and the conclusion (4), i.e., LNC, according to which there are no true contradictions. (For easier reading, consider that, here, (1) represents the premise p, and (4) represents the conclusion q of the general explanation of the ML account). Indeed—as I pointed out in §2.1—the (putative) *petitio principii* occurs because the elenctic defender of LNC already assumes the conclusion (4), i.e., LNC itself, in order to believe (or understand) the premise (1), i.e., the classic account of negation. Now, recalling ML1, ML2, and ML3 together with the propositions of Schema- \pounds , my argument to defuse *petitio principii* accusation runs as follows:

- (A1) Premise (1) is epistemically dependent on the conclusion (4)
- (A2) Given an epistemic agent S, the epistemic dependence relation occurring in (A1) can be read either as a necessary condition relation between propositions that are believed by S ((1) only if (4)), or as a grounding relation (the fact that S believes (1) is grounded in the fact that S believes (4))
- (A3) Premise (1) is true only if the conclusion (4) is true.
- (A4) From the fact that S believes premise (1) only if S (already) or believes the conclusion (4), it does not follow that S believes the premise (1) because S believes the conclusion (4).

Therefore,

(A5) Schema- $\dot{\epsilon}$ does not viciously beg the question.

Let us assess this line of reasoning. According to the ML account, the epistemic dependence₁ does not give rise to any *petitio principii*. (A1) is my starting point as far as I need to reply to Costantini- Priest's objection that the elenctic strategy viciously begs the question. In fact, I concede that there is an epistemic dependence between (1) and (4). (A2) is obtained by applying (ML1) to (1) and (4). (A3) represents how I mean to read the epistemic dependence between (1) and (4) in Schema- $\dot{\epsilon}$: negation always and only expresses exclusion, or negation is an operator that behaves

consistently, *only if* there are no true contradictions. In a nutshell, believing premise (1) *epistemically depends*₁ on the conclusion (4).⁴¹ (A4) is obtained by applying (ML2) to (1) and (4). Let us check how. Let us consider the following:

- i. The propositional content of (1) is <The complementation account of negation is true>.
- ii. The propositional content of (4) is <LNC is true>.
- iii. S is an epistemic agent who might believe propositions p (premise of Schema- $\dot{\epsilon}$) or q (conclusion of Schema- $\dot{\epsilon}$)

By (ML2), from the fact that S believes (1) only if she believes (4) it does not follow that S believes (1) because she believes (4), where the operator 'only if' can be read as an epistemic dependence₁, whilst the operator 'because' can be read as an epistemic dependence₂. In other words, the fact that the truth of LNC is the necessary condition of the truth of the classic account of negation does not entail that LNC (metaphysically and epistemically) grounds the classic account of negation. The rationale of conclusion (A5) is (ML3).

Schema- $\dot{\epsilon}$ would indeed give rise to a vicious circularity if we replaced assumption (A3) with the following (A3^{*}):

(A3*) Premise (1) is true because the conclusion (4) is true, namely, the fact that S believes premise (1) is grounded in the fact that S believes the conclusion (4).

In this case, we would obtain an epistemic dependence_{2*} between (1) and (4). Consequently, by (ML3):

(A5^{*}) Schema- $\dot{\epsilon}$ viciously begs the question.

So, whilst the latter reading of Schema- $\dot{\epsilon}$ gives rise to a *petitio principii*, the former reading—{A1; A2; A3; A4; A5}—does not viciously beg the question.

⁴¹ About the difference between epistemic dependence₁, epistemic dependence₂, and epistemic dependence_{2*}, see §2.2.

Similar considerations can also be made when ' α ' stands for $\langle x=y \rangle$, namely, when our focus is on the act of identifying different items (x, y)or—in a nutshell—when we refer to contradictory objects (non-self-identical things) such as $x \neq x$ (cf. §1.2). In this case our focus is on what Severino (2005, *passim*) calls 'the content of a contradiction', namely, the identity of different items that, *de facto*, turn out to be a contradictory object. As Costantini (2018; 2020) effectively highlights, the core of Severino's elenctic strategy is represented by the implication below (cf. §1.2 and §2.1):

$$(6^*) \quad \langle x = y \rangle \rightarrow \langle x \neq y \rangle$$

If we compare Costantini's reconstruction of Severino's elenctic strategy (Costantini 2020, 102-103) with the ML account, we immediately notice that both the *necessary condition* relation (*only if*) and the *grounding* relation appear in it. It seems to me, however, that these two kinds of relation are not properly separated in his argument, as Costantini uses the '*id est*' (*ibidem*, 102) just to explain that the necessary condition relation resolves into a *grounding* relation between the two sentences—'x=y' is *grounded* in ' $x\neq y$ '—or between the two related propositions, or, again, according to my reading of the ML account, between the fact that an epistemic agent S believes one proposition and the fact that S (already) believes the other. Meanwhile, the ML account invites us to distinguish the two relations within a given argument (see ML1 and ML2). If we apply the ML account, especially the distinction between epistemic dependence₁ and epistemic dependence₂*, in reading the reconstruction by Costantini (2020) of Severino's elenctic strategy, then we have the following:

(C1) Where Costantini (2020, 102, emphasis mine) writes 'the sentence 'x=y' is an authentic negation of LNC only if x and y are not synonyms', we can understand this to mean that the proposition $\langle x=y \rangle$ is epistemically dependent₁ on the proposition $\langle x\neq y \rangle$ (notwithstanding the fact that the identity between x and y must be understood as an effective or authentic contradiction). Therefore, $\langle x=y \rangle \rightarrow \langle x\neq y \rangle$, where $\langle x\neq y \rangle$ is a necessary condition of $\langle x=y \rangle$, as Costantini also observes.

(C2) Where Costantini writes that 'x=y' is grounded in ' $x\neq y$ ' (*ibidem*), we can understand this to mean that the fact that S believes the

proposition $\langle x=y \rangle$ is *epistemically dependent*_{2*} on the fact that S believes the proposition $\langle x\neq y \rangle$.

(C3) Where Costantini (2020, 102-103) writes (or at least suggests) that $\langle x=y \rangle$ is grounded in $\langle x\neq y \rangle$, we can understand this to mean that S believes that $\langle x=y \rangle$ because or on the basis of her belief of the proposition $\langle x\neq y \rangle$. In other words, the partial denier of LNC must already be aware of the difference between x and y, namely, the terms she wants to identify in an effective (real, authentic, and true) contradiction.

(C4) Where Costantini (*ibidem*) writes (or at least suggests) that $\langle x \neq y \rangle$ grounds $\langle x = y \rangle$, we can understand this to mean that the fact that S believes $\langle x \neq y \rangle$ is the metaphysical and epistemic explanation of the fact that S believes that $\langle x = y \rangle$.

If we read the epistemic relation between the proposition $\langle x=y \rangle$ and the proposition $\langle x\neq y \rangle$ in terms of epistemic dependence₁ (as it occurs in (C1)), then the version of Schema- $\hat{\epsilon}$ with ' α ' standing for $\langle x=y \rangle$ does not viciously beg the question (by the ML account). Instead, if we read the same epistemic relation in terms of epistemic dependence₂—as it occurs in (C2)—then that version does give rise to a *petitio principii* (by the ML account). Again, there is at least one reading of Schema- $\hat{\epsilon}$ that does not involve any vicious question-begging also when ' α ' stands for $\langle x=y \rangle$, i.e., when our focus is on a proposition that—so to say—describes an (impossible) fact: the fact that there is a putative contradictory object x such that $x\neq x$ (cf. §1.1).

Note that my interpretation of the 'heart' of the elenctic strategy *does* not challenge the core of Costantini-Priest's objection, according to which the elenchus presupposes the conception of 'classical negation' (see assumptions (1) and (1^{*})), which the dialetheist does not assume and, indeed, questions. My counter-objection to Costantini-Priest's objection, in effect, only concerns the charge of *petitio principii*. That is, even accepting that the classic account of negation as (always and only) *exclusion* is a *theoretical background assumption* of the elenctic strategy, it does not mean that the elenctic strategy viciously begs the question. This is because—given ML—the game on the charge of *petitio principii* is played on the difference between epistemic dependence₁ and epistemic dependence_{2*}, namely, two different epistemic relations we can use to understand the elenchus in one way or another (either in a way that *does not* viciously beg the question or in a way that *does*).

2.4. Concluding Remarks

Let us return to Schema- $\dot{\epsilon}$ and my reading of it ({A1; A2; A3; A4; A5}) according to which the elenctic strategy does not viciously beg the question. The focus of that reading is on the epistemic relationship between premise (1) and the conclusion (4). Since (1) expresses the complementation account of negation (cf. §1.2), and (4) is the propositional formulation of LNC, then my *epistemic* interpretation ({A1; A2; A3; A4; A5}) of the elenctic strategy affirms that *already* believing in LNC is the *necessary condition* of believing in the complementation account of negation. That is, S believes (1) only if S already believes (4). As we have seen (\$ 2.2-2.3), according to my reading (based on the ML account), the epistemic dependence of premise (1) on the conclusion (4) does not give rise to a petitio principii. If the epistemic dependence of (1) on (4) were understood in terms of grounding, then the epistemic dependence_{2*} would give rise to a *petitio principii*. Now, what about the grounding relation? We already know that—according to my reading $({A1; A2; A3; A4; A5})$ —the fact that S believes LNC (4) does not ground the fact that S believes the classic account of negation (1), by selecting (A3)rather than (A3^{*}). However, could we still somehow or somewhere admit a grounding relation? I would answer this question in two ways.

(i) We might claim that our belief in the classic account of negation, i.e. (1), grounds our belief in LNC, i.e., (4). That means that the fact we believe the conclusion of the elenctic strategy (4) is grounded (at least) in the fact that we believe in one of the premises of the elenctic strategy (1). Since the ML account does not prevent us from accepting a grounding relation where the fact that S believes the conclusion of an argument is based on the fact the S believes in one of the premises of that argument, it might be the case that S holds a grounding relation between the same two epistemic facts but running the opposite way, rather than the way of epistemic dependence^{2*}, without viciously begging the question. In a nutshell, this option rejects the grounding relation expressed by the epistemic dependence^{2*}, namely the idea that believing the premise of an argument is based on (already) believing the conclusion of that argument, but such an option keeps the grounding relation by *reversing* it, namely, accepting that believing the conclusion of an argument *is based* on believing the premises of that argument. In fact, it seems intuitive and plausible to maintain that broadly speaking—the conclusion of an argument immune from charges of vicious circularity is based on its own premises (whilst one of the premises of a vicious *question-begging* argument would be based on its own conclusion).

(ii) Alternatively, we might 'remain silent' on any kind of grounding relation between the premises and the conclusion of the elenctic strategy, appealing just to necessary condition relation between propositions (epistemic dependence₁, 'only if').

Although I think both options are available to my argument, I would prefer the first option (i). Indeed, the first option can account for Costantini's (2018) idea that LNC *presupposes* the classic account of negation. However, Costantini reads that presupposition without distinguishing the kind and the direction of the epistemic dependence between the classic account of negation and LNC, thereby charging the elenchus with a *petitio principii*. My proposal, combining my argument ({A1; A2; A3; A4; A5}) with option (i), reads this claim exactly disambiguating the kind and direction of that epistemic dependence.

I would conclude with another remark on *grounding*, this time between LNC and the *overall* elenctic strategy. Costantini (2018, 17) knows well that (for Severino, and earlier for Aristotle) LNC is not grounded in the elenchus itself. Rather, the elenctic refutation limits itself to *ascertaining* the truth of LNC.⁴² However, my objection to Costantini (exploiting the

⁴² As Perelda (2020, 14) writes, 'This argument [*viz.* elenchus], mind you, does not ground the principle [*viz.* LNC]: it is not a reason for the truth of the principle which has none (if reason means something that grounds the truth of the principle)'.

ML account) is the lack of a sufficient distinction between grounding relations and the necessary condition relations in his treatment, as we have seen. My objection might also extend to the way in which Severino accounts for the relation between contradictory items (both truth-bearers and objects) and non-contradictory items, insofar as Severino implicitly—or explicitly—suggests that it is a grounding relation. To Severino, though, this relation does not hold between LNC and the elenchus but between the negation of LNC (i.e., asserting the identity of different items) and LNC itself (i.e., asserting the distinction between different items and, *ceteris paribus*, the identity of what is self-identical). The present article, however, had no exceptical purposes regarding Severino's works. So, the fact that the *grounding* relation is an excellent way of paraphrasing what Severino claimed (and that therefore (Costantini 2020) too provides an excellent commentary on Severino's theses) does not mean that this is also an adequate way to do justice to the elenchus.

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