Challenging the law of non-contradiction

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In my paper 'Elenchos Come Petitio Principii', I argued that Severino's elenctic argument does not work against a dialetheist position such as the one defended by Graham Priest. In the present paper, I will focus on some fundamental aspects of the dialetheist's challenge to the Law of Non Contradiction that have raised many doubts, such as the claim that a true contradiction is at the same time false, or the fact that the dialetheist's metatheory should be as inconsistent as the object theory. Moreover, I shall exploit such clarifications to re-expose some of the key passages of my critique of the elenctic strategy, in particular those regarding the second figure of *elenchos*. Finally, I shall reply to the objection that accuses both dialetheism and my own view of not providing incontrovertible grounds to their respective claims.

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Introduction

Emanuele Severino's *Ritornare a Parmenide* (§6) develops an argument – known as the *elenctic argument* or *elenchos* – whose aim is to show that no contradiction can be true, i.e. the Law of Non-Contradiction (from now on: LNC) always holds without exception. Severino resumes the argumentative strategy of Aristotle's *Metaphysics* Book IV, in order to provide a justification for LNC: everybody who meaningfully speaks (and so also the denier of the LNC) uses the LNC, i.e. the same negation of the LNC requires the validity of the law itself.

In my paper 'Elenchos Come Petitio Principii' (Costantini 2018; from now on: ECPP), I argued that Severino's elenctic argument does not work against a dialetheist position such as the one defended by Graham Priest. Dialethism is the view that some contradictions are true (and false as well), and as such it represents a direct challenge to the LNC. If Severino's elenctic argument were to succeed, then dialetheism would be simply false, no contradiction being true. However, in ECPP, through a detailed analysis of §6 of *Ritornare a Parmenide*, I show that the argument is fallacious, being a *petitio principii.* The reason why the argument begs the question is that it presupposes exactly the account of negation (classical negation) that is challenged by a dialetheist such as Priest.

In the present paper, I will focus on some fundamental aspects of the dialetheist's challenge to the LNC that have raised many doubts. What does it mean to challenge the LNC? What does it mean for a contradiction, and so for a proposition, to be both true and false? How is it possible that the LNC is a logical truth also for the dialetheist? Why doesn't the dialetheist want her theory to be consistent? Some of these questions have already been treated in the previous paper, but it is important to deal with them more systematically in order to clarify the challenge that the dialetheist poses to the LNC. Moreover, I shall exploit such clarifica-

tions to re-expose some of the key passages of ECPP, in particular those regarding the second figure of *elenchos*.

1. What if some contradictions were true?

The central claim of dialetheism is that some contradictions are true (and false as well). But how is it possible for a proposition to be both true and false? I suspect that many scholars would just claim that this is not possible, since a proposition which is true cannot be at the same time false, and a false proposition cannot be true as well. Moreover, since the dialetheist wants to challenge the LNC, she should claim that some contradictions are (only) true. But why also false? By claiming that the contradiction is also false, is she not claiming that it is false because every contradiction is false? And if this is the case, then how can she challenge the LNC? These questions are all very natural, but there is a problem lying behind them: they are made from a consistent perspective. What I mean by this is that these questions presuppose classical logic. If the world is consistent, then a sentence cannot be both true and false. And it is only from a consistent perspective that we may claim that the denier of the LNC must say that there are contradictions that are true only, or that the LNC simply fails. Only if one refuses to admit the possibility that the true and the false overlap should the denier claim that the LNC is only false.

Let us try to understand why such a picture is profoundly misleading, and what it means for a proposition to be both true and false. If you pick up a proposition (maybe one that a dialetheist would claim to be a true contradiction) and you look at it and try to understand how it can be true and false, you will likely not get much from this. And this is normal, because we usually use words like 'truth', 'falsity', etc. consistently (or at least we *intend* to use such words consistently). For this reason we find the claim that a sentence is true and false astonishing.

I think that if we want to make some progress, the right way to approach the problem is simply to change perspective. Instead of picking up a sentence and trying to make sense of its being both true and false, simply ask yourself the following question: what would the world look like if there were true contradictions? Or, in less grandiose terms, what does it mean for a contradiction to be true? Such questions suggest that to make sense of the claim that there are propositions which are both true and false, we should start by reasoning about a hypothetical true contra-

diction and try to understand what this means for the truth-values of its components. A contradiction is the conjunction of a sentence A and its negation $\sim A$. A conjunction is true when both its conjuncts are true. So A is true and $\sim A$ is true. But $\sim A$ is the negation of A, and negation inverts the truth-values of sentences. So since A is true, $\sim A$ is false; and since $\sim A$ is true, A is false as well. Therefore, A is both true and false, and the same for $\sim A$. From this we can conclude that the whole conjunction $A \wedge \sim A$ is true (because both the conjuncts are true), but it is also false (because the conjuncts are false as well).

What this reasoning shows is simply that the claim that some propositions are both true and false (and the claim endorsed by the dialetheist that a true contradiction is also false) follows from the admission of true contradictions. It is in virtue of what a contradiction is that if a contradiction is true, it is false as well. In the above argument, we have just exploited the standard understandings of the connectives (we exploited the fact that a conjunction is true when both conjuncts are true, and that negation inverts the truth-values) that appear in any contradiction. Therefore, if one admits the truth of some contradictions, one must admit that some propositions are both true and false.

2. Challenging the LNC means challenging negation

Once one admits that some contradictions are true, one is admitting that there are cases where the contradictories A and $\sim A$ are both true. But contradictory propositions cannot be both true; by definition if one is true, the other is false. In the Aristotelian square of oppositions, sub-contraries can be both true. As a consequence, one might object that the dialetheist is treating the contradictories as sub-contraries[1].

This objection is profoundly misleading and, ultimately, it is question begging (*petitio principii*), because it is *within classical logic* that by definition only sub-contraries can be both true, and not contradictory propositions. But the dialetheist's challenge to LNC is a challenge to classical logic. Therefore the objection presupposes as valid what the dialetheist is challenging.

1 B.H. Slater raised precisely this objection: see Slater 1995.

The dialetheist needs a logic that allows contradictories to be both true. Contradictory propositions are propositions such that one is the *negation* of the other. As such the dialetheist needs a suitable notion of *negation*, i.e. they need a theory of negation that – contrary to the classical theory – allows contradictions to be true. In other words, dialetheism can be interpreted as a challenge to the behaviour of negation described by the classical truth-table. According to the latter, there are only two truth-values – true and false – and negation inverts them: if A is true, $\sim A$ is false, and vice versa. These truth-values are exclusive: if A is true, its negation can only be false. But as we know, the admission of true contradictions implies the admission of propositions that are both true and false. As such, the dialetheist argues that the cases are three, not two: true, false, and *both true and false*. If A is true, $\sim A$ is false, and if A is false,$\sim A$ is true; when A is both true and false, $\sim A$ is both true and false, and vice versa[2].

It is important to note that, for the dialetheist too, negation always inverts the truth-values, and this happens also in the latter case. In fact, if A is both true and false, its negation will be true (because A is false) and will be false (because A is false as well). Also in the inconsistent case where A is both truth and false, negation inverts the truth-values: the true 'goes to' the false, and the false 'goes to' the truth. Therefore, the true and false 'goes to' the false and true, which is the same as the true and false.

The inversion of the truth-value is the key feature of negation, and it represents the formal expression of the fact that negation expresses exclusion. When I negate a sentence, I *am excluding* that such a sentence is true. When I say 'I have not eaten all the cake', I am excluding that I have eaten all the cake.

What the dialetheist is thus doing is *challenging the classic interpretation of negation*. The dialetheist's interpretation of negation is different, because it admits a third possibility: a sentence being both true and false.

Of course, negation expresses exclusion, but things are not so easy when dialetheias are around. Because a dialetheia like $A \wedge \sim A$ is both true and false, which means that each conjunct is both true and false. $\sim A$ expresses that A is false, but in this specific case, A is true as well. And a di-

2 I am referring here to what is known in the literature as *the Logic of Paradox*, a formal paraconsistent logic introduced by Graham Priest in Priest 1979. More on such a logic can also be found in ECPP.

aletheist who thinks that $A \wedge \sim A$ is a true contradiction may want to assert $\sim A$ and at the same time not excluding (the truth of) A. Therefore, it seems that negation does not really manage to express exclusion. But this would be too hasty a conclusion to draw. Negation certainly expresses exclusion, but when dealing with true contradictions it behaves inconsistently, i.e. $\sim A$ *excludes* that A is the case and *it does not exclude* that A is the case, because A is in fact the case. This simply means that negation behaves inconsistently, which is something one should expect if some contradictions are true.

3. Changing the subject?

A common objection against dialetheism, and more generally against non-standard logics, is the one summed up in the slogan 'change of logic, change of subject' (Quine, 1970: 126-127). If the dialetheist speaks of negation as an operator that can behave inconsistently, then she attributes to negation different properties than those attributed to it by classical logic. But then they are speaking of different concepts. And negation is for sure classical negation, since this is the standard conception of it, which means that the dialetheist is changing the subject (of discussion).

In other words, the objection accuses the dialetheist of modifying the standard notion of negation in order to allow for contradictions to be true. But once the notion of negation has been modified, it is no surprise that the notion of contradiction ends up being modified too, and in turn some contradictions turn out to be true. Of course, in such a scenario, the dialetheist and the classical logician would be speaking of different notions, and so there would be no true disagreement between them.

I think that this objection fails. That the dialetheist is not changing the subject can be appreciated by considering the fact that the contradictions considered to be true are contradictions that can be derived in classical logic. For example, consider the Liar paradox. In formal terms, the Liar is the sentence that claims of itself to be false:

$$L{:}(L) \text{ is false}$$

When one formulates the Liar sentence within a classical first-order logic with the truth-predicate, then one is in a position to derive the contradiction. *The Liar is thus a problem for the classical logician*. In fact, clas-

sical logicians and philosophers have struggled to find consistent solutions for it. In other words, the dialetheist is claiming that it is the *classical use of negation* that leads us to contradiction. Of course, classical logic does not allow contradictions to be true, and so if one wants to accept contradictions, one has to opt for a paraconsistent logic such as that of the *Logic of Paradox* (from now on: LP). Having embraced a paraconsistent logic such as LP, we are still in the position of deriving the contradiction, but now we can accept it without trivializing the system.

There is a further reason to think that the 'change of subject' objection fails. Recall that LP's account of negation respects the idea that negation inverts the truth-values, just as classical negation does. But this seems to be the key feature in order to acknowledge a connective as a negation. Negation expresses exclusion and this is formally rendered by the inversion of the truth-values. The fact that LP's account of negation has such a feature points to the fact that it is truly dealing with negation, and it is not changing the subject[3].

Priest even has a diagnosis of the mistake behind the 'change of subject' objection (Priest, 2005, §4.2): the objection confuses negation with theories of negation. Negation is acknowledged by everybody to be a fundamental aspect of language; where opinions diverge is on what people take negation to be, i.e. on their theory of negation. Classical and paraconsistent negations are thus different theories of the same phenomenon.

4. What happens to LNC when some contradictions are true?

Another important aspect of dialetheism is that the LNC turns out to be valid, i.e. each instance of the schema $\sim(A \wedge \sim A)$ is a true sentence. This is a particularly difficult point to grasp, because one has the intuitive thought that if a contradiction is true then the LNC simply fails. But if LNC is valid, then it never fails!

3 It is well-known that Routley's and Priest's critiques of Da Costa's paraconsistent negation focused exactly on this point. In Da Costa's system, negation does not always invert the truth-value: if A is false, then ~A must be true, but if A is true, then ~A may be true or false. According to Routley and Priest, because of this feature, Da Costa's negation cannot be considered a formalization of our standard notion of negation. On this point, see Berto 2003: 132-133.

Again, we may say that the problem with the previous reasoning is that it is 'too consistent'. Remember that we are speaking of a denier of LNC, and we cannot ask him to be consistent. In particular, the fact that the LNC is logically valid is not an arbitrary claim that the dialetheist exploits to answer to some possible objections; rather, it is a direct consequence of acknowledging true contradictions. Consider the schema that expresses the LNC: $\sim(A \wedge \sim A)$. According to the dialetheist, some contradictions are true (and false) while others are simply false. For those contradictions that are (only) false, their negation is (only) true. Such negations are particular instances of the schema $\sim(A \wedge \sim A)$. Now consider true contradictions. They are false as well. So their negations are both true and false. In particular, they are true, which means that all such sentences are true instances of LNC. Therefore, LNC is logically valid: all its instances are true. This is the sense in which LNC is logically valid in LP. Of course, in the latter case the instances are false as well, which means that the LNC (also) fails in those cases. Since it fails, LNC is not valid as well. In the 'space' of a true contradiction, LNC both is and is not valid. Again, we have found a contradiction.

Note that there is no instance of LNC which is only false: if an instance is false, it is true as well. This simply means that a true contradiction is also false, which we know to be a direct consequence of admitting true contradictions. That LNC is and is not valid is a further consequence of admitting the possibility of true contradictions.

5. Why don't dialetheists want to be consistent?

One part of ECPP that has puzzled most readers has been the claim that the sentence '*x* is a dialetheia' is a dialetheia too. In other words, when a dialetheist says that a dialetheia is both true and false, she is saying something true, but also false. This position is explicitly defended by Graham Priest in the paper 'The Logic of Paradox' (Priest, 1979), which was one of the key reference points for ECPP. Later, Priest slightly changed his position, and claims that only in some specific cases – one is the Liar -the claim that *x* is a dialetheia is a dialetheia too. I would like now to take a closer look at the position defended in the 'The Logic of Paradox', before going on to say something about the later position.

In 'The Logic of Paradox' (p. 238), Priest gives the following truth-conditions for the truth-predicate (*t* means true, *f* false, and *b* both true and false, while A is a sentence):

A	A is true
t	*t*
b	*b*
f	*f*

If A is true, then 'A is true' is true as well; if A is false, then 'A is true' is false; if A is both true and false, then 'A is true' is both true and false.

The situation is symmetrical with the false-predicate:

A	A is false
t	*f*
b	*b*
f	*t*

If A is true, 'A is false' is false; if A is false, 'A is false' is true, and if A is both true and false, then 'A is both true and false' is both true and false.

Given such truth- and falsity-conditions, it is clear that any claim that A is a dialetheia turns out to be a dialetheia too. Suppose a dialetheist believes *x* to be a true contradiction. She believes *x* to be both true and false, and consequently, when trying to convey her belief, she could claim something like: '*x,* which is a contradiction, is true'. According to the truth-conditions above, since *x* is both truth and false, also the claim '*x*, which is a contradiction, is true' is both true and false. The claim that something is a contradiction is a further contradiction. Just to give a concrete example, let us consider the Liar paradox, i.e. the following sentence:

L:(L) is false

and the extremely clear text provided by Littmann and Simmons (2004: 314):

> The dialetheist makes the following claim about the liar sentence (L):
> (D) (L) is true and (L) is false
> What is the status of (D)? Consider its first conjunct. Since (L) is

> both true and false, the sentence '(L) is true' is both true and false, by the table for 'φ is true'. And since (L) is both true and false so is the sentence '(L) is false', by the table for 'φ is false'. According to the truth table for conjunction, if two sentences are each true and false, so is their conjunction. So the dialetheist claim (D) is both true and false.

As noted in ECPP, this has a surprising consequence: the claim that dialetheism is true is both true and false! Let us cite Priest directly here (Priest 1979: 238-239):

> Now consider the metalinguistic statement
> (1) Some sentences are true and false
> (i.e. $\exists x$ (x is true and x is false) where the quantifier ranges over all true or false statements – which of course includes paradoxical ones).
>
> Then using the above tables [for the truth- and the falsity-predicate] and the truth-conditions for the quantifiers[4] […] (1) can be seen to be true, in fact paradoxical. Thus its negation,
> No sentence is true and false
> is true too.

Note that sentence (1) just expresses the dialetheist view, so its negation 'No sentence is true and false' expresses the negation of (the truth of) dialetheism. Here, Priest is saying that both sentences are true and false!

This position plays a crucial role in ECPP. In fact, the first part of the second figure of the *elenchos* in *Ritornare a Parmenide* §6 dismissed the partial denier of the LNC by noticing that his partial denial is inconsistent. In this context, Severino considers a partial denier of the LNC, i.e. a denier who believes that the LNC fails only in some cases, not everywhere. According to him, what grounds such a position is the intention to preserve consistency: the denier wants his denial of LNC to be a *consistent denial* of the law. Severino's strategy consists in showing that such a perspective is actually inconsistent. But, as shown above, the inconsistency is a direct consequence of how Priest has set up the semantics (of the truth- and falsity-predicate) for LP. And this set up is no accident: the

4 For the interpretation of the quantifiers see Priest 1979: 229.

reason why the meta-language must be paraconsistent too is that, if it were consistent, then the paradoxes would arise again[5]. Inconsistency is thus not a problem for somebody who wants to deny the LNC.

However, such a situation is quite strange, perhaps also for a dialetheist. A dialetheist should believe his theory to be true, not also false. But his theory delivers a slightly different result: the theory is true, but also false. Maybe for this reason or others, in later works Priest has slightly modified his view. For instance, in *In Contradiction* (Priest, 2006: 79), he explicitly claims that, in general, there is no reason why, if *x* is a dialetheia, the claim '*x* is true' is a dialetheia too. When *x* is a dialetheia, '*x* is true' is certainly true, but it might be simply true, and not (also) false. Of course, this implies rejecting the truth- and falsity-conditions seen above, and a consequent modification of the semantics for the truth-predicate[6].

In any case, Priest explicitly acknowledges that this is not the case of the Liar Paradox. Since *L* is a sentence that denies its own truth, it is equivalent to its negation $L \leftrightarrow \sim L$. By applying the T-schema $(T\alpha \leftrightarrow \alpha)$ we obtain $T'L' \leftrightarrow \sim T'L'$, which means that for the Liar we have the behaviour of the truth-predicate as in the tables above. The claim that is both true and false is still true and false.

The latter resulting position is as follows: in most cases, to claim that a sentence is a dialetheia is not a dialetheia, but there are cases – such as the Liar – where the same claim that something is a dialetheia is a dialetheia too.

This might be seen as a problem. For instance, Littmann and Simmons (2004: 317-318), write:

> But we now see the apparent high cost of such a thoroughgoing dialetheism. The theory is contradictory; it implies the falsity of its own claims about liar sentences; and every assertion that a liar sentence is true and false may be accompanied by a true assertion that it isn't.

Priest's reply has simply been to acknowledge that such sentences are dialetheias, but to notice that the fact that they are also false does not undermine their truth. These are simply more contradictions to be acknowledged as true.

5 On this point, see Priest 2006, in particular Chapter 1.
6 The details can be found in Priest 2006, §5.4.

How does this position relate to the *elenctic* strategy of *Ritornare a Parmenide*? In ECPP §3, I argued that Severino's *elenctic* argument against the partial denier of the LNC, i.e. against a denier who claims that there are two zones – C1 and C2 – the former consistent, while the latter inconsistent, fails exactly because the dialetheist has no need to be consistent. In *Ritornare a Parmenide* §6, Severino introduces this particular denier of the LNC as a consequence of the fact that a universal negation of the LNC fails: the negation of the universal opposition of the Positive and Negative is an instance of the same opposition. The denier can thus transform his negation into a partial negation: in other words, he can claim that his negation is an individuation of the law of opposition and in this way is consistent, but that there are zones of reality which are not consistent. The negation finds itself in C1 – the consistent zone, while C2 is the inconsistent one. This same argument is presented in Severino's contribution to this journal, in particular in §§6–9. The problem is that the argument is based on a misinterpretation of Priest's view. The dialetheist certainly claims that only some contradictions are true, but he has no need for his claims to be consistent. Therefore, to show that the distinction between C1 and C2 is inconsistent, and thus the same claim that 'C1 is consistent, while C2 is not' (which is the partial denier of the LNC) is inconsistent, is in no way a refutation of dialetheism. Pointing out that the dialetheist's theory is inconsistent is not enough to show that it is wrong.

6. Avoiding some misunderstandings

Let us take stock. We may think of dialetheism as posing a challenge to the defender of the LNC. The dialetheist just asks the classical logician to use the words 'negation', 'truth', and so on in the standard, classical way. Sooner or later, the classical logician will face a situation that reveals itself to be a contradiction. As an example, think of the Liar Paradox, i.e. the sentence 'This sentence is false'. If we suppose that the sentence is true, then it is false; if we suppose that it is false, then it turns out to be true. This is a contradiction that the classical logician faces as soon as he admits the legitimacy of the Liar sentence. The Liar sentence, along with the standard concepts of truth, falsity, negation, etc., gives rise to a contradiction. The Liar is just one example, but many more can be found in Priest's papers and books. All such examples are of situations where the standard (classical) use of words like 'truth' or 'negation' brings about a contradiction.

Of course it is at this point that the struggle starts. The classical logician will try to solve the contradiction, while the dialetheist will argue in favour of accepting the truth of that specific contradiction. The perspective of the dialetheist is thus that the standard use of such key concepts is inconsistent. By arguing that we should accept some contradictions, she is arguing that those concepts behave inconsistently.

Of course, the dialetheist does not argue that we should accept all contradictions. She is not a trivialist because she thinks that only some contradictions are true, not all. Nor does the dialetheist confuse the fact that we contradict ourselves with the content of a contradiction. The fact that we fall into contradiction is not enough to prove the truth of that contradiction. Such a proof is given by the arguments that the dialetheist uses in favour of that contradiction and against the solutions proposed by the classical logicians. In the case of the Liar Paradox, the argument in favour of it being a true contradiction is given simply by the derivation of the paradox, while many efforts have sought to show the problems of the consistent solutions. If all consistent solutions fail, then we should accept the contradiction. Or at least, this is the idea of dialetheism[7].

7. Severino's second figure of elenchos

The heart of the elenctic strategy in *Ritornare a Parmenide* is the second figure of *elenchos* (in particular the last part, where Severino looks at what happens within the supposed contradictory zone C2). Here Severino considers a denier of the LNC who affirms that there are true contradictions of the form x=y. 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≠y'. In other words, to have a contradiction, one must claim that x and y are distinct (x≠y) and not distinct (x=y).

7 Admittedly, such an argumentative strategy is quite weak. However, dialetheists have also given positive arguments, whose conclusions are not that this or that contradiction is true, but that there must be some true contradiction. One example is Priest and Routley's use of Gödel's theorem in the formalization of the naïve notion of mathematical provability; see Priest 2006, Chapter 3.

The relation between the two contradictory sentences is one of grounding ('x≠y' grounds 'x=y'). This means that there is an asymmetry: 'x≠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≠y' *must* be true too. The verb 'must' in the last sentence indicates that the truth of 'x≠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. But we know that dialetheism is challenging the way in which classical negation works. So the question is: how are we to understand negation in Severino's argument?

The first option considers negation as classical negation. The consequence is that the argument works. The fact that 'x=y' requires the truth of 'x≠y' implies that 'x=y' is simply false. In classical logic, of two contradictory statements, 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.

The other option is to consider negation as depicted in LP. In such a paraconsistent logic, two contradictory statements might be simultaneously true. In fact, this happens whenever we have a true contradiction. But this means that the truth of 'x≠y' is not enough to exclude that also 'x=y' is true. Both might be true, and Severino's argument is therefore inconclusive.

7.1 A remark on the foundation relation

The fact that the negation of the LNC 'x≠y' is *grounded* on the truth of the sentence 'x≠y' has been interpreted as the claim that the sentence 'x≠y' must be true if the sentence 'x=y' manages to express a negation of the LNC. In this sense, the truth of 'x≠y' is what makes it possible for 'x=y' to be *a negation* of the LNC. We know that the truth of 'x≠y' makes 'x=y' false (because negation inverts the truth-values). But from the fact that the sentence is false we cannot conclude that it cannot also be true, because true contradictions are propositions which are both true and false. But isn't the fact that 'x≠y' is true and grounds 'x=y'

enough to exclude the possibility that 'x=y' will be true as well? Doesn't the fact that x and y are different imply that x cannot be the same as y? I admit that it is very difficult to conceive of a situation like this; however, this is not the point of my criticism. The point is the following: the fact that when formalized within LP the argument does not work (because the truth of 'x≠y' cannot exclude that 'x=y' is true as well) shows that the second figure of *elenchos* crucially relies on a consistent notion of negation (such as classical negation), and in this way the argument begs the question.

It is important not to confuse such an interpretation of the foundation relation with a different – and misleading – interpretation. According to the latter, the sentence 'x≠y' grounds 'x=y' in the stronger sense that it fully (or completely) determines the truth-value of 'x=y'. In such a scenario, it is difficult to think that there could be true contradictions, because the truth of 'x≠y' seems to require that 'x=y' is only false. However, such an interpretation is misleading, because to require that 'x≠y' *completely* determines the truth-value of 'x=y' means either to presuppose a classical account of negation (where the truth and false are exclusive) or, alternatively, to require that *the reason why* we claim 'x=y' (i.e. the reason why we claim that there is an identity between the different x and y) is simply that there is such a difference (i.e. it is simply that 'x≠y' is true). We would claim that x is identical to y because of (in virtue of) their difference. But this is clearly false. We need to recognize that x and y are different, in order for the claim that they are identical to be a negation of the LNC, but the reasons why one might believe that two contradictory statements are both true are usually (if not always) distinct reasons[8]. Since such reasons are distinct, and the *grounding* relation only implies that 'x≠y' is true, we cannot exclude that 'x=y' may be true as well.

8. What about incontrovertibility?

A common complaint coming from people working within the Severinian tradition is that the dialetheist argumentative strategy fails, because it cannot provide an *incontrovertible ground* for the truth of dialetheism. Even if we find an abundance of arguments in Priest's work, they are not incontrovertible: dialetheism would be nothing more than a hypothesis.

Against this objection, one should note that by definition a hypothesis can be true or false. The fact that dialetheism would be a hypothesis does not imply that it is (only) false. Such an objection does not show that dialetheism is wrong. Second, the objection is completely blind to the intermediate space between an incontrovertible argument and the absolute lack of an argument. This is the space of reasons – good or bad, strong or weak. Even if dialetheism fails to provide us with an incontrovertible argument, it gives us many reasons (and some of them are very clever and witty) in favour of its view. They may not be incontrovertible, but they are still reasons. Consequently, if one does not like dialetheism, one cannot merely point to the hypothetical nature of dialetheism, but must show why such reasons fail.

The accusation of the lack of incontrovertibility does affects not only dialetheism, but also the thesis that I defend in ECPP according to which the *elenchos* is a *petitio principii*. Since in Severino's philosophy it is the elenctic argument that guarantees the incontrovertibility of its theses, if the *elenchos* fails then its theses are no longer incontrovertible. However, in that paper I claimed that the same claim that the *elenchos* is a *petitio principii* is not incontrovertible. Again, what I claimed is to have good reasons (very good indeed) to support such a view. But here there is one more aspect to consider, because my paper shows a failure in Severino's elenctic argument. As such the burden of proof lies with the defender of the *elenchos*: they need to show that my thesis is wrong. To simply claim that it is not incontrovertible is not enough to show that it is false, just as to claim that something is a hypothesis is not enough to claim that it is false.

There is a final reason why it is simply wrong to ask that the thesis in ECPP be incontrovertible. That paper shows that the *elenchos* fails to provide incontrovertible reasons. On the assumption that the *elenchos* was the only strategy available to provide incontrovertible reasons, if my paper is right, no incontrovertible reasons can exist, and so no incontrovertible reasons can be developed to support the thesis in ECPP.

8 I refer the reader to ECPP §3.4 (861–862), where this interpretation has been discussed at length and ultimately rejected.

9. Conclusion

In this paper, we have looked in more depth at some specific features of dialetheism in order to clarify them. Moreover, we have utilized such clarifications to re-expose some key passages of my critique of the elenctic argument. The general idea that I have defended is that the elenctic strategy fails because it presupposes a consistent account of negation, i.e. it presupposes an account of negation that is incompatible with true contradictions. But if there were true contradictions, then negation behaves differently, and the truth-table of LP is a possible (and very intuitive way) of characterizing such behaviour.

From a logical point of view, the presence of different systems of (formal) logic implies that there are different logical theories of how negation behaves. Different theories of negation implies different consequences for the Law of Non-Contradiction: the classical theory implies that no contradiction is true, while a theory such as LP allows for some contradiction to be true. The problem is therefore how to evaluate such different logical theories. Is there a way of choosing one and dismissing the others? This is a very difficult question that I do not intend to settle it here. I will only say a couple of things about it. First, it should be clear that the *elenctic* argument cannot provide any reason to choose the classical theory. This is because, in order to work, such a strategy presupposes the classical theory of negation; but we need to justify such a theory, not to presuppose it. Second, no purely logical argument can give us reasons to choose one theory above another. In fact, a purely logical argument can be formalized within a logical system. But there are different systems, and an argument that is valid in one can be invalid in another. Of course, the existence of a plurality of logical systems does not imply that there are no logical laws which are transcendentally valid, i.e. the existence of paraconsistent logics does not imply that the LNC ontologically fails. However, such a plurality poses a challenge to the reasons we have to believe that a law like the LNC is transcendentally valid. And any purely logical argument can be seen as begging the question to a certain logical system.

But if logic fails, where are we to look for such reasons? Do we have to embrace a relativist position concerning logical laws? I do not think this would be a good answer to the problem. The only available option I see, when it comes to where to look in order to find reasons to prefer a logical theory of negation above another, is *metaphysics.* More specifically, what one should do is to defend *a metaphysical account* of the nature of

negation, and to use such an account to justify a certain logical behaviour of it. For instance, Priest defends a metaphysical account of negation where when we assert a contradiction – $A \wedge \sim A$ – we are giving a piece of information (i.e. A) and then we are adding a further piece of information (i.e. $\sim A$) which is inconsistent with the first piece of information. On such an account, every contradiction has a specific content that defers from that of other contradictions. But other accounts exist. For instance, one may think that when we claim '$A \wedge \sim A$' we are giving an information (A) and then deleting it ($\sim A$). On such an account – known as the cancellation account of negation – no contradiction has a content, which implies that no contradiction can be true.

These are just two options; others are available. In my view, the failure of *elenchos* shows that the discussion of dialetheism should be moved from a purely logical discussion (where one tries to dismiss the view on logical grounds), and should instead be brought to a metaphysical level.

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