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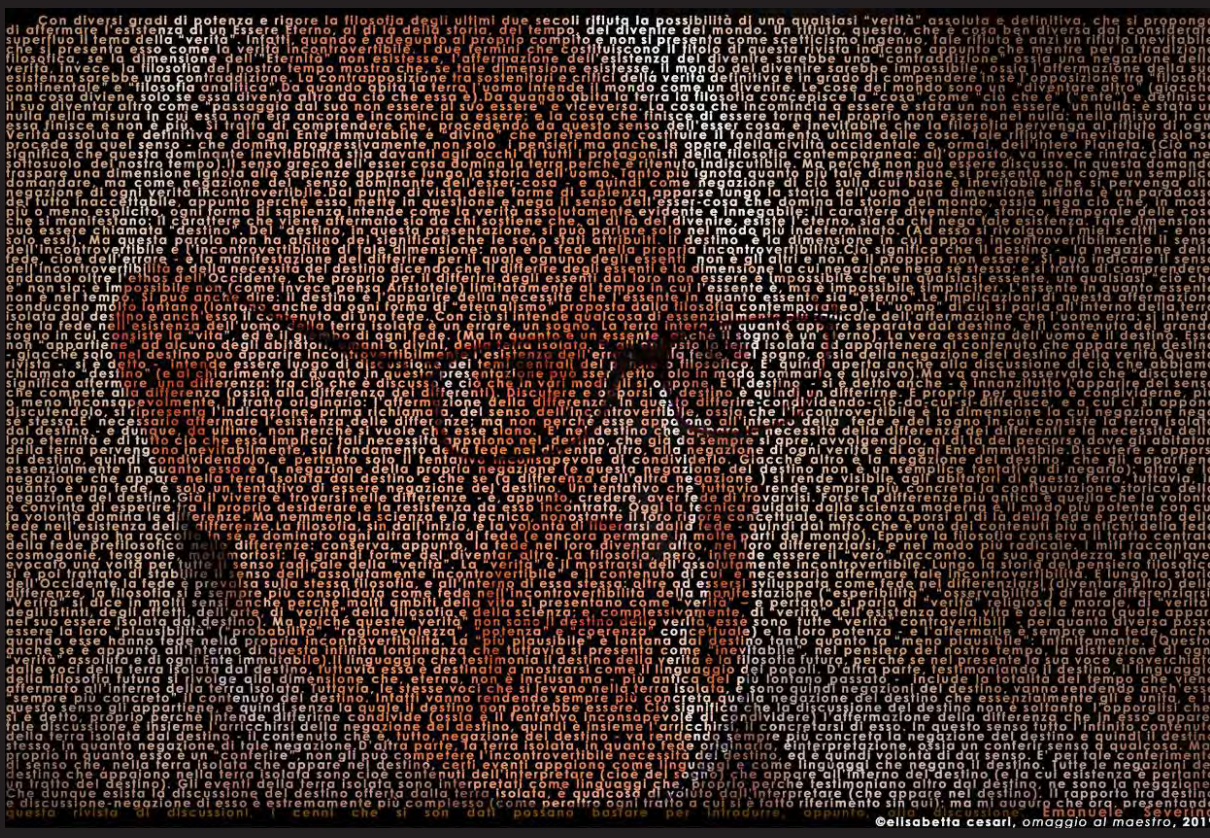

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Opening Note

by Giulio Goggi

In 2018, the ASES celebrated the the 50th anniversary of *La struttura originaria*. In that occasion, the ASES invited prof. Graham Priest to discuss the problem of "contradiction" with prof. Emanuele Severino. After the opening meeting, the philosophers continued their dialogue. This issue of the «Eternity and Contradiction» contains the result of that dialogue.

Prof. Severino is gone... Yes, that's what it is. Emanuele Severino as an empirical individual, as an empircal will, is dead. But death of the empirical individual is not its nullification: death as annihilation is not something visible, and the truth is that no being – therefore not even an instant of the individual existence – can become nothing. Moreover, what we say "empiric individual" is one of the things that isolating faith (which wants to *become other of beings*) believes to be. What man is – what we all really are – is the appearing of the truth of being that implies the eternity of being *insofar as it is being*. Severino calls "the Self of destiny" the dimension in which all the eternal beings, including the empirical individual, begin to appear. And the appearing of death inside the "the Self of destiny" in which the will dies, is the extreme imminence of Joy to which we are all destined: an infinite path awaits us along which ever larger dimensions of being are destined to come forth.

Severino said that a tree is judged by its roots, not by its fruits. The roots are the incontrovertible primal structure of truth. The fruits are its implications. The content of the E&C intends precisely to be rooted in that structure.

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Federico Perelda

Who is afraid of contradictions? A general introduction to the debate between Severino and Priest

This paper is divided in two parts. In the first, I sketch the debate between Priest and Severino on the principle of non-contradiction (henceforth PNC) and its defence. I explain what the challenge to PNC amounts to, by distinguishing paraconsistency from dialetheism. Later I will dwell on Severino's broad conception of PNC integrating the laws of identity and of non-contradiction into a more basic law that can be dubbed the principle of ontic determinacy. A crucial point in the dispute is the conception of negation, that is, whether or not the PNC denier, while claiming a dialetheia, must avail herself of the exclusive negation, despite her intentions. If so, the charge is not so much of inconsistency but of holding a self-undermining position as any proposition affirming a dialetheia would be grounded on PNC itself.
In the second part, I propose a mild interpretation of dialetheisms. By considering some reasons supporting it, I suggest that it is motivated by the view that reality is over-determinate, rather than in-determinate (as it would happen, according to Aristotle and Severino, if PNC turned out to be false), and by the fact that the conceptual, linguistic expression of this over-determination leads to contradictions. A dialetheia is, as it were, a two-footed creature whose being simultaneously both true and false is grounded upon two (or more) different facts. These are mutually conflicting and thus play the roles of, respectively, verifying and falsifying the very same proposition. The existence of these facts, however, must be an univocal datum also for a dialetheia. If so, dialetheism does not jeopardize the view that reality, at least at its most fundamental level, is absolutely determined – just as Aristotle and Severino claim.

Keywords:
Law of non-contradiction, dialetheism, Aristotle, Severino, Priest negation, transcendental argument, identity

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In March 2018 in Brescia, Graham Priest took part in the final debate of a conference dedicated to the thought of the Italian philosopher Emanuele Severino. The discussion focused on the principle of non-contradiction (henceforth PNC), on its universality and on its defence, with particular reference to the position expressed by Severino in the essay *Returning to Parmenides*[1]. Priest is one of the leading figures of paraconsistent logic and of the philosophical current known as *dialetheism*. These two positions, one logic and the other more broadly philosophical, are peculiar because they are condescending to contradictions, albeit in a different way. That discussion therefore had as protagonists a staunch defender of PNC, on the one side, and a sophisticated critic of it, on the other. The debate could not have moved from more radically opposing theses and could hardly have involved more radical thinkers.

What follows is divided into two parts. In the first, I shall provide an overview of the issues discussed on that occasion and in this volume, as well as some interpretative clues for understanding the debate. First of all, I shall briefly indicate what Priest's criticism of PNC consists of, and what is the crucial point in the debate between him and Severino, as it emerges from the various contributions. Later I will dwell on what Severino considers to be the fundamental principle and its formulation, in order to avoid some misunderstandings. In this context, it will emerge how the discussion hinges upon the so-called *limited* negation of PNC, and upon the meaning of *negation*. In the second part, I shall propose a philosophical interpretation of dialetheism that might reduce the distances between it and Aristotle's and Severino's doctrines (at least with respect to some ontological aspects). My interpretation is based on the following remark. In Aristotle and in Severino PNC has an ontological val-

1 *Returning to Parmenides* and the relative *Postscript* were originally published, respectively, in 1964 and 1965, and then reprinted in *The Essence of Nihilism* (1972), recently translated into English (E. Severino 2016).

ue and its negation is equivalent to thinking that things are radically *indeterminate* (*aorista*)[2]. However, the view that reality is totally indeterminate is not endorsed by Priest, who indeed rejects the so-called *trivialism*, i.e. the view that all contradictions are true, that everything is the case and not the case[3]. By considering some of the reasons supporting dialetheism, I shall suggest that it is motivated not by the view that reality is indeterminate, but rather that reality is *over-determinate*, and by the fact that the conceptual, linguistic expression of this over-determination inevitably leads to contradictions. From this point of view, I shall propose that, whether or not this overabundance gives rise to inconsistencies, there is room for an interpretation of dialetheism according to which reality, at its most fundamental level, is ontologically univocally determined. And this is not so far from Aristotle's and Severino's views. This idea is further developed in the paper co-authored by E. Boccardi and F. Pereda included in this volume.

Who is afraid of contradictions?

First of all, to better understand the debate, it is necessary to explain the peculiarities of Priest's position with respect to contradictions[4]. The reader already familiar with paraconsistency and dialetheism may skip this section. If in a reasoning starting from some premises one reaches a contradiction, it is generally assumed that one of them is false. Why? Because contradictions are unacceptable. But why are they so? Various answers can be given and Priest has the merit of having shown that none of them is obvious. Here I consider two of the most relevant ones. One can invoke, for example, the venerable PNC[5] which establishes, with a certain approximation, that no contradiction is true. This is an absolutely convincing and sufficient answer for many. There are, however, also other

2 See V. Politis (2004), ch. 6, §4.
3 See G. Priest (2005), ch. 3 'Trivialism'.
4 See G. Priest (2006), (2007).
5 The first formulation of PNC is found in Plato's *Euthidemus* (*Euth*. 293 d); others are present in other dialogs (*Gorgias*, *Republic*, *Parmenides*); the canonical formulation, however, is due to Aristotle, in the gamma book of *Metaphysics* (*Met.* IV, 3 1005 b 19-22).

options that can be explored. In the so-called classical logic (which, despite the name, is not so ancient, going back to Frege's and Russell's axiomatic formulations of logic), no contradiction is admissible: indeed, from the acceptance of even just one, anything can be deduced, with few logical steps. If a contradiction is true, then everything is true and also the opposite of everything. Clearly, one can no longer reason.

These few logical passages were invoked by Popper[6] who sanctioned the unreasonableness of the Hegelian and Marxian dialectical method which, according to Popper, purported to make a fruitful use of contradictions, passing unscathed trough them. Yet, so he objected, if one admits a contradiction, then anything goes. This kind of bankruptcy of reasoning is called nowadays *explosion*. Classical logic (the one taught everywhere in the basic logic courses) is *explosive* in the aforementioned sense. Interestingly, according to Priest's historical reconstruction, neither Aristotle's logic nor the logic of the Stoics were explosive[7]. Explosion, rather, derives from a certain conception of negation, so-called Scotian, regimented in modern times, such that anything follows from the false. This aspect is also recorded by some idiomatic expressions in many languages. In English, for instance, it is customary to say: 'Yes, and pigs might fly!' This and the equivalent expressions in other languages embody the view that if what is false is also true, then everything is true. The threat of explosion, therefore, is the main motivation of the classical rejection of contradictions.

Aristotle does not seem to have had these concerns about the contradictions: his logic, Priest has shown, is not explosive after all. Aristotle, in fact, seems to consider cases of syllogisms whose premises are inconsistent[8] without this entailing that everything can be deduced from them. Perhaps Aristotle did not even know the phenomenon of explosion, or perhaps his notion of negation does not imply it in a strict technical sense. This does not mean that Aristotle liked contradictions: quite the contrary! Indeed, for Aristotle, PNC is a principle of thinking and reasoning without which no sensible discourse would be possible; so, in a broader (though not technical) sense, Aristotle's logic is explosive after

6 See K. Popper (1940).
7 See G. Priest (2007), pp. 120 and ff.
8 See G. Priest (2007), p. 120; Aristotle, *An. Pr.* 63b 31-64a 16.

all[9]. Be that as it may, and leaving aside the historical-exegetical aspects of the question, Aristotle rejects contradictions on the basis of PNC, which he considers undeniable and the firmest of all principles.

Now, if the explosion is the only logical problem with contradictions, then the news, for some decidedly good, is that there is a remedy: explosion can be defused. There are in fact some logical adjustments, concerning for instance negation (the extent and depth of which are questionable) thanks to which contradictions no longer imply everything. The mine is disarmed. This gives rise to the family of so-called paraconsistent logics[10], that is, to those systems working despite the presence of some contradictions. In other words, even if there is a contradiction one can still reason because the system does not explode. This can be very useful, as there are many circumstances in which in fact we implicitly or explicitly admit contradictions, without thereby believing that then everything is true. In fact, when we notice an inconsistency we think that there is something wrong in the premises; nevertheless we continue to reason, waiting to be able to amend the error. One can find some examples of this attitude in mathematics and science. The original formulations of the calculus contained inconsistencies concerning the very notion of infinitesimal (which is considered both zero and different from zero, as Berkley famously pointed out); they were amended only long after, when Cauchy and Weierstrass refounded analysis, banishing infinitesimals. But before that, nobody had seriously thought that, given the inconsistency of calculus, then everything had to be thrown overboard and everything could be claimed. Similarly, there is a notorious tension between general relativity and quantum mechanics. General relativity is basically a theory of gravity, which does not cease to be valid at a small scale. A serious problem arises, for example, with respect to the first moments of the universe, when this was so small

9 Aristotle purports to claim that PNC is presupposed anytime someone says 'something meaningful'. So, if PNC were false, nothing (no word) would be meaningful and 'there would be no statement for such a person (the denier), either in response to himself or to anyone else' (*Met.* 6a 22). So it seems that for Aristotle PNC is at least a necessary condition for the possibility of thought and language about things. Of course, for him PNC is more than this; it is true of thing in themselves, of entities qua beings, i.e. without any further qualification, and not of things only inasmuch as they are object of thought or are captured and expressed by a language.

10 On this see, in addition to the various works of Priest, F. Berto (2007, part II, pp. 107 ff.).

and massive that in describing it one is forced to apply both general relativity and quantum mechanics, engendering contradictory predictions. Probably many, also for this reason, think that one or both theories will prove to be false, sooner or later; however, while waiting for a better theory replacing them, scientists accept them both, in fact also accepting their inconsistency. Yet, nobody thinks that from this acceptance in the meanwhile it follows that anything goes.

Even in everyday life we sometimes have contradictory beliefs, though not patently such. For example, one can be convinced (I have been) that, in a somewhat labyrinthine city a certain road is parallel to another and that a side street orthogonal to the first diagonally intersects the second. Now, if all these roads are straight, this is obviously contradictory. In general, it is possible, indeed very probable, that some contradictions may lie hidden in our belief network, and that this appears coherent just because and so long as we do not consider our beliefs and their implications all together simultaneously. In fact, in a discussion the ability of an opponent consists in uncovering a latent contradiction in the interlocutor's complex of beliefs. Nonetheless, it is not the presence of one or more latent contradictions in one's set of beliefs (and in some cases not even the manifest contradiction among any of them) which prevents one from reasoning and holding a certain position in a debate. Of course, a contradiction is a problem, but this does not make it impossible to rationally discuss. For this reason, paraconsistent logic seems to be the most suitable, or at least more suitable than the classical one, to shape our actual way of thinking and reasoning in everyday life as well as in science. But there is more than that, regarding the unacceptability of contradictions.

Let's also assume that we can adopt a paraconsistent logic and that we are thus able to reason in the presence of one or more contradictions, putting them, so to speak, in quarantine. Well! An Aristotelian at this point will tell us that the contradictions still remain unacceptable, even though their disruptive charge with respect to the implication has been defused. Why? We said it before: simply because PNC holds. The question that arises at this point is: but can one deny PNC, or is it a kind of absolutely inviolable *sancta sanctorum*?

Dialetheism is a position that not only embraces paraconsistency, but that also affirms that some contradictions are true. Here a clarification is in order: *some* contradictions are true, but not all of them are. Here the challenge is posed to PNC, to its proclaimed undeniability. Today there are various formulations of PNC, not always equivalent, which have

been characterized as syntactic, semantic, pragmatic or psychological[11]. Moreover, also in Aristotle there are various formulations, with some interesting differences[12]. However, let's consider the best-known version[13], which could be so rephrased: "for any object x and any property F, it is not possibly the case that x is both F and non-F"[14], in the same sense and at the same time. Here there is a double quantification: *for any* object and *for any* property, and a modal operator. Therefore, according to the so-called square of opposition, applied in succession to the two quantifiers, there are various negations of that statement (not to mention the modal operator and the relative opposition square). There is no need here to weigh down the discussion with unnecessary details; it is sufficient to keep in mind that the position *contrary* to the law of non-contradiction is that for "any object x and any property F, it is the case that x is both F and non-F", i.e. everything has and does not have every property. In other words: the world turns out to be totally indeterminate, and all contradictions are true. A crazy position, obviously (more on this later). But this is precisely the *contrary* position, not the *contradictory* one, of the principle. The contradictory denial of the principle merely states that *some* contradictions are true, that is, there are some things that both possess and do not possess certain properties.

One may wonder who exactly are Aristotle's opponents; this is a question of a historical nature, but not only. In fact the criticism, also moved by Priest[15], is that Aristotle confuses or even conflates two very different negations of PNC, that is, respectively the *contrary* negation and the *contradictory* one. In this way, Aristotle's defence of PNC seems insufficient in refuting his opponents, because only the contrary position, to which the contradictory would be surreptitiously assimilated, is clearly unsustainable. Priest's criticism, on closer inspection, does not seem to be fully correct, since "Aristotle is clearly aware of the distinction between the view that some things are both F and not-F and the view that all things are both F and not-F (see especially 1008a7–12)"[16], when he takes into

11 See J. Łukasiewicz (1910), S. Haack (1978), p. 244, P. Grim (2004).
12 See V. Raspa (1999), pp. 33-61, W. Cavini (2007-8).
13 See note 5.
14 See V. Politis (2004), p. 122.
15 See G. Priest (1998).
16 V. Politis (2004), p. 140.

consideration those (Anaxagoras, Democritus, see *Met.* 1009 a 22f) who countenance inconsistencies only in the special case of changing things (it is true, however, that most of Aristotle's arguments seem to be directed against the extreme denier of PNC). Severino is also well aware of the different quantifications: he distinguishes two negations of what he calls the principle universal opposition (which he considers equivalent to PNC): the general and the limited one. Now, regardless of exegetical problems with the Aristotelian text, it is clear that the dialetheist challenges only the universal validity of PNC.

On the un-deniability of the principle of non-contradiction

Dialetheism challenges the alleged indisputability of PNC. But how would this indisputability be supported? This is a thorny question but there are some fixed points. Clearly any argument in favor of the undeniability cannot be demonstrative in nature: as PNC is a principle, it is not demonstrable. But there is more in the Aristotelian context (and also outside of it); PNC cannot be proved for two reasons: because it is a principle, and because it is more specifically a 'principle of reasoning' (*sillogistike arké Met.* 1005 b 7). That is to say, in contemporary terms: all deductive reasoning are based on the notion of logical consequence the usual definition of which (most likely accepted also by Aristotle) is that it is impossible that if the premises of a deductive reasoning are true, its conclusion is false. *Impossible* here means: contradictory. Thus, if the validity of a deduction presupposes that PNC holds, the latter cannot be proved by deduction, a fortiori.

Therefore, any argument in defense of the PNC cannot be deductive, much less a *reductio ad absurdum* which also presupposes that no contradiction can be true. Indeed Aristotle never charges his opponent of inconsistency: he perfectly knows that the disputant is prepared to accept contradictions; so they cannot be refuted in this usual way. So how does Aristotle's defense of PNC work? In this regard there are some interpretative problems, and the literature on this topic is wide. Of course, Aristotle provides arguments centered on the thesis that whoever denies the principle does so only in words, because in the linguistic act of giving meaning to his words he implicitly makes use of PNC and so presupposes its validity. This is the famous *elenchos* which can be considered a kind

of performative, transcendental argument[17]. This argument, mind you, does not *ground* the principle: 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); rather, the *elenchos* is a reason to *believe* the principle is true. After Aristotle, however, not much else seems to have been done in defense of the principle[18].

In Severino's thought PNC, duly reformulated, has a central role, above all for the consequences with regard to ontology. Severino maintains a position that could be considered, referring to the contemporary debate in the philosophy of the time, as a form of (dynamic) eternalism (in some way similar to the so-called moving spotlight view), precisely because, according to him, presentism (or any other ontology which admits absolute becoming) implies contradictions concerning existential propositions[19]. Indeed, to say that something no longer exists implies, for Severino, to have a singular proposition about a thing, which denies the existence of that very thing. Now, if singular propositions have the entities themselves as constituents and so are existence-entailing, it is clear that every negative existential singular proposition turns out to be false. Severino's argument in its fundamental features runs similarly to Williamson's argument in favor of the necessity of the existence of every entity[20]. PNC, therefore, precisely because of its ontological significance, plays a fundamental role. Severino considers it undeniable and dubs it the "destiny of truth", that is, that whose denial is self-undermining.

However, the discussion between Severino and Priest does not focus on ontology or on whether everything is eternal or not; rather, it revolves around logic and the defense of PNC. Priest already analyzed Aristotle's defense, judging it negatively[21]: According to him, Aristotle's arguments are not compelling (Priest's criticism is somehow akin to Łukasiewicz's one). In more recent times, Priest had the opportunity to read Severino's defense of PNC formulated in *Returning to Parmenides* and he considers it no more convincing than the Aristotelian one; he recognized, however,

17 See A. Bardon (2005).
18 See E. Tugendhat, U. Wolf (1989), ch. 4.
19 See F. Perelda (2016), (2017).
20 See T. Williamson (2002).
21 See G. Priest (1998).

that it is the most tenacious defense of PNC ever undertaken from the time of Aristotle onwards.

The text in which Priest expound his critical considerations is contained in this volume; Severino prepared a rejoinder, partly exposed at the conference; then he enriched it with other passages in view of this publication. The reader can get an idea for himself. However, in what follows I want to emphasize that the pivotal point of the dispute is the very notion of *negation*. I would like to dwell briefly on it and on Severino's formulation of the principle, first of all to dispel certain misunderstandings.

Against trivialism

A point already briefly discussed, which however deserves to be explored further, is the difference between trivialism (all contradictions are true) and dialetheism (only some contradictions are true). It is not without interest to compare Priest's and Severino's attitudes towards trivialism. In this regard, Priest acknowledges that the dialetheist and the 'classic' thinker are together in opposing trivialism. Yet, it can be noted that the dialetheist seems to have more difficulties than the classical thinker. The dialetheist, indeed, has or could have the enemy at home, as it were, since trivialism, since trivialism in a system like *Logic of Paradox* (henceforth LP) is a logically admissible scenario (one for which all the statements are both true and false). So let me sketch how Severino and Priest reject trivialism[22].

According to Severino the elenchos has two formulations, or steps, having partly different argumentative structures, addressing different opponents and thus aiming at proving different theses. The first figure addresses trivialism, while the second concerns dialetheism. As far as the former is concerned, Severino maintains that every position, including the extreme denial of PNC, must be a determinate position in order to mean what it means, to be what it is, i.e. that certain negation it is and nothing else (the negation of PNC is not a fried egg, to begin with). In other words, the negation, the speech act of denying any validity of PNC presupposes (at least in this limited case) the structure of determinacy, i.e. identity and difference, the opposition between being and not-being.

22 Priest deals specifically with trivialism in G. Priest (2006), ch. 3.

Thus (a proposition claiming) trivialism is *grounded* in what it denies, being a determinate being or meaning. This circumstance generates a performative contradiction which renders trivialism a self-refuting position. Obviously, the charge addressed against trivialism is not that of being inconsistent, as the trivialist is prepared to accept inconsistencies (as already seen in the case of the Aristotelian defence), but that of presupposing as true what is denied. The first figure of the elenchos is, in other words, a transcendental argument, whose upshot is what Priest dubs the Law of non-Triviality (henceforth LNT).

Priest seems more lenient than Severino towards trivialism. On the one side he marshals against trivialism a transcendental argument based on phenomenology concerning the act of choosing[23]; but he also believes that there are no knockout arguments against it. In particular, Priest does not consider binding the argument, which can be traced in Aristotle's *Met. gamma*, according to which if trivialism were true the language would be meaningless[24]. One can object to Priest that he is even too condescending towards trivialism, because also the trivialist must take a stand against his opponent in a discussion, after all: otherwise there is no dissent and no rational discussion takes place, not even that concerning trivialism. This circumstance seems to imply a performative contradiction, which is not far from what Severino's first figure of elenchos unveils. In such a vein, some authors, such as Karl-Otto Apel[25], have acknowledged a legitimacy to PNC inasmuch as it belongs to the transcendental-pragmatic conditions of communication and rational discussion. Indeed, the trivialist may utter whatever he wishes, of course: she can both assent to and reject what her interlocutor says; she may agree with whatever her interlocutor says. Anything goes. Yet, if she wants take part to a rational discussion, she is to make her position clear playing the 'language game of argumentation'. This game has its own rules, just as chess does. If a trivialist wants to play chess she must accept some rules: otherwise she does not play chess. Maybe she does something else, but of course, whatever she does, he does not play chess. The same goes for communicative praxis. The rules of the 'communicative game' are its pragmatic-transcendental conditions, among which a version, perhaps limited, of PNC.

23 See G. Priest (2006), pp. 69-71.
24 Ivi, p. 68.
25 See K.-O. Apel (1972).

This, of course, does not turn PNC conceived of as a pragmatic condition into a metaphysical principle, but still it makes it a necessary requirement for interlocutors being able to discuss and disagree. In any case, in the discussion between Severino and Priest, what is at stake are not the different ways how both reject trivialism, but, once this is done, whether or not some contradictions ca be true or not.

Negation and ontic determinacy

Severino conceives of negation as an *exclusion*, just like classical logic does; but he interestingly applies it not only to sentences, propositions or judgements (meaning it as a logical constant), but also and above all to entities, terms: for him, every difference even simply numerical among entities is or implies *negation*. This explains Severino's peculiar formulation of PNC, which assimilates it to the low of identity: "Being is not not-Being", "the positive is not the negative". In other contexts, Severino speaks of the 'undeniable being-itself of being', i.e. of any entity. These formulations seem pretty different from both Arisotle's and the contemporary formulations of both PNC and the law of identity. All this can lead to misunderstandings. But there is a reason to support Severino's formulation, which purports to grasp the common root of both the law of identity and PNC. Severino's basic principle could be called *the principle of ontic determinacy*. Let me explain it in some steps.

First of all: there are many things, different from each other; they are determined. So, one can say: "Everything is what it is, and not another thing" (as Bishop Butler said, as quoted by Wittgenstein)[26]. For example: this table is not this computer. Anyone familiar with the rudiments of the philosophy of language may notice that, while in the canonical formulation of PNC the verb 'to be' has *predicative* meaning, here instead it expresses *identity*. Now, identity and difference are opposite concepts, so that if two things are different, then they are not identical, and vice versa. But for Severino there is more: simple ontic determination is not conceivable without negation. The mere notion of being (of pure Being, as Hegel said) in Severino (as in Hegel) is not sufficient to think about the

26 See L. Wittgenstein (1969), p. 84-84e, 15.10.1916.

plurality of entities: the non-being, negation is also needed. In fact, for Severino, the only genuine ontological deep innovation after Parmenides is the so-called philosophical parricide of Parmenides carried out by Plato in the *Sophist* (241 d3), that is, the introduction of the sense of non-being as being different[27]. Put in set-theoretic terms, one can think of a singleton and its complement: they relate negatively to each other, because they are mutually exclusive and jointly exhaustive. Yet, for Severino negation precedes set theory, because it must be applied to everything: objects, sets, concepts, universals and whatever else there may be. This ontological conception of negation is not an invention of Severino: it aligns with a metaphysical tradition that conceives negation as something that concerns not only sentences, but also entities. In this way negation is not so much opposed to the affirmation, but to reality, to positivity, to being, to perfection (using the metaphysical jargon of Aquinas, Scotus, Suarez, Descartes, Spinoza, Leibniz, Kant, Hegel, etc.). According to scholars, this conception of negation has its origin in Aristotle's notion of privation (*steresis*) and then has been developed by the Scolastics and later in the metaphysics of the moderns[28]. That notion is still present in Hegel when he praised Spinoza's claim that every determination is negation[29]. Severino fully agrees with this, and finds the essence of it precisely in Aristotele's *elenchos*.

Ruling out theory of meaning

Priest notices in this regard that Severino seems to endorse a form of ruling out theory of meaning (henceforth ROTM), that can be traced back to Spinoza's dictum 'omnis determinatio est negatio'. According to ROTM to be meaningful or to be a meaning implies to rule out something. Priest's criticism is that ROTM, besides being a somewhat bizarre

27 "[T]he Platonic 'parricide' […] was the only deepening of the meaning of Being to be achieved by metaphysics after Parmenides", E. Severino (2016), p. 45.

28 See J. Ritter, K. Gründer (eds.) (1984), the entries: *Negation*, *Negation der Negation*, columns 671-692.

29 "That determinateness is negation posited as affirmative is Spinoza's proposition: omnis determinatio est negatio, a proposition of infinite importance", G.W.F. Hegel (2010), p. 87.

theory far from the mainstream, seems to be incorrect as there are meanings that do not rule out anything (the meaning of 'being nameable', for instance)[30]. To this remark one can reply that even though this theory is not common (since the mainstream are the truth-condition theories of meaning), there are some exceptions interestingly interlaced with the point at issue. For instance, some aspects of Robert Brandom's theory of meaning (partly inspired by Hegel) seem to be akin to ROTM. The core of Brandom's view is that meanings are not only different from each other, but also in some relevant cases mutually incompatible (he talks, referring to Hegel, about a 'modal robust exclusion' between meanings), as for example 'round' and 'square'[31]. To grasp a meaning amounts to grasp also some contents incompatible with it. So, if Priest's objection is that ROTM is untenable because there are meanings that apply to anything, one can reply in light of Brandom's (or, better: Hegel's-Brandom's) ROTM, by distinguishing two versions of it, depending on whether the incompatibility concerns the *sense* or the *reference* of concepts. Priest's criticism is a problem for the reference-depending version of ROTM; but it seems to fail in the case of the modal robust exclusion among concepts. In other words: given ROTM, a door could be both open and not open but not both round and square; otherwise this would jeopardize the intelligibility of the very concepts themselves.

Anyway, it is true that Severino endorses a generalized version of ROTM even to the extent that his view recalls Leibniz's monadism: what a thing is not, its negative, contributes to define what that thing is, to individuate it. So, to really grasp what a thing is implies, just as in Leibniz, to grasp the whole to which the thing is inherently connected. This has remarkable consequences within Severino's thought (as in Leibniz); at any rate, however, these are not relevant for the point at issue.

Principle of ontic determinacy

Now, even conceding all this, what does this ontological notion of negation have to do with PNC? Of course, identity and difference are (rela-

30 For more details, see G. Priest (1998, § 1.12).
31 See R. Brandom (2001).

tional) predications, so that a denial of the law of identity can be formulated as a contradiction. But the point is another. Negation, applied to an (atomic) statement *P* generates *–P*. What does *–P* mean? This is not a simple issue, since there are many accounts of negation; it seems not possible, however, to explain what a negative statement means, if not by resorting to negation[32]. Let me assume, for explanatory purposes, the framework of Wittgensteins's *Tractatus* (which is debatable in itself, as well as pretty inhospitable to dialetheism)[33]. He maintained that "To understand a proposition means to know what is the case if it is true"[34]. One can take the test with a proposition *P* as "the table is white", and then with *–P*: "the table is not white". According to Wittgenstein, in the first case there must exist something in the world, a certain state of affairs which verifies that proposition; in the second case, that state of affairs must not exist[35], where "a state of affairs (a state of things) is a combination of objects (things)" (1961 § 2.01). Aristotle seems not far from this view: he claimed that while the affirmation (*kataphasis*) indicates the connection between what is referred by the subject and what is referred by the predicate, the denial (*apophasis*) indicates their separation[36].

Now, Severino's view is that entities are self-identical not only in their numerical identity, but also in their configurations or characteristics or ways of being. Or, to put it another way: not only are entities self-identical, but so are also states of affairs. Therefore Severino's principle of ontic determinacy is a generalized version of the law of identity, focusing on

32 Also Priest agree on this, see. G. Priest (2006), p. 64 where he notices that there is a circularity between truth, falsity and negation: "A legitimate question […] is what negation is. If we are searching for a definition, I confess I have none to offer. Negation is that sentential function which turns a true sentence into a false one, and vice versa. This is true enough, though as a definition entirely circular. Alternatively, we could use these clauses to define negation, but then our definition of falsity would become circular. It would seem that falsity and negation can be defined in terms of each other, but neither can be defined without the other. (Nor would it help, obviously, if we were to define a false sentence as one which is *not* true)".

33 See G. Priest (2006), p. 51.

34 L. Wittgenstein (1961), § 4.024.

35 "If an elementary proposition is true, the state of affairs exists: if an elementary proposition is false, the state of affairs does not exist", L. Wittengstein (1961, § 4.25). Here is assumed that the falsity of a proposition implies the truth of the negation of that proposition.

36 *De Int*. 17a 25-6.

the self-identity of both things and their arrangements (so including both the principle of identity and PNC). It can be so reformulated: "everything is what it is and it is how it is, and it is neither another thing, nor it is different from how it is".

For Severino a contradiction violates ontic determinacy, that is, the self-identity of a given state of affairs. If the proposition *a is P* is true, a certain state of affairs exists; if it is false, *a is not P* is true; thus that state of affairs does not exist; but if that proposition is both true and false, that state of affairs must both exist and not exist. Apart from the difficulty in understanding a contradiction concerning the existence of something, Severino's view can be explained also in these terms: given an object *a* and a predicate *P*, the object *a* has only a logical space, a *logical slot* that can host what it can be the case with respect to *P*. The logical slot is one, but the possible cases are two. So, if they both occur, they occupy the very same logical slot; they coincide giving rise to a *coincidentia oppositorum*. This is the reason why Severino thinks that a contradiction amounts to a conflation of the positive and the negative, of being and non-being, where *being* means indifferently the predication of P or the existence of that state of affairs making the proposition *a is P* true, and *non-being* (the negative) means the privation of P or the non-existence (absence) of that state of affairs. The coinciding or conflating, in one and the same logical slot, of those different terms that are being and non-being is the reason why Severino assimilates a contradiction to the identification of two differents terms, as red and green, or as a man and a trireme etc. Put another way, Severino maintains, on the basis of his principle of ontic determinacy, that a contradiction amounts to considering identical a state of affairs with its absence, whence the semantic collapse[37].

Priest denies that there is a semantic collapse in the case of a dialetheia. More precisely, he denies that when a dialetheia such as 'Socrates both is and is not a musician' is affirmed, being a musician is identified with non-being a musician: "Even if A & –A is true A means, in general, something different from –A". More in general "that some-

37 See E. Severino (2005), p. 33, 66-69 where he responds to Łukasiewicz's book-length critique of Aristotle on the Law of Non Contradiction. Severino refers to Łukasiewicz's book, whose Italian translation appeared in year 2003 and whose text is different from the more famous but much shorter article on the same topic, translated into various languages.

thing is F and non F does not entail that either the universals F-ness and (not-F)-ness, or their extension, are identical" (Priest, in this volume p. 49). Severino can reply that it is not the sameness of the abstract universals which is at stake, but the sameness of the state of affairs making true the proposition that a certain thing is F. And it is precisely on this point that Severino leverages to show that the denier of PNC makes use of it. Indeed, so Severino argues, if a contradiction identifies different terms (in the sense that has been specified), he who claims a contradiction must first presuppose, recognize and maintain them as different. Yet, the denial of the diversity of the differents terms is a self-falsifying proposition. Analogously, it is impossible for a liar to really believe what she says, because the act of lying presupposes knowledge of the truth, and that the truth is other than what is said. If what is said is not known to be different from the truth, then you are not lying. The question is whether a dialetheist accepts such a transcendental argument or not.

In any case, it does not seem that Priest, with respect to concrete reality (that is to say the reality constituted by facts or states of affairs or whatnot) asserts that a part of it both exists and does not exist, so infringing the principle of ontic determinacy. I will return to this in the final part, but here I can anticipate what follows: for Priest at the most there are facts that relate negatively to each other, so as to give rise to contradictions. But the existence of each of them is an absolute datum. In other words, there do not seem to be existential dialetheias about the existence or not of the facts[38].

On the negation

However, there is another aspect to consider with respect to negation. Priest (but also Filippo Costantini) claims that Aristotle's and Severino's defenses of PNC are not persuasive. Why? Something is to be explained, otherwise one may miss the point of contention. Priest claims that there

38 See G. Priest (2006), p. 53 where he confirms the "obvious truth that everything that exists *is*"; for Priest there are both positive and negative facts; but negative facts are not the non-existence of the positive ones; rather, they are 'simply' other facts, which "*are* in exactly the same way that all existent things are, viz. they are part of reality" (ib.).

are various possible conceptions of negation. That which he prefers reverses the truth value of the propositions it is applied to, just as classical negation does, but, unlike classical negation, it is such that both affirmation and negation can be true (and false). Thus the crucial point is which conception of negation is admissible, whether the classical or the dialetheistic one. In light of the above, it is clear that, whatever the *elenchos* proves, it is expected that it proves that negation is always exclusive, even for those who purport to maintain the opposite view. On the contrary, according to Priest and Costantini, the *elenchos* fails, because it is probative only by presupposing that the negation is exclusive by nature. Severino and Goggi provide arguments, in our contributions, to show that the defense of PNC is not a circular. E. Boccardi and I argue in favor of the distinction between the principle of ontic determination and the principle of coherence of reality, which is usually (but perhaps also surreptitiously) expressed by PNC; while the former appears undeniable, the latter is questionable. The reader will be able to make his own opinion.

There is a point, however, that must be kept in mind in order not to run into misunderstandings. The logical system adopted by Priest (LP) accepts the formal validity of PNC: for Priest PNC is true. Yet, it is also, in some cases, false. In a certain sense, the dialetheist does not deny what the opponent claims: for him it is true both that there are no true contradictions, and that there are true contradictions. This circumstance is only a more complicated form of true (and false) contradiction, that is, a second level contradiction.

But it is also true that the dialetheist must distance himself from classical logic and from Aristotle's and Severino's approach to negation, otherwise he would have made only much ado about nothing. That is, a dialetheist must avail herself of some form of exclusion inasmuch as she must contest the statement "every contradiction is not true", in which the 'not' has to be understood exclusively. Standard negation, however, is not a good candidate to express this exclusion (because it is not exclusive). What else is available? In order to express exclusion, Priest resorts to the opposition between two cognitive states, *acceptance* and *rejection*, which are expressed by the linguistic acts of *asserting* and *denying*. So, a sentence can be logically affirmative or negative; it can also be pragmatically asserted or denied, which shows if the speaker intends to accept rather than to reject the content of the statement. The point is that, according to Priest, if *P* is a proposition, *P* cannot be both accepted and rejected by someone (although she can accept and assert both *P and –P*).

Therefore, Priest rather than denying classical logic, *rejects* it. A discussion of these aspects would take us away from the purposes of this introduction. Yet, the point, with respect to what is discussed in this volume, is the following: the *elenchos* should not simply induce the dialetheist to *deny* contradictions (because for him denial is compatible with the affirmation); rather the *elenchos* should induce him to recognize that there are good reasons to believe that contradictions cannot be (also) true, so that he *accepts* this view.

Moreover, with respect to acceptance and rejection, some[39] have rightly pointed out that their relationship of mutual exclusion mimics or equates the exclusivity of Aristotelian and classical negation[40]. Classical negation, however, has been rejected by the dialetheist among other reasons mainly because of the logical paradoxes. What would happen, however, if similar paradoxes resurfaced? In fact, it has been argued, *pace* Priest, that refuting (or rejecting) is subject in turn to the paradox that something (the proposition *R*: *R is refutable*) can be both asserted and refuted, giving rise to a so-called rational dilemma. Priest's view on rational dilemmas is that they should simply be accepted[41]; but this is not, however, a solution to that paradox. The situation then appears to be the following. Dialetheism abandoned classical negation because with it there is no way out of paradoxes. On the other hand, dialetheism, in turn, not only must resort to a form of exclusion but it seems also affected by paradoxes. Then, the alleged advantages of dialetheism vanish, and the classic notion of negation may be retained. In other words, you may as well stick with classical logic and with its unsolved dilemmas.

Towards a mild dialetheism

After this introductory overview, I would like to propose a possible philosophical interpretation of dialetheism that reduces its distance from the classic perspective. In doing this, I once again make use of the notions of states of affairs (or facts), and of the correspondence theory of truth[42].

39 M. Carrara, E. Martino (2017).
40 See in particular F. Berto (2007), ch. 14.
41 G. Priest (2006), p. 111.
42 Priest claims that dialetheism, however, is not per se committed to any specific theory of truth; see G. Priest (2006), ch. 2.

Both these notions and theories should be clarified, but for reasons of space I rely on an intuitive idea of both. The question is: why should a dialetheia be admitted? According to Priest there are logical and philosophical reasons. One of these are the logical-linguistic paradoxes, such as the liar paradox, Russell's paradox and many others. For a long time logicians and philosophers have struggled to solve them, without achieving any satisfactory solution. These paradoxes are certainly relevant, but they do not seem to imply that there are *contradictory things* in the world; rather, they concern entities of linguistic nature, whose impact on reality is questionable. Russell himself doubted that classes belong to the ultimate furniture of the world[43]. Let us ask ourselves: in which cases would there be a dialetheia concerning the concrete world?

Priest here gives some interesting examples concerning e.g. the instant of change, which, from Plato's *Parmenides*, raises serious problems[44]. Briefly: while leaving a room, is there a moment when I am neither inside nor outside? And where would I be at that moment? According to Priest, at that moment I am both inside and outside (not inside) and this is a viable explanation. Yet, Priest excludes that I can both win and lose a game, or that I can both get on and not get on the train. In principle, the reason for these exclusions are not very clear: why can I be both inside and not inside of a room, while I cannot get on and not get on the train? Be that as it may, in general Priest claims that good reasons are needed to assert a dialetheia. One might say that no proposition is a dialetheia, until proven otherwise.

Another interesting case concerns motion and the reconsideration of Zeno's paradox of the arrow. Priest endorses Zeno's arguments and allows that it is impossible for the arrow to move during a lapse of time, if for all the instants of this interval the arrow does not go anywhere. A sum, albeit infinite, of displacements of zero measure is zero. Priest's solution is to admit that if an arrow moves and reaches its target, at every instant during its journey it is moving, that is, it occupies more than one position. Of course, the arrow is in the position assigned to it by the equation of motion $x=f(t)$, but it is also in the positions that the function returns for a neighborhood of the considered instant. The arrow is, we could say, both here and a little further back, at one and same instant. Priest calls this the

43 See B. Russell (1919), 182.

44 On this see N. Strobach (1998) who also discusses Priest's position.

spread hypothesis, "A [moving] body cannot be localized to a point it is occupying at an instant of time, but only to those points it occupies in a small neighborhood of that time"[45]. This is contradictory, of course, because at one and a same (durationless) instant the arrow is both in a certain position and elsewhere (though in the closest vicinity). It is precisely thanks to this kind of contradictions that motion is explained[46]. I omit here a whole series of historical and theoretical considerations (Zeno's paradox of the arrow has given us a hard time for millennia, and it certainly has not been dissolved by the calculus nor by its coherentisation).

Now, on closer inspection, how does the world look like when the contradiction of motions occurs? For Aristotle, if the deniers of PNC were right, the world would be *indeterminate*. But this is not the case according to dialetheism. Let's see why. Suppose that the arrow A is in motion, and consider the instant t, belonging to the lapse of time of the journey. Where is A at t? The usual equation of motion $x = f(t)$ tells us where: at the instant t, A is in position s_1. Let P_1 be the proposition 'A is in s_1'. Can we say at time t that P_1 is true? Sure! Why? Because in the world, at the instant t, it is the case that the A is in s_1. Let's call this fact or state of affairs F_1. At t , F_1, the verifier of the proposition P_1, exists. That's all? No. Indeed, for a dialetheist, thanks to the spread-hypothesis, A at t is also in the vicinity of s_1 including, let's say, the position s_2 (close but distinct from s_1). Let P_2 be the proposition 'A is in s_2'. Can we say at time t that P_2 is true? Sure! Why? Because at instant t it also is the case that A is in s_2. Let's call this fact F_2. F_2 is the verifier of proposition P_2. But isn't it true that at the instant t A is both in s_1 and in s_2? And isn't it true that if A is at one place then it is not at the other? It really seems so (and this seems to be a kind of a priori truth about space). Now, the proposition P_1 is true because its verifier exists; yet, if the arrow is also found in s_2, does not this fact, F_2, falsify P_1? It seems so. And does the same, *mutatis mutandis*, not happen for P_2 with respect to the fact F_1? That is, a certain fact, F_1 both verifies P_1 and falsifies P_2, while the other fact F_2 verifies both P_2 and falsifies P_1. Thus, the propositions P_1 and P_2 are both true and false, even if these two truth values, taken individually, depend on different truth-makers.

45 G. Priest (2006), p. 177.
46 See G. Priest (2006), ch. 12.

The question is: given the spread hypothesis, what makes a proposition both true and false? Is it some kind of ontic indeterminacy? Is it the circumstance that one and the same fact both exists and does not exist? It really seems not. Rather, a dialetheia derives from a kind of ontic *over-determination*, that is, from the circumstance that there are facts which, although different and ontologically independent from each other, interfere with each other in grounding the truth values of certain propositions, giving rise to contradictions. Thus, in the world there is no indeterminacy, but rather its opposite: an over-determination.

This seems like a plausible account of what a dialetheia might be compared with respect to the concrete world. (More on this, in the essay by E. Boccardi and F. Perelda, in this volume). Yet, one may reason as follows. Consider reality at the basic level – that is, as regards the existence or non-existence of states of affairs, of facts: which logical principles should be adopt to describe it? The world is over-determined in such a manner that certain facts are negative compared to others, and therefore can be considered *negative* facts. Many philosophers have questioned whether it is necessary to admit them and what exactly they are. Be that as it may, once they have been admitted into the world as Priest seems to do, they "are in exactly the same way that all existent things are, viz. they are part of reality" (G. Priest 2006, p. 53). In other words, it seems that the dialetheist must concede that any fact, such as F1 or F2, must either univocally either exist or not exist and cannot simultaneously exist and not exist, entirely regardless of whether it is a negative or positive fact.

It seems then that at this basic level, if a fact either exists or does not exist but not both, then something like the Aristotelian principles of non-contradiction and of the excluded middle hold true. That it is impossible for a certain thing to have and not have a certain property means that it is impossible for a certain state of affairs both to exist and not to exist (provided that a state of affairs is, as Wittgenstein claimed, a combination of objects: things, properties). This impossibility does not seem to be denied by the dialetheist. Rather, he thinks that the (non-existential) description of the world gives rise to contradictions for the reasons mentioned above, that is that different facts conflict with each other in grounding the truth values of the propositions referring to them, in such a way as to make each proposition not only true, thanks to one fact, but also false, by virtue of the other fact. It could be said that in a certain sense Priest sharps Kant's *real opposition* transforming it into a *logical* opposition. Indeed, Kant distinguishes the *logical* opposition from the *real*

one. The former "consists in the fact that something is simultaneously affirmed and denied of the very same thing"[47]. For example "being dark and not dark at the same time and in the same sense is a contradiction in the same subject" (ib.). In this case, despite the superficial logical form, what is opposed is a positivity (*realitas*) to its negation conceived of as the absence of something. The positivity is the clarity, the absence of it is the darkness. So a positivity is canceled by its negation and the result is "*nothing at all* (*nihil negativum irrepraesentabile*)" (ib.). In the case of the "real repugnancy" (ib., 212), however, "that which is affirmed by […] [a predicate] is not negated by the other […]. It is rather the case that both predicates […] are affirmative" (ib.) The two predicates conflict with each other without giving rise to any contradiction, according to Kant. Yet, the result of this conflict can be also "nothing, but nothing in another sense to that in which it occurs in a contradiction (*nihil privativum, repraesentabile*)" (ib., 211). An example of real opposition is tug of war, where two forces (each of which is something, is a positive) apply in opposite directions neutralizing each other's effects.

Now, there are both analogies and disanalolgies between real opposition and a dialetheia. The analogy lies in the fact that both involve two positive elements of reality (e.g. being here of the arrow, and being there of the arrow), and that they are in conflict with each other. The disanalogy lies in the fact that the conflictual relationship is not logical in the case of real opposition, while it is in the case of a dialetheia which, from this point of view, is instead akin to the Kantian logical opposition. The two or more facts that are the truthmakers of a dialetheia, although they all exist in an absolute sense, are negative with respect to each other and thus they give rise to an *alethic* opposition.

What I have just sketched is an interpretation of dialetheism, perhaps attenuated. It shows that the basic level of reality is, even for the dialetheist, absolutely determined and governed by PNC (or, better, by the principle of ontic determinacy) and by the principle of the excluded middle. Dissent comes later, when the determinately existing reality gets not simply inventoried but described. In this regard there are two options. It could be thought that the Aristotelian approach and the tradition derived from it are limited to affirming the determinacy of what exists, but

47 I Kant (1763), p. 211.

they do not pronounce on the internal coherence of reality. In this case, dialetheism starts where Aristotelian view ends, and expresses through contradiction the conflict among the items of furniture of the world. The alternative is that the Aristotelian approach, in addition to ensuring the determinacy of what exists, extends to affirming the internal coherence of it. In this case dialetheism is not complementary but in conflict with traditional thought, even though both agree in thinking the absolute determinacy of the existence of what is the case.

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Metaphilosophical Sketches between Emanuele Severino and Graham Priest

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Adopting the metaphilosophical perspective, the article considers some implications of the relationship between two contemporary thinkers able to open two important new perspectives of thought: Emanuele Severino and Graham Priest. Severino reasons with the theoretical instruments involving the logical ones; on the other hand, Priest with that of the logical which secondarily involve the theoretical ones. Both are interested in metaphilosophical questions, among which the relationships between truth, contradiction/non-contradiction, and logic emerge as important. However, their solutions are quite different, if not completely opposite. The aim of this brief essay is not to make a comparison between them, but rather to retrace their possible contributions in normal science and any possible paradigm shift passing through the epistemological question. The paper attempts to open the discussion on their contributions to find their differences but also their possible areas of consonance.

Keywords:
Metaphilosophy, truth, logic, original structure of destiny, dialetheia paradigm shift, normal science

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Introduction

This present brief contribution to the second number of "Eternity and Contradiction" traces the relationship between Emanuele Severino and Graham Priest with respect to their importance in the area of metaphilosophy and then of epistemology, since both can somehow be defined as metaphilosophers. In fact, their work discusses philosophy and the main points of philosophy. Indeed, their work analyses the aims, boundaries, methods, and, especially, the question inherent to the definition of truth, logic, and reality. In particular, we want to stress some epistemological key concepts of science and their connection with other possible conceptualizations derived from different ways that knowledge indicates reality (Lazerowitz, 1970). From a metaphilosophical point of view, this specific area of thinking is particularly significant, since many authors, epistemologists, and scientists want to reduce all philosophy into the brackets of science and its methodologies. This effect is due to the fact that science is considered a priori, able to construct/explain the world out and independent of the mind. For example, in their *Introduction to Metaphilosophy*, Søren Overgaard, Paul Gilbert and Stephen Burwood (2013, p. 45) recall the declaration of Stephen Hawking, in which he expressed the opinion that philosophy is dead because it was not able to keep up with modern developments in science, particularly physics. From this perspective, scientists would have replaced philosophers as "bearers of the torch of discovery in the human quest for knowledge", because philosophy is an outdated form of thought surpassed by contemporary history and scientific technological strategies that can find answers to important and concrete questions. In reaction to the Continental and phenomenological philosophy, the New Realism moves precisely in this direction (Ferraris, 2014), affirming that human conceptual schemes and perceptual apparatus play a constitutive role to the tangible world. However, as widely considered by Severino (i.e. 1984, pp. 203-5), in discussing the

Hegelian dialectic on "certainty vs. truth", this perspective had already and definitively been refuted by Hegel in the *Phenomenology of Spirit.* Indeed, it is quite difficult to infer any possible form of reality today on the basis of "certainty", especially after the critical discussion sprung from the Vienna circle and developed from Herbert Feigl to Paul and Patricia Churchland. Indeed, their eliminative materialism, claiming that human understanding is deeply wrong, affirms that mental states posited do not actually exist and have no role in thinking truth, because thoughts are only states of the neurological matter and cannot observe themselves.

The theme of illusion and error is at the basis of scientific investigation, which, although based on hypothetical and falsifiable assumptions, always considers the principle of verification on the basis of the recognition of error. This is certainly the territory where philosophy and science find their meeting point. But the most insidious problem for science is to observe reality without seeing the distortions that the observation instrument can put into the observed field. Philosophical reflection, in particular the epistemology, helps scientists in the complex work of recognizing theoretical and/or methodological biases; whereas, from criticism, they often take the shape that Thomas Kuhn (1962) called "paradigm shifts" which are structures of knowledge able to remove conceptual limitations.

Overgaard, Gilbert, and Burwood point out that Hawking's statement, despite his persuasion of speaking only scientifically, utilizes a language hugely rooted in philosophical background. The fundamental problem on which such forms of reductionism are founded is perfectly foreshadowed by Edwin Abbott, author of the satirical novel *Flatland: A Romance of Many Dimensions* (1884), in which the setting is described as a two-dimensional world. It is inhabited by geometric figures, in which women are segmented lines, men are various polygons, and the narrator is a square that guides readers through the implications of life in two dimensions. The difficulty is that of being aware of the air we breathe, or, as Einstein said (1950, p. 5), the water where fish swim: "Of what is significant in one's own existence one is hardly aware, and not bother the other fellow. What does a fish know about the water in which he swims all life?" Priest, in his paper "What is philosophy" (2006, p. 189), sketches the same question, saying, "Any person knows by acquaintance what breathing is; but this does not mean that they know the nature of breathing: its mechanism and function". Following this metaphor, we can say that both Severino and Priest are metaphilosopher because they want to discover the meaning of water, showing the fishes how they are immersed in it.

In his book *Beyond the Limits of Thought*, Priest introduces a sense of his studies affirming that "Finitude is a basic fact of human existence. Whether one treats this as a source of sorrow or of relief, it is without doubt that there are limits to whatever people want to do, be they limits of human endurance, resources, or of life itself. What these limits are, we can sometimes only speculate; but that they are there, we know. For example, we can only guess what the limit time for running a mile is; but we know that there is a limit, set by the velocity of light, if not by many more mundane things" (1995, p. 3). Priest's perspective considers certain kinds of limits of the mind that he calls "limits of thought, though 'thought', here, should be understood in its objective, Fregean, sense, as concerning the contents of our intentional states, not our subjective consciousness. [...]. Limits of this kind provide boundaries beyond which certain conceptual processes (describing, knowing, iterating, etc.) cannot go; a sort of conceptual ne plus ultra. […] *My* thesis is that such limits are dialetheic; that is, that they are the subject, or locus, of true contradictions. The contradiction, in each case, is simply to the effect that the conceptual processes in question do cross these boundaries" (ibid).

Severino is also rigorously interested in the clear definition of the error and everything that conceals it, causing the delusion of certainty. He explains the impossibility of Western rational thought to understand its fundamental fault. The philosopher defines the boundaries within all this philosophy develops "nihilism", which is the language conceiving beings isolated from their necessary eternity. This isolation causes a fundamental real contradiction, which indicates impossible contents that cannot be true, because they are all immersed in the paradoxical believing that being is nothing. However, his discourse considers science as a radical form of faith because it is entirely immersed in an abysmal fundamental error.

1. Beyond the logic or beyond the limits of the error?

Also, Hilary Putnam (1992), after developing the links between mathematics, logic, and philosophy and then wandering around a renewal of philosophy while dealing with Wittgenstein, relativism, deconstructionism, unrealism, and the conundrums related to the representations, was convinced that philosophy is increasingly dominated by science, because of the belief that science is able to describe the world in itself, that is, to objectify the reality. Indeed, the evolution of his perspective, caused by

difficulties related to the definition of what reality is, sprang from the problem of defining what allows us to know what we know and how: "meaning of meaning" (Putnam, 1975, pp. 215-271).

As Severino and Priest discuss, the fundamental framework that permits to manage these reflections is what is indicated as "truth" that means the discourse without errors, articulated in a formal structure (logic), which content are related to being (ontology), whereas "reality" is exactly the expression of their contact. Whether the debate on the validity of metaphilosophy seems to be endless, despite it is surely acceptable that this field of study is still philosophy in itself, however, it is possible to recognize that the two authors stay at a superior level, giving an important contribution in the renewal of philosophy, from which it is recognizable the fundamental structure of thought and the same meaning of meaning. Indeed, both of them found their reflection on the sense of truth and of non-truth from which their logic derives, analysing the role and limits of the Principle of Non-Contradiction PNC). The question consists of defining if their standpoints are radically opposite or they can somehow be integrated.

Priest is famous because coined the word 'dialetheism' and developed this area of logic, which is define "paraconsistent". Dialetheism affirms that there can be a true statement whose negation is also true. A "dialetheia" is a sentence, A, such that both it and its negation, ¬A, are true, and dialetheism is the view that there are dialetheias. Such statements are called 'true contradictions'. From a metaphilosophical point of view, logic is a crucial element because, as argued by Michael Dummett (2010, p. 4, 13), if philosophy is rooted in the "systematic quest for truth", logic defines the grammar of the statements, guaranteeing the possibility of developing substantial accordance between different philosophical viewpoints, epistemology, and sciences. From this perspective, thanks to the the language of logic, whose grammar contains expressions that cannot be inconsistent with the content it indicates, philosophy defines what makes sense, as Rudolf Carnap and the Vienna Circle debated. However, dialetheias indicate that the ἔλεγχος (èlenchos), one of the fundamental principles of logic, is no longer considered a universal law. In this way, does not logic simply become a formal way to describe any form of speech as pronounceable?

Against this direction, for his part, despite the growing success of the epistemologies of suspicion, of the thought of disenchantment, and of the perspectives of uncertainty, Severino's discourse developed, proceeding through a vigorous critique of the science, technique, and meta-

physics, but also any form of weakness characterizing the strategies of contemporary thought for overcoming the traditional use of principle of non-contradiction (PNC) to indicate truth. His main goal is to identify the dynamics that necessarily produce the sunset of truth as understood by traditional thought, and above all, to show how both the traditional way of thinking truth and all the contemporary forms of confuting it are at the same time the expression of the extreme alienation reached by Western philosophy (nihilism). In this way, Severino's indication has irrevocably distanced itself from the entire history of philosophy, since it aims to exhibit how its framework could not but engender the destruction of the whole philosophical tradition and especially how it attempts to know the ultimate truth about the meaning of reality. And this path, which questions the way in which the meaning of truth has been understood by the tradition, is not only inevitable but also an expression of the greatest rigor achieved by the traditional thought (in particular, the epistemic metaphysics). Undoubtedly, the rigour of Severino's thought on: a) the authentic sense of truth; b) the forms and the reasons why philosophy ("Western thought") has thought for the first time and in an irreversible way the sense of the truth; c) the forms and the reasons why philosophy has radically and utterly betrayed the sense of truth; d) the solution of the Western thought error (nihilism) makes Severino a great critical philosopher but also a great re-founder of the same sense of truth.

2. Future Philosophy

First and foremost, Priest is interested in the loss of universality by the logic that decrees the possibility is increasing to make any speech logical. Quoting Thomas Kuhn, Priest considers philosophy as "subversive. Time and philosophers have shot at religions, political systems, public mores. They do this because they are prepared to challenge things which everybody else takes for granted, or whose rejection most people do not countenance" (2006, p. 202). And further on he states, "I have suggested that philosophy is precisely that subject where anything can be challenged and criticized. This may make it sound terribly negative, as though all that philosophers try to do is knock things down. That's not a terribly attractive picture. Neither is it an accurate one. For philosophy is a highly constructive enterprise. Philosophers are responsible for creating many new ideas, systems of thought, pictures of the world and its features" (p. 203).

The future of the Priest's perspective inheres the consequences with respect to language, realism, antirealism, and deflationism, but also, in particular, with metaphysics and contemporary epistemology. In fact, it is possible to develop the implications of dialetheism with the Aristotelian metaphysics, so that the area of incontrovertible truth may be considered the divine dimension of the absolute being. In this sense, dialetheias should be considered as the field of scientific studies, where the probabilistic calculation should measure the percentage of the degrees of freedom with respect to truthfulness or approximation to the truth of each of the two contrary assertions. In this respect, dialetheism should be a new expression of modern science (i.e. Newtonian and Gelilean). Undoubtedly, from this viewpoint, he somehow re-founds the relationships between truth and opinion related to un-decidability with respect to the truth of a set of assertions, so that he seems to be an Aristotelian metaphysician, able to solve the metaphysical problems that have made traditional thought obsolete in modernity compared to science. On the other hand, if its application develops in the epistemological field, definitively aimed at founding indecidability with respect to any opposites that can be considered true, dialetheism could be the basis of the expansion of all Taoist and Buddhist epistemologies, which already characterize some contributes of physics (i.e. Capra, 1975). At the end of this brief analysis, we want to refer to Kuhn's perspective again, in particular to his definition of "normal science". Since it is the regular work of researchers theorizing within a settled paradigm framework, which permits a slow accumulation of explanations of the world in accord with established broad theories, without destructuring or challenging the assumptions accumulated during the history of science, then it is possible to say that Priest further grounds the normal science. Indeed, Priest improves the possibility to found the maintenance of an area of contradiction which may give sense to opinions (*doxa* and, why not, myth). Briefly, in Kuhn's perspective, Priest's contribution can be considered as the logical solution for the further development of normal science in two of its traditions: the modern and the contemporary. It all depends on how it is contextualized and then used in the paraconsistent logic of dialetheism.

Despite his radical and total critique, Severino attributes to philosophy a more eminent magnitude (1984, pp. 17-19), claiming: "Philosophy is born great. The first steps of its history are not the uncertain preamble to a more mature development of thought but establishes the fundamental traits of its entire historical course. For tens and tens of mil-

lennia, man's existence – globally and in every single aspect – has been guided by myth. Myth is not meant to be a fantastic invention, but the revelation of the essential and overall meaning of the world. Even in the Greek language, the oldest meaning of the word mythos is 'word', 'judgment', 'announcement'; sometimes mythos even means 'the thing itself', 'reality'. Only in a derivative and later way, in the Greek language mythos means 'legend', the 'fairy tale', the 'myth'. For the first time in human history, the first Greek thinkers came out of the guided existence of myth and looked it in the face. In their gaze, there is something absolutely new. That is, the idea of a knowledge that is undeniable appears, and is undeniable not because societies and individuals have faith in it, or live without doubting it, but because it itself is capable of rejecting all its adversaries. The idea of a knowledge that cannot be denied either by men, by gods, or by changes in times and customs. An absolute, definitive, incontrovertible, necessary, unquestionable knowledge. [...] The first thinkers called this knowledge with ancient words of the Greek language [...]. These words are *sophìa*, *lógos*, *alétheia*, *epistéme*. If we want to translate them, they correspond respectively to 'knowledge', 'reason', 'truth', 'science'. But these words tell us little (or too much) if we do not put them in relation to that unheard-of meaning. As far as the word philosophy is concerned, which, however, appears in the Greek language together with its name, it means, precisely, to the letter, (*philo-sophìa*) 'taking care of knowledge'. If we accept the hypothesis that in *sophós*, 'wisdom', (on which the abstract term *sophìa* is construed), resonates, as in the adjective *saphés* ('clear', 'manifest', 'evident', 'true'), the sense of *pháos*, the 'light', then philosophy means 'caring for what being in the light' (outside the darkness in which the hidden things are instead – and *alétheia*, truth, literally means not being hidden) can in no way be denied. 'Philosophy' means 'caring for the truth'; therefore, it also gives the latter term the unheard of meaning of 'absolutely undeniable'".

This means that not all philosophical content can be denied. In Severino's indication, philosophy is the thought that would be freed from myth through the true discourse, which means it is irrefutable; however, at the same time, it is not able to maintain its aim; therefore, it is pervasive auto-contradiction. The emergence of philosophical thought, as indicated by Severino, is intended to define the line of separation between true discourse, pointing at the extreme error (nihilism) and making it recognizable through the "non-error". Truth is the non-error and its basis, which is the basis of any possible true discourse. This is what he calls

the "original structure" and later the "original structure of the destiny of truth". Nihilism becomes evident as the fundamental error of traditional and contemporary thoughts, thanks to the original structure of truth, which shows the non-sense of the contradictory persuasion that suffers from the tyranny of time. Definitely, the opposite of the error of nihilism is the true indication of "destiny", and the original structure of destiny is the appearance of what is not other than itself; that is, of the being itself of every being and, above all, of the beings that appear and that cannot be denied because its negation denial is self-defeating. Severino indicates in an irrefutable way (a very true way) the necessary eternity of any single being, affirming that everything exists forever, and everything is eternal. The concept of eternity inheres both the entities and the horizon where the entities appear. The theoretical structure of the irrefutable indication of eternity ("the necessary being-self of the being that appears") is the core of the original structure. The "being's being itself" is the dimension whose negation is self-negation. The original structure of the destiny shows that the basis of nihilism is faith in the becoming of beings, which is believed to be an oscillation between being and nothingness, such that everything can be reduced to a product of contingency. The concept of "faith in becoming" indicates the acritical assumption of the oscillation between being and nothing. This faith is the basis of nihilism and found in both traditional (then metaphysics), contemporary thoughts, and all sciences. Severino shows that, contrary to what Western philosophy assumes, no becoming appears in the sense of the appearance of the annihilation or of the becoming 'ex nihilo' of beings. The scenario of transformation does not testify to creation or annihilation: beings cannot come into or go out of being, because they cannot be created or annihilated by any God or scientist.

The Severinian indication can recognize and solve any contradiction indicating the basis of all possible theoretical errors and then can solve any kind of dialetheias. From this perspective, contemporary epistemology is facing a real and substantial scientific revolution, similar to that described by Kuhn. As a result, starting from Severino's indication, a new epistemology may be opened, because it is possible to change the basic nihilistic and contradictory Western paradigms, which assume that 'being is nothing' (which means that the basis of being is time) and develop a new epistemological era that can authentically integrate science, logic, and ontology (Testoni, 2019; Testoni et al., 2017).

Conclusion

Despite the fact that Severino's and Priest's discourses are so different, it is possible to find a metaphilosophical dimension, a novel chance, based on the conceptual structure of eternity. If the challenge of the Severinian assumption is that consistency is a requirement for truth, validity, meaning, and rationality, on the contrary, dialetheism could consider the possibility of inconsistent theories that are nevertheless considered meaningful, valid, rational, and true in the area of nihilism. In this sense, inconsistency turns out to be a necessary condition for any of these notions considered in a nihilistic way, and dialetheism could show how consistency turns out not to be an essential characteristic for all nihilistic theories, showing that everything said in the universe of nihilism is a dialetheia. Since he works with Priest and was a pupil of Severino, maybe Francesco Berto could develop such a field of research, perhaps making the role Severino played in his thinking more explicit.

Refereces

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Emanuele Severino and the Principle of Non-Contradiction

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1. Introduction

Emanuele Severino's philosophy is one of great breadth and profundity – and one that has been largely closed to those, such as myself, who cannot read Italian. Here, I aim to examine only one small part of it, though a part which is clearly central. Severino's thought revolves around the Neo-Parmenidean claim that there is no change; and so, in particular, if something exists it has always existed and will always exist. As he puts it, 'if Being were to become, it would not be – before its birth and after its corruption. Thus, *all* being is immutable: neither issuing from nor returning to nothingness, *Being* is eternal' (p. 86)[1]. He infers this as a corollary of the Principle of Non-Contradiction (PNC). My interest here is not with change, but with the PNC itself, and in particular, Severino's defence of it[2].

1 All quotations from Severino are from Severino (2016). All italics are original.
2 Though, for the record, I do not find Severino's arguments that change violates the PNC convincing. There may well be other arguments, however. See Priest (2016b), chs. 11, 12.

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2. Background

We will come to Severino in the second part of this paper. In the first part, I will spell out a number of necessary background matters.

2.1 Dialetheism

First, let me explain why I am interested in this part of Severion's work. A *dialetheia* comprises a pair of statements of the form *A* and ¬*A* such that both are true – or, assuming a relatively uncontentious view about the way that negation behaves, a statement, *A*, which is both true and false. *Dialetheism* is the view that there are some dialetheias: that is, *some* contradictions are true, and so may be accepted. It is very necessary to distinguish dialetheism from a distinct view: that *all* contradictions are true. This is *trivialism*, and a quite different matter. Clearly, that some *A*s are *B*s does not entail that all *A*s are *B*s.

Dialethesim clearly flies in the face of the PNC[3]. And it must be said that the PNC has been high orthodoxy in Western philosophy. (The situation in Eastern philosophy is another matter.) True, there have been some dialetheists. The most notable example is Hegel[4]. Still, these have been very lone voices – at least until recently. Modern developments in logic have shown how it is possible to keep contradictions under control. In particular, a paraconsistent logic is one in which contradictions do not imply everything. That is, the principle of *Explosion*, according to which a contradiction implies everything, is invalid[5]. Using a paraconsistent logic, contradictions in a theory can therefore occur as isolated "singularities". They do not generate triviality.

In the light of these deveoplments, we have seen a number of philosophers endorse contradictory theories of certain subjects. I am one of them. The most frequently cited subject in question is that of the paradoxes of self-reference, such as the liar paradox (*this sentence is false*). Reasoning about this sentence very quickly leads to a contradiction. Other

3 At least, some versions of it. It may be formulated in many different ways. On this, see Grim (2004).
4 See Priest (1990).
5 The medieval name for the principle is *ex falso quodlibet sequitur*.

subjects include motion, the law, and the limits of thought[6]. The correctness of the PNC has now become, therefore, an important issue in the contemporary philosophy of logic.

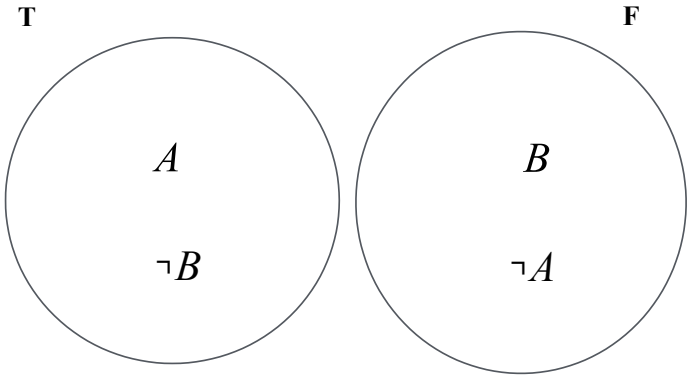
Now, the canonical defence of the PNC is given by Aristotle in the *Metaphysics*. We will come to this in a moment. Whether cogent or not, the passage was so influential that virtually no one since him in the history of western philosophy has felt the need to defend it in any substantial way (though many have been happy to appeal to the it). Severino has; so this makes his arguments exceptionally interesting.

2.2 Paraconsistent Logic

Next, by way of background, let me give some idea of how a paraconsistent logic works. As we will see, this has an intimate connection with what Severino has to say about the PNC.

Let us start with "classical" logic. This is not Aristotle's logic: it is the logic invented by Frege and others at the end of the 19th Century. However, it enshrines an account of negation that I think Severio would be happy with, since each of A and $\neg A$ rules the other out, or 'opposes' it, as Severino puts it.

In classical logic, every situation (interpretation) divides up the statements into those that are true, **T**, and those that are false, **F**, these zones being mutually exclusive and exhaustive. If a sentence, A, is in the **T** zone, its negation, $\neg A$, is in the **F** zone, and vice versa, thus:



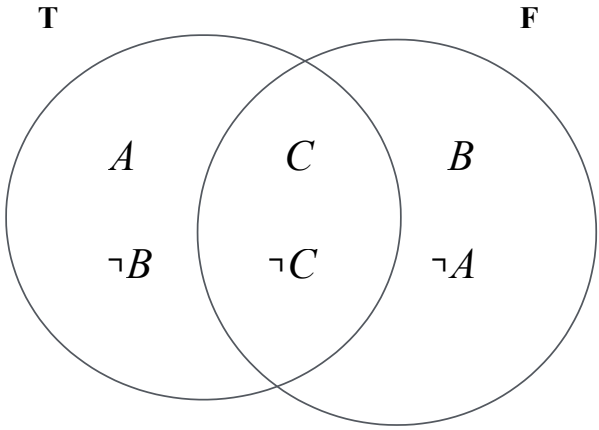
6 On all of this, see Priest (2007a), and Priest, Berto, and Weber (2018).

A conjunction, $A \wedge B$, is in the **T** zone if both A and B are in the **T** zone, and it is in the **F** zone if at least one is in the **F** zone. Dually, a disjunction, $A \vee B$, is in the **T** zone if at least one of A and B is in the **T** zone, and in the **F** zone if both are. Something is a logical truth ($\models$) if it is always in the **T** zone. Hence, it is easy to check that the following hold:

[α] $\models \neg(A \wedge \neg A)$
[β] $\models A \vee \neg A$

An inference is valid if, whenever the premises are in the **T** zone, so is the conclusion; or equivalently said, there is no situation in which the premises are in the **T** zone *and* the conclusion is not. Hence, Explosion, $C, \neg C \vdash B$, is valid, simply because there is not situation in which both premises are in the **T** zone.

There are a number of paraconsistent logics[7]; but let me describe one of the most simple, *LP*[8]. This is *exactly* the same as classical logic with one change: the **T** zone and the **F** zone may overlap. In particular, negation works in exactly the same way, but now, something may be in both the **T** zone and the **F** zone, thus:



7 See Priest (2007a), and Priest, Tanaka, and Weber (2018).
8 For full technical details, see Priest (2008), ch. 7.

Unsurprisingly, the inference of Explosion now fails. (In the diagram, both C and $\neg C$ are in the true zone, but B is not). It is not difficult to check, perhaps more surprisingly, that both $[\alpha]$ and $[\beta]$ hold[9]. Note, then, that the logical truth of $\neg (C \wedge \neg C)$ does not rule out the truth of $C \wedge \neg C$, since this may yet be in the **T** zone.

2.3 Aristotle's Defence

The third matter of background is Aristotle's defence of the PNC in the *Metaphysics*, since Severino's defence of the PNC is clearly indebted to this. Aristotle's defence is tangled, and it is often not clear exactly what his argument is. His cogitations frequently seem to shoot off at tangents whose points are not clear. However, essentially the text seems to proceed as follows[10].

Aristotle starts by stating (a version of) the PNC (5^b18-12)[11]:

> For the same thing to hold good and not hold good of the same thing and in the same respect is impossible (given any further specifications which might be added against dialectical difficulties).

He then tells us that the PNC is so fundamental that it is not susceptible to demonstration (5^b35-6^a10). One can, however, give a proof by refutation (*elenchos*), 'if only the disputant will say something meaningful' (6^a12). Although not explicit in the text, it turns out that the disputant says *man*. Note that they do not say *that* something is the case. They merely say something meaningful – in this case, a simple common noun. In order to rule out simple ambiguities, Aristotle fixes its meaning as *two-footed animal*.

We then get the following argument (6^b28-34):

9 Indeed, the logical truths of classical logic and *LP* are exactly the same – though their logical consequence relations are not.

10 For a full analysis of the text, see Priest (1998).

11 The translations of Aristotle are from Kirwan (1993).

> It is accordingly necessary, if it is true to say of something that it is a man that it be a two-footed animal... and if that is necessary, it is not possible that the same thing should not be, at that time, a two-footed animal... Consequently it is not possible that it should be simultaneously true to say that the same thing is a man and not a man.

One might parse this argument in a couple of different ways, but the most natural is as follows, where *Mx* is '*x* is a man', *Tx* is '*x* is a two-footed animal', and *a* is any object one pleases. □ and ◊ are the usual modal operators: *it is necessary that*, and *it is possible that*, respectively:

$$\Box(Ma \rightarrow Ta)$$
$$\neg\Diamond(Ma \wedge \neg Ta)$$
$$\neg\Diamond(Ma \wedge \neg Ma)$$

Given the synonymy of *M* and *T*, this argument is perfectly sound. Its conclusion is, of course, only an *instance* of the PNC; but the thought, presumably, is that we could run essentially the same argument with any predicate in place of *M*.

It might be thought that Aristotle has succeeded in his prosecution of the dialetheist. He has not. It could yet be true that $Ma \wedge \neg Ma$. Of course, given standard principles of modal logic, it follows that this is then possible. That is, $\Diamond(Ma \wedge \neg Ma)$; and so we would have $\Diamond(Ma \wedge \neg Ma) \wedge \neg\Diamond(Ma \wedge \neg Ma)$[12]. That, of course, is a contradiction. But one can obviously not rule this out without begging the question. Let me highlight this fact, because it will play an important role when we come to Severino's argument. Accepting that $\neg(A \wedge \neg A)$, or the stronger $\neg\Diamond(A \wedge \neg A)$, does *not* rule out accepting $A \wedge \neg A$. 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.

Returning to Aristotle's text, I note that there are some, such as Anscombe and Cresswell, who interpret its main argument somewhat differently[13]. For them, it is necessary that the noun uttered denote a sub-

12 Indeed, in the modal extension of *LP*, for example, $\neg\Diamond(A \wedge \neg A)$ is a logical truth, even though $A \wedge \neg A$ can be true in an interpretation.

13 Anscombe and Geach (1961), p. 39 ff.; Cresswell (1987).

stance (that is, essence). They then appeal to some claims about essence to establish the same conclusion as above. I find this interpretation much less plausible. One reason for this is that this interpretation appeals to claims about essence that Aristotle would certainly not subscribe to. Another is that, at best, it establishes the PNC only where the predicate is an essence-predicate, contrary to the more general aim stated by Aristotle. But in any case, as an attempt to establish even the instances of the PNC for essential predication fails, since it is subject to exactly the same reply that I gave above to the more general interpretation: it does not rule out accepting a contradiction[14].

At any rate, Aristotle is now done with his major argument, but he is not yet finished. In the rest of the text (7^b18-9^a6), he gives half a dozen very brief arguments. The most obvious thing about these is that the *elenchos* has disappeared entirely. The disputant is absent, and, contrary to what Aristotle says at the start, we just have straight arguments. More importantly for present purposes, the arguments do not target the PNC. Their conclusion is that it is not the case that *all* contradictions are true (which is of course compatible with *some* being true). We might dub this the *Principle of Non-Triviality*, PNT. Indeed, the argument at 8^b2-31 has the even weaker conclusion, that no one can *believe* all contradictions to be true[15].

In short, then, for all its influence, Aristotle's argument against the diaetheist is a failure. Note that this claim is by no means idiosyncratic. The point was already argued cogently and famously by Łukasiewicz in (1910), and it is argued more extensively by Dancy (1975).

14 For a more thorough discussion of this interpretation, see Priest (1998), 1.10.

15 There is one exception, which does target the PNC: 'if whenever an assertion is true its denial is false, there can be no such thing as simultaneously asserting and denying the same thing truly. However, they [those who would violate the PNC] would doubtless assert that this is the question originally posed' (8^a34-8^b2). As Aristotle himself points out, the argument simply begs the question.

3. Severino

So much for the background. Let us now turn to Severino. It seems to me that his arguments – at least those I can read – are, in the end, no more successful than Aristotle's. Let us examine them in detail. These are to be found in Section 6 of 'Returning to Parmenides'[16].

3.1 Being and Not-Being

This Section starts by asking (p. 59):

> But why can't the identity of Being and not-Being be affirmed? We shall dwell on this question, since rarely has the non-contradictoriness of Being been dealt with at anything but a trivial level, whether by its defenders or its opponents.

It is not clear whether Severino is talking here about Being and not-Being as universals (properties) or as their extensions (the things which instantiate them). But whichever of these is intended, a dialetheist is *not* required to affirm that Being is identical to not-Being.

The mere fact that someone holds a contradiction of the form '*x* exists and *x* does not exist' to be true does not imply that Being and not-Being have the same extension: merely that the extension of these properties overlap. Even if some things exist and do not exist, it by no means follows that all do. *A fortiori*, a dialetheist is not required to hold that Being and not-Being have the same intension; that is, that 'Being' and 'not-Being' have the same meaning; that is, that *Being* and *not-Being* are the same properties. A similar point applies to any predicating of the form '*x* is *F*' and '*x* is not *F*'. That something is *F* and not *F* does not entail that either the universals *F*-ness and (not-*F*)-ness, or their extension, are identical.

16 Severino (2016), pp. 59-83. I am not sure that I have always understood the text, but I have done my best. Since I cannot read Italian I do not know whether there are essentially different arguments in other texts.

3.2 The *Elenchos*

After these initial worlds, there are a few pages of stage-setting. The defence proper of the PNC then starts on p. 61, and carries on to p. 68. In what follows, I shall proceed by commenting on this text, paragraph by paragraph. I reproduce the whole English translation of this passage in an appendix to the paper. I label the paragraphs for reference. Those not familiar with the passage are advised to read each paragraph of the text in conjunction with my commentary on it

Let us start with paragraph [A]. This paragraph introduces a number of ideas that will be taken up as the text proceeds (opposition, negation, meaning), but the main thought here is an appeal to Aristotle's *elenchos*. What the dialetheist denies '*in actu signato*' is affirmed '*in acto exercito*'. In other words, what is denied explicitly is presupposed implicitly. Now, I note, first, that this is not really Aristotle's *elenchos*. For him, as we saw, a person who denies the PNC is not required to state (affirm or deny) *that* anything; they simply have to say a word that they take to be meaningful.

But set this aside. What is it that the person in question denies explicitly and affirmed implicitly? Perhaps the person might say something like:

[1] Socrates is not a man

Does this presuppose that he is a man? Obviously not. Perhaps, it might be argued, [1] entails 'Socrates is not', which many people (e.g., Plato in the *Sophist*) have taken to presuppose that Socrates does exists[17]. But this is just a confusion. The copula in English and most other European languages is ambiguous. It can be the *is* of existence, as in "Socrates is no loger', or the *is* of predication, as in 'Socrates is a man'. These are logically quite distinct[18].

Another thing whose denial might be at issue here is the PNC itself. Thus suppose I say:

[2] Socrates is and is not a man

17 Again, just for the record, I do not think it does. See Priest (2016).
18 See Priest (2016), ch. 19.

This is clearly, in some sense, a denial of the PNC. But how does it presuppose the PNC? There is, as far as I can see, no explicit argument for this in this piece of text. However, the reference to Aristotle's *elenchos*, might suggest that one can simply rerun Aristotle's argument. The person has used *man* in a way that they take to be meaningful. So we can use Aristotle's argument to infer that it is not possible that Socrates is a man and not a man. However, as I noted when we discussed Aristotle's argument, even if uttering [2] presupposes this instance of the PNC, as an argument against its truth, this fails. The dialetheist can endorse the claim that Socrates is and is not a man *and* that he is not. To reject this endorsement is exactly to suppose that one cannot accept a contradiction, and begs the question.

3.3 Linguistic Meaning

Turning to paragraph [B], we find an argument to the effect that the *elenchos* shows that a denial of the PNC not only presupposes the PNC, but the PNC is actually the ground of it, in the sense that without the PNC the denial itself could have no meaning. The PNC 'is the ground, in the sense that it is *that without which* no thought and *no* discourse could constitute itself or exist'. In denying an instance of the PNC one 'denies that without which it would not *be* (or, which is the same thing, would not be *meaningful*)'. That is, the statement would have no (linguistic) meaning, i.e., no content. (As Severino puts it, its content would not be.) This is clearly something a dialetheist cannot accept.

Now, let me say, first, that I do not find this argument in the Aristotelian text[19]. But, in any case, why should one suppose this to be true?[20]

Severino's argument appeals to what one might call the *ruling out* theory of meaning, or as Spinoza famously put it quite generally: *omnis determinatio est negatio*. Let us see how this works. Take, as an example, the

19 At 7^a20 there is a remark to the effect that somone against whom Aristotle is arguing 'entirely eliminates substance' (that is, essence). However meaning and essence are by no means the same thing. As far as I know, there is no contemporary account of meaning which takes meanings to presuppose Aristotelian essentialism.

20 I note that an argument for a similar conclusion, and with similar reasons, has also been endorsed by McTaggart (1922), p. 8, and Lear (1988).

claim that Socrates is a man. For this to be meaningful, so the argument goes, it must rule something out. The main thing it must rule out is *not being a man*. And if the PNC fails, it does not do this, so *man* is meaningless[21].

This argument is problematic for many reasons. For a start, the fact that:

[3] Socrates is a man

does not rule out 'Socrates is not a man' does not imply that it does not rule out other things. For example, it might rule out the claim that Socrates is a trireme. Next, the *ruling out* theory of meaning does not seem viable anyway. Thus, any tautology is true in every possible world, and so rules out no such world. And 'Everything is true' rules out nothing, since it entails everything. Yet sentences such as these are quite meaningful.

In fact, virtually no contemporary theory of meaning endorses the *ruling out* theory of meaning, just because it is all too clear that some statements rule out nothing. Since Frege, perhaps the most popular account of meaning in logic and the philosophy of language is a truth-conditional account. In this, the meaning of a sentence is given by its truth conditions. One can do this for negation is a quite straight forward way:

• '$\neg A$' is true iff 'A' is false

note that these truth conditions hold equally for classical logic and a paraconsistent logic such as *LP*, as we saw in 2.2[22]. Moreover, these truth conditions hold even if, for some A, the situations where $\neg A$ holds and A

21 Severino often speaks of meaning as being determinate. As far as I can see, for the meaning of something to be determinate is simply for it to have a meaning. But as we shall see in due course, Severino also talks about objects being determinate. I am less clear what this is supposed to mean. I guess that it means that there is some object which it is not (identical to). Of course, as long as there are at least two things in the universe, this is true. Severino sometimes seems to suggest that this is the same as being a non-contradictory object. However, I fail to see why this follows, and I could find no argument for it in the text.

22 In the classical semantics for negation, *false* means the same as *not true*. However, in the semantics of a paraconsistent logic, it is *sui generis*.

holds overlap; indeed, even if A or $\neg A$ holds in all situations, and so rules out none.

3.4 Negation

Paragraphs [C], [D], and [E] raise the possibility of this overlap explicitly. Paragraph [F] then argues against this. The main claim of the paragraph is that if negation does not rule out the overlap it is not really negation (it 'fails to constitute itself', 'fails to live as negation'). That is, this is not the way that negation, properly so called, works. Again, it is claimed that the *elenchos* shows this. I fail to see how. But let us consider the claim on its own merits.

The behaviour of negation is a highly contentious matter historically. Some take a sentence and its negation to entail everything (e.g., as in "classical logic"). Some take it to entail nothing (e.g., Boethius, Abelard, Berkeley). And some take it to entail some things but not others (e.g., as in *LP* above, and even Aristotle, *An. Pr.* 63^b31-64^a16). Some take it to satisfy both $[\alpha]$ and $[\beta]$ of see 2.2 (e.g., Aristotle). Some take it to satisfy $[\alpha]$, but not $[\beta]$ (as in Intuitionist Logic). Some take it to satisfy $[\alpha]$, but not $[\beta]$ (e.g., da Costa). And some take it to satisfy neither (e.g., Beall). Some take it to satisfy the Principle of Double Negation (A if and only if $\neg\neg A$) in both directions (e.g. classical logic, *LP*). Some take it to hold from left to right, but not vice versa (e.g., Intuitionist Logic). Some take it to hold from right to left, but not vice versa (e.g. da Costa)[23].

So why should one suppose that the correct account of negation rules out an overlap? In Severino's paragraph, I find essentially three arguments. The first is a claim to the effect that negation is 'universal', meaning simply that it rules out an overlap ('fails to free itself from that which it denies'). Clearly this begs the question.

The second is that if $\neg A$ is in the overlap, it 'becomes the very bearer' of A. I'm not entirely sure what this means. But if it means that $\neg A$ states that A, or entails that A, these claims are just false. It does neither. Even if $A \wedge \neg A$ is true, A means, in general, something different from $\neg A$. A

23 For Boethius, Abelard, and Berkeley, see Priest (1999). For Intuitionist Logic, see Priest (2008), ch. 6. For da Costa, see Priest (2007a), 4.3. For Beall, see Beall (2015).

and $\neg A$ may not even be logically equivalent, let alone synonymous. Each may not even entail the other. And what if some sentence, such as *this sentence is false*, does mean the same as its negation? There is nothing problematic about this. (The meaning of the sentence is simply a "fixed-point" for negation). It certainly does not entail that, for every A, A and and $\neg A$ mean the same thing.

The third argument is the most interesting. This is to the effect that negation is a contradictory-forming operator ('for the negation intends to posit itself precisely as the affirmation of a contradiction'), and such an operator rules out an overlap (by definition?). The definition of negation as a contradictory-forming operator is, though contentious (as we have just seen), a venerable one, being Aristotle's (*De Int.*, chs 6, 7). However, most significantly, even if this is correct, it does not rule out an overlap[24]. To say that negation is a contradictory-forming operator is to say that, for any A, one must have one or other of A and $\neg A$, but not both. That is, for any A, $A \vee \neg A$ and $\neg(A \wedge \neg A)$. However, as we saw in 2.2, the negation of *LP* satisfies both of these, and also allows for overlaps. Certainly, the overlap gives rise to what one might call 'secondary contradictions' of the form $(A \wedge \neg A) \wedge \neg(A \wedge \neg A)$. But to reject this is obviously to beg the question in this context[25].

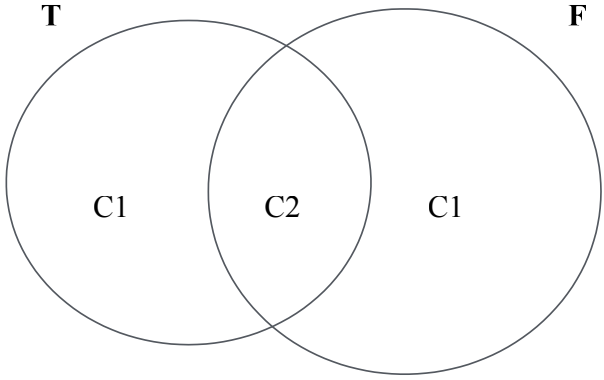
Of course, none of this shows that an account of negation that allows an overlap (such as that of *LP*) is correct. However, that is not the point here. The point was whether Severino's arguments succed in ruling out dialetheism, and this one does not.

3.5 The Overlap

Paragraph [G] then discusses the possibility of an overlap between truth and falsity further. Severino asks us to consider the following diagram:

24 For further discussion, see Priest (2007b).

25 It might be suggested that I have mis-characterised what it is to be a contradictory-forming operator. Rather, for negation to be a contradictory-forming operator is for one of A and $\neg A$ *to be true*, but not both. But this does not help. Suppose that this definition is correct. Then if, A and $\neg A$ are true, then both are true and not both are true. A contradiction, for sure. But it remains the case that one can rule this out only by begging the question.



The left hand 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. In either case the 'opposition' between truth and falsity is maintained.

Severino argues that this account of negation attempts to maintain non-contradictoriness ('wants to be noncontradictory'), but falls into contradiction anyway, since C2 is itself contradictory (that is, has contradictory properties)[26]. It is contradictory for:

> since C2 is the negative of C1 and vice versa, it is said (when the non-contradictoriness of C1 is to be preserved) that C1 is opposed to C2, and (when the contradictoriness of C2 is to be posited) that C1 is not opposed to C2.

Now, C2 is certainly the complement of C1. So nothing is in both C1 and C2. But the other half of the argument appears fallacious. If something is in C2 is is certainly true and false, and so contradictory. Howev-

26 Severino also claims that it is arbitray to suppose that only *some* things are non-contradictory (i.e., in C1). Not at all, no more so than it is to claim that only some things are true. One would not expect the picture itself to say which sentences are in which zones. That is determined by quite different considerations: the reasons we have for supposing something to be true or to be false. And, as I have noted, there are good reasons for supposing that the Liar sentence, for example, is both true and false. There would appear to be no cogent reasons for supposing that everything is, however. See Priest (2006a), ch. 3.

er, this does not make C2 itself contradictory. In particular it does not follow that there is something in C1 and C2[27].

But in any case, the argument suffers from a now familiar objection. Even if C2 is itself contradictory, one cannot reject this picture on this ground without begging the question. Indeed, dialetheism, and an account of negation which this deploys, does not 'want to be noncontradictory'. After all, the members of C2 *are* contradictory. The point of dialetheism is not to eliminate contradictions, but to accept some, and show how these can be managed sensibly.

3.6 Identity

Paragraph [H] now turns its attention to the members of C2[28]. Severino gives as examples 'man is a trireme', 'red is green'. One might add, more realistically, the example 'the liar sentence is true'. Severino notes, correctly, that even though the members of C2 are contradictory, there is nothing that requires them to contradict one another ('but it does not *seem* necessary for the determination of C2 (i.e., *x*, *y*, *z*) to be opposed to one another').

But then Severino goes on in Paragraph [I] to worry about identity statements, such 'red is green', arguing that these, at least, must be consistent.

> For the opposition [between red and green] to be effectively denied, it is requisite that the difference – the opposition – between red and green should be known and affirmed, so that red, known as opposed to green, be denied as opposed to green.

27 The question of whether the distinction between statements that are consistent and statements that are inconsistent can be be consistently maintained is an important issue in the dialetheist literature. Leaving self-reference aside, there is no reason to suppose that it cannot be. Self-reference complicates matters, since it naturally behaves as a mechanism that tears through semantic boundaries. For some discussion, see Priest (2006b), 20.3, and Priest (2017), 7.3.

28 There is an infelicity the text here, since, when introduced, the values of the variables (*x*, *y*, *z*) are member of C2, that it, statements. But when examples are given, the variables are used for subjects and predicates. I take it that this is just a slip.

Thus, for 'red is green' to be meaningful, red and green must be distinct, undercutting the very claim.

Several points are relevant here. The first is that dialetheists are not, as such, committed to things of the form:

[4] Red is green

'The liar sentence is true' is a much more plusible example. But if *red* and *green* are at issue, they might simply say that there is something that is red and green. And as I emphasied in 3.1, this requires *red* and *green* to have neither the same meaning nor the same extension.

Next, and in any case, the meaningfulness of a claim of the form:

[5] a is (identical to) b

presupposes nothing about the senses of the terms '*a*' and '*b*'. Thus, *red*, and *green* do not mean the same thing. But 'red is green' is meaningful; as, then, is its negation. Conversely, in English, the colour terms *slate* and *dark bluish grey* mean much the same thing. But 'slate is dark bluish grey' is meaningful; as, then, is its negation.

Nor does the meaningfulness of a claim of the form [5] presuppose anything about the denotations of the terms '*a*' and '*b*'. Thus 'George Elliot' and 'Mary Anne Evans' refer to the same person. 'George Eliot is Mary Anne Evans' is meaningful, as is its negation. Conversely 'Gottlob Frege' and 'Julius Caesar' refer to different persons. But 'Gottlob Frege is Julius Caeser' is meaningful, as is its negation.

And finally – a now familiar point – even if the truth of [5] were to entail its falsity, one cannot reject it on this ground without presupposing that contradictions cannot be accepted, and so begging the question. Indeed, that *A* is both true and false is *exactly* what one is supposing when one supposes that *A* is in C2.

3.7 Back to the Elenchos

Paragraph [J] reiterates the claims that Aristotle's *elenchos* shows that for *A* to be meaningful, it cannot be the case true that $A \wedge \neg A$; and for '$a = b$' to be meaningful, *a* must be distinct from *b*. Whether or not Aristotle's *elenchos* itself (as opposed to what Severino claims about it) is supposed to establish this, I have already dealt with these points. In general, *A* and

$\neg A$ mean something different, even if $A \wedge \neg A$ is true (3.4). And the meaningfulness of '$a = b$' does not entail that 'a' and 'b' have different meanings or referents (3.6).

Finally, paragraph [K] reiterates the claims that the *elenchos* works even if we suppose that there is an area of overlap between truth and falsity, since it still lapses into inconsistency, and 'we are dealing with a discourse that wants to be non-contradictory (i.e., determinate), but which is superseded simply by showing it to be self-contradictory'. As I noted though (3.5), this argument fails since it begs the question. The dialetheist does not 'want to be noncontradictory'. The very claim that it makes is that it is possible to accept some contradictions as true, and that this does not lead to disaster (for accounts of negation, truth, meaning, rationality)[29].

4. Summary and Conclusion

The pages that follow the paragraphs analysed in Section 3 add no new arguments against dialetheism, as far as I can see. So we need pursue Severino's text no further.

By way of concluding, let me summarise the crucial points established in Section 3.

- A dialetheist (that is, someone who endorses a claim of the form A and $\neg A$) is not required to say that *being* and *non-being* are identical in either sense or extension (reference). [3.1]
- The fact that $\neg\Diamond(A \wedge \neg A)$ does not rule out $\Diamond(A \wedge \neg A)$ – or at least, one can claim so only by begging the question. [3.2]
- The fact that $A \wedge \neg A$ is true does not render A or $\neg A$ meaningless. The argument for this is flawed. [3.3]
- Even if negation is a contradictory-forming operator, this does not rule out $A \wedge \neg A$ being true. It just means that $(A \wedge \neg A) \wedge \neg(A \wedge \neg A)$ is also true. [3.4]
- The fact that some contradictions are true does not necessarily entail that the distinction between being contradictory and non-contradictory is itself contradictory. And even if it were to do so, this is not a fact that need worry a dialetheist. [3.5]

29 All these points are discussed at greater length in Priest (2006a).

- The meaningfulness of a statement of the form '*a* is *b*' presupposes nothing about either the sense of the reference of '*a*' and '*b*'. [3.6]
- Dialetheism does not try to eliminate contradiction. It accepts some contradictions, and shows how to manage them. [3.7]

These points serve to refute all of Severino's arguments against dialetheism. I conclude, therefore, that his arguments against dialethism are no more successful than Aristotle's[30].

5. Textual Appendix

This appendix reproduces the text analysed in 3.1 to 3.7. I omit footnotes. The letters in square brackets are my references. The numbers in angle brackets are page numbers.

> [A] How, then, must the opposition of Being and not-Being be thought, so that it may be seen in its truth? By thinking its *value*; which means, on the one hand, that the opposition is *per se notum* – i.e., that the predicate (the negation of not-Being) belongs *per se* or immediately to the subject (Being) (so that the negation of opposition is negated, because it denies that which is *per se notum*, i.e., that which is the ground of its being affirmed); and, on the other hand, that the opposition is undeniable, because the negation can live as negation only if, in its way, it affirms the opposition. *This* is the formidable contribution made by the Aristotelian *elenchos*. If the opposition is, in *any* way, denied and the negation is to *be* negation – is to hold fast as negation (i.e., as that specific negation which it is) and intends to deny in earnest and not be indifferent to its ranking as negation rather than as not-negation – then the negation is *opposed* to its negative; that is, it holds firm in that meaning for the sake of which it is negation, and differentiates this meaning from all other meaning: its positivity, its being meaningful as negation and as that specific negation which it is, consists in its differentiating itself from, and opposing itself to, its ⟨62⟩ negative (i.e., from and to all other meaning). In denying that Being is not not-Being, one must therefore *think* that the Being in

30 For very helpful comments on an earlier draft of this essay, many thanks go to Franz Berto.

which this negation consists is not not-Being (i.e., is not everything that is other than this negation). The negation is explicit, *in actu signato*, whereas the thought is implicit, *in actu exercito*: but it is a thought that one really *thinks*, a thought that must be realized, if one wants the negation to have that determinate meaning of negation which is proper to it and if one is not to remain indifferent to its having some other meaning.

[B] But the Aristotelian *elenchos* must be more closely examined. First, it should be noted that the *elenchos* consists not simply in ascertaining that the negation of the opposition is also affirmation of the opposition, but rather in the ascertainment of the opposition, i.e., the opposition, is the *ground* of any saying, and so *also* of that saying which is the negation of the opposition. In all discourse and in all thought, the meaning that emerges in the saying and in the thinking is held fast in its difference from any other meaning, i.e., in its opposition to its own negative. If this opposition is not thought, no thought can constitute itself, not even the thought which consists in the negation of the opposition. In manifesting itself, that is, Being submits itself to the law of opposing it to not-Being, in *any* manifestation of Being, be it truth or untruth – and so in that paramount form of untruth, which is the explicit denial of truth. The opposition is the ground, in the sense that it is *that without which no* thought and no discourse would constitute itself or exist. It grounds its own negation as well: not, however, in the sense of making it valid or grounding its value, but rather in the sense that if the negation did not base itself upon the opposition (that is, did not oppose its own meaningful positivity to all other meaning), it would not even exist. It exists only if it affirms that which it denies. Indeed, denying, it denies its own ground, it denies that without which it would not *be* (or, which is the same thing, would not be *meaningful*): it denies itself. The negation of the opposition effectively includes the declaration of its non-existence, it supersedes itself by itself; it says, "I am not here," "I am meaningless"; and if saying has any meaning, it is only because, despite the explicit negation of the opposition (which is equivalent to the self-supersession of the negation), the opposition is held fast. The *elenchos* is precisely the ascertainment of this self-supersession of the negation; ⟨63⟩ i.e., it is the ascertainment that the negation does not exist as *pure* negation – as negation that, in order to constitute itself, has no need to affirm that which it denies. Saying that the opposition "cannot" be denied thus

means ascertaining that, precisely because the ground of negation is that which it denies, the negation consists in the negation of itself, in its superseding itself as discourse.

[C] But a more thorough investigation into the meaning of the *elenchos* leads to the following series of considerations.

[D] The assertion "Being is not not-Being is the opposition *qua universal* – in the aforesaid sense of the term (i.e., it is the opposition between Being as transcendental and not-Being as transcendental, where "Being" means any positive, be it the totality of the positive or any moment of that totality). The assertion "this Being is not its not-Being" is an *individuation* of that universality. The *elenchos* shows that the negation of the universal opposition is (*in actu exercito*) affirmation of an individual of the universal opposition. Such individuation consists in affirming that this Being (this meaningful positivity), in which the negation of the universal opposition consists, is not its not-Being. The denial of the universal opposition can be realized only if it implies, i.e., only if it bases itself upon, the affirmation of an individuated opposition between Being and not-Being (that is, only if it implies the affirmation that a certain positive is opposed to all its negative). The *elenchos* so understood does not show that the negation of the universal opposition implies and is grounded upon the affirmation of the universal opposition.

[E] It seems, then, that whereas the *elenchos* is capable of showing that the negation of the opposition fails to be universal, precisely because there is a region in which the negation does affirm the opposition (and it is this region that the negation holds fast as negation), it does *not* seem able to prevent the negation – insofar as it renounces its claim to be universal – from presenting itself as negation of the opposition with respect to everything that lies beyond that region. It would seem, that is, that the *elenchos* fails to prevent the negation of the opposition from re-presenting itself in the following way: "Beyond the region that is constituted by the negation and by its semantic implications, the positive is not opposed to the negative"; or to put it another way: "Only in a limited region is the positive opposed to the negative, whereas beyond ⟨64⟩ this region it is not so opposed. Such a region is constituted by the very discourse that denies the opposition of the positive and negative in the residual region." In this way, the negation

would no longer be grounded on that which it denies, because that on which the negation is grounded, i.e., that upon which its constitution depends, is the *individuated* opposition, which is now no longer denied by the opposition with respect to the area not occupied by the ground of negation.

[F] Yet this conclusion rests on a misunderstanding. This approach, in fact, fails to keep in mind that when the negation of the opposition, i.e., the affirmation of the contradictoriness of Being, renounces its claim to be universal, it does so *not* because it intends to supersede itself, but rather because it intends to posit itself in earnest, and thus as *non*contradictory, banishing contradictoriness from itself. Accordingly, we are faced here with something radically different from the universal negation of the opposition of Being and non-Being (or negation of the universal opposition). The Aristotelian *elenchos* effectively shows that such universal negation fails to constitute itself: for the very reason that it can constitute itself *only if* it is affirmation of the opposition (albeit of the opposition between a particular positive and its negative); and thus it denies both its own ground and itself. The *elenchos*, be it noted, does not say that the negation of contradictoriness is inadmissible because it is contradictory (since in that case, it would presuppose the very thing whose value it has to show: namely noncontradictoriness); but rather that such a negation fails to live as negation, because in the act in which it constitutes itself as negation it is at once also affirmation. And so it is, most definitely, contradictory: but the negation is not superseded insofar as it is formally ascertained that it fails to posit itself as negation, unless it grounds itself on that which it denies, and so only if it denies itself. The negation, failing to free itself from that which it denies, becomes its very bearer; not only does it fail to tear what it denies off its back, so that it can then hold it at arm's length and condemn it, but what it thinks it has before it and has condemned, actually stands behind it and directs all its thoughts, including the thought that announces the condemnation. The law of Being is the destiny of thought, and thought is always witness to this ⟨65⟩ law, always affirming it, even when ignorant of it or when denying it. The supersession of the negation is not, therefore, brought about by the negation's being shown to be contradictory (for the negation intends to posit itself precisely as the affirmation of contradictoriness), but rather by showing that the negation fails to live as pure negation (that is, as negation not grounded upon that

which it denies); the negation is superseded insofar as it is shown to be self-supersession.

[G] Now, when the negation, recognizing that it cannot live as pure negation, foregoes positing itself as universal negation and presents itself as limited negation of noncontradictoriness (i.e., as the affirmation that everything, except the positive consisting in the affirmation that some positive is not opposed to its negative, is not-opposed to its negative), then it, too, becomes a discourse that, not wanting to deny that upon which it is grounded, wants to be noncontradictory; the noncontradictoriness here being the very determinateness of the discourse. At this point, then it is no longer a matter of showing the value of noncontradictoryness (i.e., of the opposition of the positive and the negative), but rather of seeing whether this way of understanding noncontradictoriness is effectively noncontradictory; of seeing, that is, whether this new type of negation, having set out to hold fast to its determinateness, manages to do so. We are no longer faced with an opponent of the principle of noncontradiction, but ⟨66⟩ rather of someone who affirms in a certain way; namely as having a limited range. Thus, in order to eliminate this limited affirmation we have to show that it is contradictory, i.e., that it fails to be what it sets out to be. And this is so in several respects. Apart from the arbitrariness of attributing noncontradictoriness to that particular region of the whole which is itself nothing other than a partial affirmation of noncontradictoriness, we have only to observe that this affirmation divides the whole into two fields, in one of which (let this be C1), the positive is opposed to its negative, while in the other (C2) the positive is not opposed to the negative. Consequently, since C2 is the negative of C1 and vice versa, it is said (when the noncontradictoriness of C1 is to be preserved) that C1 is opposed to C2, and (when the contradictoriness of C2 is to be posited) that C1 is not opposed to C2. The limited affirmation of noncontradictoriness is self-contradictory.

[H] It is, however, possible for this limited affirmation to further limit itself, so as to avoid being self-contradictory in the aforementioned manner. If *x*, *y*, *z* is the content of C2, it *is* necessary, in order to maintain the determinateness of C1, that C2 should also be determinate – i.e., that it be opposed to C1, precisely because C1 is held fast in its determinateness, i.e., in its being opposed to C2 – but it does not *seem* necessary for the determinacy

of C2 (i.e., *x*, *y*, *z*) to be opposed *to one another* : for the determinateness of C1, the determinateness of C2 with respect to C1 is requisite, but the determinateness of the terms that make up the content of C2 is not. If we give a concrete value to the variables *x*, *y*, *z*, it seems that judgments such as "man is a trireme" (*x* is *y*), "red is green", etc., are not superseded by the *elenchos*, at least in the way it has hitherto been formulated. The negation of the opposition, now, not only renounces the claim to be universal, but consists in nothing other than the ascertainment that the determinateness of a particular field (whose confines have yet to be determined) can be exempted from the law of opposition (which would consequently no longer be a universal law).

[I] And yet the *elenchos*, in order to attain its self-supersession also of these self-contradictory propositions, need not alter its structure. If, in affirming that "red is green", one is in a situation where, effectively, no difference between red an green is known, present, or ⟨67⟩ intended, then the law of opposites would be denied if one were to say that red is not green, and not by saying that red is green. For the opposition to be effectively denied, it is requisite that the difference – the opposition – between red and green should be known and affirmed, so that red, known as opposed to green, be denied as opposed to green. Here, then, the affirmation is the ground of the negation of the opposition, so that the negation denies that without which it would not be negation, and so denies itself.

[J] The *elenchos* is the ascertainment of the *determinateness* of the negation of the opposition (where "determinateness" means nothing other than the positive's property of being opposed to the negative). This determinateness is proper *both* to the negation, considered as a semantic unity with respect to everything other than the negation, *and* to the single terms that make up the negation. If the negation does not remain distinct from its other, there is no longer negation: if each term of the negation is not distinct from each other term (as occurs when no difference is posited between red and green, i.e., when red is affirmed to be green), again, there is no negation (for if the terms are not seen to be different, positing a difference between them would be a negation of the opposition). In order for there to be negation, the negation must be determinate, both with respect to its other, and in ⟨68⟩ the terms that constitute it; and therefore it presupposes and is grounded on that which it denies.

[K] From what has been said, it is clear that the *elenchos* works not only on the just-mentioned type of the negation of the opposition, but also on the aforementioned type of limited negation, in which the opposition is affirmed in C1, and, at the same time, denied in C2. In this case, it is true that we are dealing with a discourse that wants to be non-contradictory (i.e., determinate), but which is superseded simply by showing it to be self-contradictory; but it is also true that the *elenchos* works on this type of discourse as well: and it does so by ascertaining that the denial of the positive's being opposed to the negative in C2 presupposes the affirmation of the opposition (for the same reasons as that for which the denial of red's being opposed to green presupposes the affirmation of this opposition). In what follows, this will be considered in a context of greater theoretical scope.

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Discussion with Graham Priest

EMANUELE SEVERINO

1. Dialetheism and primal structure

1. I would like to extend my warmest thanks to Professor Graham Priest for having kindly agreed to take part in the Congress held in Brescia (Italy) on March 2-3, 2018 and dedicated to my book *La struttura originaria*, published in 1958. On that occasion, he presented a highly interesting text entitled *Emanuele Severino and the Principle of Non-Contradiction*, where he analyzes a number of pages of my *Returning to Parmenides* (1964), now included in *The Essence of Nihilism* (Verso, London-New York, 2016, Italian edition 1972, Adelphi 1982) – an essay which elaborates on several central themes of *La struttura originaria*. Priest addresses the basic issues of knowledge. The video of his talk is available on Google, and the text, divided into chapters and sections, was distributed to the participants. For my own part, I provided a response in the form of a set of notes before the Congress opened. I re-present them here, reordered and to some extent expanded – though they deal with only some of the topics, those that I regard as most decisive, covered by Priest.

In the 'Presentation' of the first issue of this journal, I provided a rough outline of the general framework of my philosophical thinking, which provides the background for the following pages.

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2. As we know, Priest is the most important supporter of the form of paraconsistent logic he calls "dialetheism". This theory holds that *in certain cases* the statement A and the negation of A are both true, or in other words they are both true and false, and consequently *some* contradictions are true. ("Dialetheism is the view that there are some dialetheias: that is, some contradictions are true, and so may be accepted. It is very necessary to distinguish dialetheism from a distinct view: that all contradictions are true. This is trivialism, and a quite different matter", 2.1).

Much earlier, my essay *Returning to Parmenides* had presented this central thesis of what later were to be called "paraconsistent logics" and "dialetheism", but had done so in order to demonstrate that it *is* a contradiction – where it does *not intend* to be a contradiction (but intends to theorize *non-contradictorily* that *in certain cases* the statement A and the negation of A are both true).

3. But before turning to why this thesis is a contradiction, I would like to say – referring not just to Priest, but to all present-day scientific and philosophical perspectives – that these perspectives' contentions no longer intend or can no longer claim to be absolutely and incontrovertibly true, "Truths" with a capital T, which is what the Western philosophical and scientific traditional has always aimed at. In other words, these perspectives, at least in their more cognizant forms, recognize that they are hypotheses, postulates, falsifiable knowledge, faiths, a desire to acknowledge that certain things rather than others exist (they recognize this, even though they often forget it). They recognize it even if they do not consider themselves as contradictions – given that, *from their own point of view*, not being a contradiction is *not* being incontrovertible truth (Hilbert maintains that, for mathematical beings, not being contradictions means that they exist and thus are true. But Hilbert does not say what determinations make his statement an incontrovertible truth, or what configuration truth would have to have in order to be incontrovertible. In any case, not even Gödel's essay on formally undecidable propositions has anything to say about this, though it sets out to prove that it is impossible to prove that arithmetic, and thus all of mathematics, is non-contradictory).

As for Priest, even assuming that his dialetheism is not in turn a contradiction, I do not see where it shows *why* it should be considered undeniable and definitively incontrovertible truth. This means that the thesis that *in certain cases* the statement A and its negation are both true (both of them are

at once true and false) can only be a hypothesis, or the consequence of a hypothesis. This must be said not only of contemporary logic and mathematics, but also of the "principle of non-contradiction" (PNC), since it arises from the climate of rejection of all incontrovertible truth.

By contrast, my *Returning to Parmenides*, which Priest discusses, is framed in a language that refers to a dimension where the *truth* has a meaning which does not belong *either* to the philosophical tradition, *or* to the negation of that tradition that is now taking place.

Greek philosophy invokes the *idea* of "incontrovertible knowledge", or "science of truth" (*epistéme tês aletheías*) and seeks to discover what this knowledge consists in. In the past two centuries – as we have seen – science and philosophy have denied that such knowledge is possible, and hence that an incontrovertible *ground* for it is possible. Not even logic can be the incontrovertible ground of knowledge. It proceeds from a group of postulates, or in other words, of conventions. On the other hand, by accepting logic we believe that we can transform the world according to certain projects: it has a *practical* value.

In any case, the meaning of "Being" that Greek philosophy brought to light is at the basis of the growth of all Western civilization, as well as that of the planet by now (the wisdom of the East is the prehistory of the Greek sense of Being). For the Western tradition, in fact, as well as for the knowledge that seeks to destroy it, Being *qua* Being is that which was not and will not be (it was nothingness, and will return to nothingness. My writings demonstrate that when the meaning of Being is interpreted in this way, it is "inevitable" that we end by rejecting all incontrovertible knowledge and any incontrovertible ground of knowledge. But my writings question the Greek sense of Being and can thus once again address the sense of incontrovertible knowledge, demonstrating its ground, i.e., the *primal structure*. This structure is the authentic meaning of primal truth. It is the dimension where Being *qua* Being appears in its being itself and nothing other than itself, and where the negation of this being itself and of the beings that appear is self-refutation. The "false" is the negation of the primal structure. I call the authentically incontrovertible "destiny", using the term with a nod to its Latin roots: "destiny" is "that which *stands firm*", which does not let itself be shaken or knocked down, where the "de" in "de-stiny" does not mean "coming *from*", but is an intensifier (along the lines of the Latin *devincere* or *deamare*, for example).

And it should be noted that in *Ritornare a Parmenide* ([RP] – *Returning to Parmenides*), this "being itself and nothing other than itself" is

called the "opposition of Being and Not-Being" ("opposition of positive and negative") – where the term "being" denotes *every* being, i.e., *everything* that is in any way significant (things, statements, feelings, impulses, fantasies, faiths, rational constructs, relationships, situations and so forth): *everything that is not nothing and nothingness itself.*

4. In the way *RP* anticipates the central thesis of paraconsistent logic and dialetheism, this thesis holds that that which exists is divided into two fields: one we will call C1, where that which exists is not contradictory, and one we will call C2, where that which exists is contradictory. But – I ask – why then do we have the "principle of non-contradiction" (PNC) whereby C1 exists and cannot be negated? In other words, why *must* "trivialism" (see section 2) be negated? Until such time as this question is answered, this PNC is a faith, a hypothesis.

It seems to me that Priest maintains that the "truth" and hence the non-contradictoriness of dialetheism is given by the circumstance that in dialetheism, the statement of the contradictoriness of C2 does *not* entail that it be followed by any statement whatsoever (or in other words, from that *falsum* that is C2, *quodlibet* will follow); and that it thus follows that dialetheism belongs to C1 even though it affirms that the contradictoriness of C2 exists; accordingly, C1 would not be a contradiction. But even if we accept this thesis, it does not mean that dialetheism is an incontrovertible truth.

5. However, dialetheism (like every paraconsistent logic) not only is not incontrovertible truth, but contrary to its intentions, is a contradiction (i.e., it asserts something contradictory, see section 7-9). This is one of the points where Priest and I do not see eye to eye.

Section VI of *RP* deals with the negation of the "opposition of positive and negative", or in other words, the negation of the opposition between any *meaning* – or *being*, or *entity* – and everything which is other than itself (my writings show that this opposition is the authentic sense of what philosophy and logic call the "principle of non-contradiction"); and *RP* shows that this negation is the meaning's negation (*in actu exercito*) of what it (*in actu signato*) signifies, so that it rejects (*in actu signato*, in fact) its own basis: it rejects itself, and thus is unable to be what it intends to be. The demonstration of this self-negation has its historical roots in the refutation (*élenchos*) of the negation of the *bebaiotáte arché* (*principium firmissimum*), developed by Aristotle in Book IV of *Metaphysics,* which we will return to

later (see section 13-14) in discussing Priest's criticisms of the Aristotelean *élenchos* and how *RP* draws on it (and also goes beyond it).

6. *After demonstrating* that the opposition of positive and negative is irrefutable, *RP* considers the case where C1 (see section 4) is the dimension that, *without* intending to be contradictory, *is the negation of the opposition of positive and negative*, or in other words is the negation that affirms the contradictoriness of everything differing from it (i.e., affirms that C2 is contradictory). C1's statement of the contradictoriness of that which exists claims to be the only non-contradictory thing in existence (so that affirming the coexistence of C1 and C2 is a form of what then came to be called "dialetheism").

But – as should be emphasized – by demonstrating that, contrary to its intentions, C1 is contradictory, *RP* does *not* intend to show that the negation of the opposition of positive and negative is self-negation (such an intention would be a trivial *petitio principii*); rather, *once it has been determined that this negation is self-negation*, *RP* considers the thesis that posits C1 as non-contradictory and C2 as contradictory, and *on the basis of this determination* shows that C1, contrary to its intentions, is contradictory. (As I have already said, this seems to me to be one of the points where Priest and I are at odds).

7. *RP* demonstrates it as follows: "Since C2 is the negative of C1 and vice versa, it is said (when the non-contradictoriness of C1 is to be preserved) that C1 is opposed to C2, and (when the contradictoriness of C2 is to be posited) that C1 is not opposed to C2" (RP, p. 66).

Indeed, if we posit that C2 is contradictory, and given that C2 is related to C1 (if for no other reason than because C1 asserts that C2 exists), this relation is in turn something contradictory, and consequently C1's relation to C2 is also something contradictory (since C2's relation to C1 *is* C1's relation to C2); accordingly, the contradictoriness of C1's relation to C2 entails that C1 is contradictory, in the sense that C1's relation to C2 can be contradictory only if C1 is contradictory.

C1's contradictoriness is thus two-fold. First, C1 is contradictory because its relation to C2 is contradictory; second (as *RP* points out), C1 is contradictory because it is opposed and is not opposed to C2.

8. In other words, if dialetheism claims not to be simply a hypothesis and believes that its ground for the existence of contradictory dimensions

is a necessary (undeniable) implication, then the relation that dialetheism posits between the contradictory and non-contradictory dimensions cannot be external to the terms in this relation (an "external relation" in the sense that Bertrand Russell assigns to this expression): it is a relation that involves the content of the two dimensions.

Now, a dimension is contradictory only if it is X and at the same time is not X; and if this dimension is related to something else, it is not only X or only not X which is related (in which case the relation would not be contradictory), since what is related is the contradictory unity of X and not-X. This means that the relation between the non-contradictory and contradictory dimensions is necessarily a contradictory relation.

But, as we were saying, if dialetheism sees this relation as incontrovertible (i.e., if it holds, as seems to me to be the case, that the ground for the contradictory dimension's existence is not deniable, not hypothetical, not conventional, not provisional, not falsifiable, and so forth), then this relation cannot be an external relation. Consequently, the existence of a contradictory relation between the non-contradictory and contradictory dimensions necessarily entails that the non-contradictory dimension also be contradictory, and in other words that – contrary to dialetheism's intentions – *every* dimension, every being, and every reality be contradictory.

9. Conversely, in connection with the relation between C1 and C2, Priest asserts (3.5.): "if something is in C2 it is certainly true and false, and so contradictory. However, this does not make C2 itself contradictory". And he adds: "Even if C2 is itself contradictory, one cannot reject it on this ground without begging the question". This claim that my argument begs the question makes me think that Priest believes that *RP*'s treatment of the relation between C1 and C2 is meant as an *élenchos* of the negation of the opposition of positive and negative – where, as was indicated in sections 6 *ff* and bears repeating here – this treatment *is grounded* in the *élenchos* of this negation, and *on this ground* demonstrates the contradictoriness of the thesis (and hence of dialetheism) which seeks to support the form of negation of the opposition which considers that contradictory existence is limited to C2, or in other words demonstrates that dialetheism is contradictory.

Ruling out that dialetheism's contradictoriness follows from the way *RP* considers the relation between C1 and C2, Priest also adds that "it does not follow that there is something in C1 and C2". But the relation between C1 and C2 is indeed something that is in both C1 and C2.

10. According to Priest, dialetheism is confirmed by Hegel ("the most notable example", as he writes near the beginning of his commentary), by self-referential paradoxes such as the liar's paradoxes, and by the existence of movement ("Other subjects include the law, and the limits of thought). As it seems to me that Priest's contention does not clarify why the law and the limits of thought should confirm dialetheism, I will now consider the other cases of such a confirmation.

Hegel undoubted denies the PNC, *but he denies the abstract conception of this principle*, as I have shown in Chapter IX of *La struttura originaria (op. cit.), in Abitatori del tempo* (Armando, 1978, 2nd edition, Rizzoli) and in *Tautotes* (Adelphi, 1995). And if Hegel sees every *finite* reality as undoubtedly a contradiction, we must not forget that for Hegel every reality is the content of thought, and if finite thought contradicts itself – if contradiction exists – this does not mean that Hegel believes that a contradictory reality external to thought exists.

My writings have long dwelt on the difference between contradiction and the contradictory (i.e., impossible, nil) content of contradiction. Someone may *believe* that the circle is square – his or her conviction exists –, but its contradictory content, i.e., a square circle as a reality, is an impossibility, a nothingness, and cannot exist. (Similarly, we can say that madness exists, but not what it believes in). And since I maintain that, in considering movement to be a confirmation of dialetheism, Priest is again referring to Hegel, it should be pointed out that with the Hegelian dialectic method, movement results in thought contradicting itself when thought is still abstract "intellect" (*Verstand*) where determinations are isolated, so that the isolated determinations contradict each other and are involved in the movement which makes them become their opposite. For Hegel, in any case, movement is also that which removes the contradiction produced by abstract intellect – and in this movement thought becomes "reason" (*Vernunft*).

Self-referential paradoxes like the liar's paradox are also to be interpreted in the light of the distinction between contradiction and its contradictory content (nothingness). "This sentence is false". Reasoning about this sentence very quickly leads to a "contradiction", writes Priest (2. Background). But there are *contradictions* that reveal themselves as such immediately, and there are others – like the statement "This sentence is false" – that in order to be revealed for what they are must be subjected to certain kinds of conceptual elaboration. And these contradictions – we repeat – are precisely that: *contradictions*. They are not their

contradictory content; they are not the content they assert, which is nothing, and does not exist.

Consequently, self-referential paradoxes do not confirm dialetheism, or in other words do not demonstrate the existence of contradictory *realties*. Rather, it should be pointed out that all forms of knowledge other than the knowledge which is able to be absolutely undeniable, the "destiny of truth", are contradictions (see section 3, last paragraph but one). The sphere of existing contradictions is infinitely larger that the sphere in which dialetheism holds that contradictions exist.

There are contradictions – as we have said – that are immediately apparent as such, and there are others (e.g., "This sentence is false") that in order to be revealed must be subjected to conceptual elaboration. But this elaboration is based on hypotheses and postulates, not on the absolutely undeniable. In the case of "This sentence is false", the elaboration goes, as we know, "If this sentence is true, then it is false (because since it says it is false, it is thus false); if it is false, then it is true (because it says it is false). But the statement "If this sentence is true, then it is false" not only presupposes a certain logic and a certain use of the PNC, but assigns a meaning to the terms "true" and "false" that differs from truth as the "destiny of truth" and of its negation (and this also apples to the statement "If this sentence is false, then it is true"). Paradoxes thus spring from the desire to assume certain hypotheses as a ground. These hypotheses – as we said a moment ago – are not absolutely undeniable and consequently are contradictions that entail the contractions making up these paradoxes (and where these implications are themselves hypothetical rules).

11. In the primal structure of the authentically undeniable, i.e., of the destiny of truth, Being *qua* Being, i.e., every being, appears in being itself and nothing other than itself on the one hand, and a certain set of beings appears on the other hand. In this combination, the negation of this being itself and of this set is self-negation. As indicated above, *RP* considers this self-negation first according to how it is presented in the Aristotle's *élenchos* and then in its authentically radical form. Priest maintains that neither succeeds in its intent.

And as we have said (section 3, next to last paragraph) that in *RP* the term "being" is taken to be a synonym of "that which exists" or "meaning", so that "being" is everything that is not nothingness (and thus even the *meaning* "nothingness" is a "being"), in *RP,* "being" consequently in-

cludes not only the distinction between "meaningful" and "meaning", but also (I mention this because Priest has asked me) the "extension" of "everything that is not nothingness" (where this totality is the "intension" of "being").

2. Elenchos

12. As for the Aristotelian *élenchos*, Priest discusses the sequence where Aristotle notes that someone who denies the *principium firmissimum* must say something (1006a 12-13), or in other words, something that has a meaning (*semaínein*, 1006a 21). But for Priest, the something that has a meaning to which this passage refers would be "a simple common noun", like "man".

Except that, by interpreting Aristotle's text in this way, Priest fails to consider that this (i.e., "man" or another "simple common noun") is not the *primary* signification asserted in the *semaínein* of the denier of the PNC: this primary signification is *the universal negation of the principium firmissimum*.

In fact, Chapter 4 of *Metaphysics*, Book IV, which deals with the *élenchos* or proof by refutation of this principle, starts out by noting that "there are some who *state* (*phási*) that *the same* can be and not be" (1005b 35-1006a 1); where "the same" refers to *any* meaning whatsoever, or in other words, "the same" is universal. And, *immediately* after emphasizing that whoever denies the principle must say something that has significance, the text notes that in this significance "there will be something with a definite or determinate meaning (*horisménon*)" (1006a 24-25), and so – the text *concludes* – the denier of the principle, by "disowning reason, acquiesces to reason" (*anairôn gàr l gon hypoménei l gon,* 1006a 26).

Here, reason, or "logos", is first of all the *principium firmissimum* (and thus everything grounded in this principle). The fundamental meaning of Aristotle's *élenchos* is that if the denier of the principle states the meaning which is the *universal* negation of the principle, then this negation, as it means something, is a *horisménon*, something "determinate", or in other words it is a non-being other than itself, it is not itself and other than itself, and it is impossible that it exist and not exist. The content of the formula that Aristotle starts from (it is impossible for the same thing to belong and not to belong at the same time to the same thing and in

the same respect, 1005b 19-20) is in fact identical to the content of the formulas that state that it is impossibe for something "determinate" to be other than itself, to be itself and other than itself, to be and not to be – in the same respect. That the negation of the principle is a *horisménon* means that it accepts, affirms and acquiesces to this principle.

13 – In Aristotle's *élenchos*, the denier of the *principium firmissimum* first states the meaning that is the *universal* negation of this principle, but this is not to say that Aristotle does not consider the principle's particular negations, "Socrates is and is not a man", for example. Here too, however, as we will discuss in a moment (III, 17), *RP* proceeds independently of Aristotle's text.

14. In the meantime, returning to the conclusions of the primary sequence of Aristotle's *élenchos* – that "disowning reason" which is also an "acquiescence" to it" – it should be noted that precisely because "disowning" is also "acquiescing" to what was disowned, the disowning is not in fact accomplished and is thus only the *intention* of disowning reason, an intention that *is expressed* in the negation of the principle. Conversely, inasmuch as the denier of the principle also "acquiesces" to it, he does not intend to acquiesce to it, and *neither acknowledges nor expresses* his acquiescence and yet it is necessary that he acquiesce. This means that he negates it explicitly (*RP* says: *in actu signato*) and acquiesces to it implicitly (*RP* says: *in actu exercito*).

It is thus strange that Priest maintains that this relationship between the explicit and the implicit has nothing to do with Aristotle's *élenchos* ("this is not really Aristotle's élenchos", Priest, § 3.2, p. 50 in this volume). And the *determinatio* of Spinoza's *omnis determinatio est negatio*, which Priest considers extraneous to Aristotle's *élenchos*, is precisely the Aristotelian *horisménon* – even though Spinoza does not speak of the connection between *determinatio-negatio* and *élenchos* of the negation of the PNC.

In general, I would urge Priest not to lose sight of the *élenchos* of the *universal* negation of *principium firmissimum*, i.e., the first part of Book IV, Chapter 4, and specifically the passage 1005b 35-1006a 26 discussed above (section 12). *Everything* else that Aristotle adds does not concern that negation as much as it does the *particular* negations of the principle (e.g., "Socrates is and is not a man").

In this connection, *RP* develops a set of considerations that are not in Aristotle's text – (and which are informed by a sense of "being" differing

radically from that which has dominated throughout Western, and now planetary, civilization). We will return to this portion of the discourse, which Priest neglects.

On the other hand, we can say without fear of exaggeration that Book IV, Chapter 3 of *Metaphysics*, where Aristotle formulates the *principium firmissimum*, has almost never been understood (one of the very rare exceptions, and perhaps the only one, is Thomas Aquinas's commentary on this passage). And the failure to understand Chapter 3 has affected how the first part of Chapter 4 (1005b 35-1006a 26) has been interpreted. I demonstrated this in Part Three of *The Essence of Nihilism* (cit.). And in Part One of *Fondamento della contraddizione* (2005, Adelphi; French translation *Le fondement de la contradiction*, 2018, Mimesis), I demonstrated the inconsistency of Łukasiewicz's critique (with which Priest agrees) of the essence of Aristotle's *élenchos*.

15. We will now come back to Aristotle's *horisménon*, which crops up again in Spinoza's *determinatio*, i.e., in the principle that *every* meaning rules out (or in other words, is not) that which is other than itself (the ruling out theory of meaning): every *horisménon est negatio*. In connection with this principle, Priest states that "there are many predicates that rule out nothing, e.g., is an object, is self-identical, was or was not thought about by Aristotle" (3.3 *Meaning*); and a few lines later adds: "In fact, virtually no contemporary theory of meaning endorses the ruling out theory of meaning, just because it is all too clear that some predicates apply to everything".

I will overlook the fact that the dialetheist should *not* say that the predicate "is self-identical" applies to everything: he should not say it because self-identity is a way that what the dialetheist also calls the "principle of non-contradiction" is presented. Accordingly, if everything is self-identical, *everything* falls under this principle. And I will start by observing that the predicate that applies "to everything" is first of all the meaning "thing" (which I do not believe Priest has difficulty in identifying with the meaning "object"). The "was or was not thought about by Aristotle" (and every other similar predicate) is also a "thing" (in the broad, transcendental sense of "being" – see section 11). Greek ontology then thought of a "thing" as "being", as opposed to absolute nothingness. Aristotle – well before any contemporary theory of meaning – speaks of the science of *Being qua Being,* or in other words sees existing as being as the predicate of all things. On the other hand, "being" is everything that is in some way

meaningful, so that saying that "being" is predicated of all things is to say that "meaning" is predicated of all things. The meaning that is predicated of all things is first of all the meaning "meaning", or "being" – and as every "meaning" or "being" is an "object" and "self-identical", so every "object" and "self-identical" thing is a "meaning" or "being".

But if some predicates apply to everything and rule out nothing, *nevertheless* every meaning (every being), and thus every predicate rules out being a meaning other than what it is. However nuanced, complex and elusive a meaning may be, its nebulous semantics is not to be confused with another dimension or nebulous semantics. Additionally and *a fortiori*, the predicate "being" ("meaning") *rules out* that it is not predicated of everything, but at the same time rules out having a meaning other than itself: even being predicated of everything rules out not being predicated of everything. And it is only because "being" rules out being meaningful in another way that "being" can be the predicate of everything.

"Being" does not rule out anything: in the sense that it is the predicate of everything. Asserting that its meaning differs from the meaning in which it consists is a contradiction; but contradictions are also beings (unlike their null content). And consequently, "being" is also predicated of the contradiction "being is a meaning differing from the meaning of which it consists". And indeed, it is precisely because "being" *rules out* that it is *not* the predicate of everything and in general rules out being meaningful in another way than its own, that "being" "applies to everything".

(The statement "Every predicate rules out having a meaning differing from what it is" does not mean that a meaning – this white surface, for instance – can disappear and be replaced by the appearance of this black surface. In other words, it does not rule out what Western civilization, which is now planetary civilization, interprets as this white surface's "becoming black").

That "being" does not rule out anything because it is the predicate of everything is not to be confused with the need for "being" to rule out being meaningful in a way other than its own and for which it is the predicate of everything.

16. In addition, just as "being" does not mean "tree", "water", "moon", and so forth (even though it is the predicate of "tree", "water", "moon", and so forth), so "being" does not even mean, and, in a certain sense, above all does not mean "nothing". "Being" is not "nothing".

And yet "being" is also predicated of "nothing". In fact, the "nothing"

that "being" (the *determinatio* "being") denies that it is (i.e., that "being" rules out) is a meaning that, unlike all other meanings, signifies the absence of all signification, and is thus a *contradiction*. As such, the meaning signifies *something*, but the meaning "nothing" signifies the absence of any *thing*. The signification of this meaning contradicts what it signifies.

Except that, as we have seen, contradiction (being contradictory) is not nothing, but is in turn a being, a meaning, so that "being" is also predicated of the meaning "nothing". It is only because the *determinatio* "being" is *negatio* of the meaning "nothing" that this *determinatio* can also be predicated of this meaning. Thus, the meaning "being" does not rule out "nothing", but this is not in turn a contradiction.

The conviction that the existence of meanings that apply to everything entails that the *determinatio* as such is *not negatio* of what is other than the *determinatio* is the negation of the opposition of the positive and the negative – and as we discussed above, is the form the *élenchos* of this negation should take, over and above the configuration of Aristotle's text. What is all clear for every contemporary theory of meaning is thus more complex than could be suspected.

The contradiction in the meaning "nothing" (and the aporia brought about by the fact that Nothing is thought about, and thus exists in some way) are addressed in particular by Chapter IV of *La struttura originaria*, *cit*. and by *Intorno al senso del nulla*, Adelphi, 2013. Here, in addition to reiterating the distinction between contradiction (which is a being) and the contradictory content of the contradiction (which is a non-being, nothing, or in other words an impossibility), we can point out that in the statement "being is not nothing" – i.e., in the negation of "being is nothing" – "being is nothing" is a contradiction both because, as in all contradictions, the predicate is the negation of the subject, and because the predicate itself is a contradiction, or in other words, it is a meaning whose content is the absence of all meaning. And the sense of this two-fold contradiction is addressed determinately in the two works cited above.

3. Elenchos and primal structure

17. But, as we were saying (section 13), the denier of the opposition of positive and negative makes statements that are not only the universal negation of the opposition, but are also particular negations, e.g., "Socrates is and is not a man".

Of this negation, Priest writes: "This is clearly, in some sense, a denial of the PNC. But how does it presuppose the PNC [i.e., the *principium firmissimum*]? There is, as far as I can see, no argument for this in this piece of text" (3.2): according to Priest, my text presents no argument that would allow us to claim that that negation of the principal of non-contradiction ("Socrates is and is not a man") presupposes that principle.

RP (pp. 66-68) considers the statement that "red is green" (or, to give other similar examples here, that this house is this tree, or that a certain hot liquid is not hot, etc.). As will be clarified below, the statement "red is green" is of the same type as "Socrates is and is not a man"; but we will begin with the latter, applying the same considerations that RP applies to "red is green".

"Socrates is and is not a man" is equivalent to "The man Socrates is not-man" (*p*), which is in turn equivalent to "The not-man Socrates is man". Now, following *RP*, it should be noted that *p* is the (particular) negation of the opposition of positive and negative only if, in this negation, "man Socrates" (*MS*) shows a meaning other than "not-man (*nM*)". If *MS* were to show the same meaning as *nM,* the statement "*MS* is *nM",* as such, would not be a negation of the opposition between positive and negative.

But if it is necessary that, to be the negation of that opposition, "*MS* is *nM*" (*p*) must be such that *MS* differs from *nM,* this differing is the opposition of that positive which is *MS* to that negative which is *nM*; thus, *p* is the negation of that (the difference-opposition) which, in *p*, makes it possible for it to be the negation of the opposition – and consequently *p* is the negation of itself. Contrary to Priest's belief, *p* is thus grounded upon, and *presupposes* that which it denies; it does not deny the universal opposition of positive and negative, but that particular opposition – that individuation of the universal opposition – which is the negation of *p.* (And it denies *in actu signato* what it affirms *in actu exercito*).

The example *RP* uses to demonstrate the self-negation of the particular negations of the opposition between positive and negative is, as we have said, the statement "red is green" (*p*). And *RP* notes that *p'* denies the opposition *only if* "red" and "green" show themselves to be different (opposed); here again, then, *p'* is the negation of the difference-opposition which, in *p*', enables *p'* to be the negation of the opposition – and consequently *p'* is the negation of what it affirms, the negation of itself. Here, "red" corresponds to *MS* and "green" corresponds to *nM*. Priest

writes that "dialetheists are not, as such, committed to things of the form: Red is green". Except that things of the form "Red is green" belong, as we have said, to the same type as things of the form "Socrates is and is not a man", which the dialetheist is committed to defending.

However, the main intention of these pages of *RP* is not that of obliging the dialetheist to come to grips with statements like "red is green" (as Priest would appear to think), but to demonstrate that even the *particular* negations of the universal opposition of positive and negative (i.e., the individuations of this opposition) can be constituted only by denying themselves. Here, it should also be borne in mind that the configuration of the *élenchos* of *p* (and of *p'*) enables the primal structure to be the negation both of the particular negations and of the universal negation of the opposition of positive and negative, as "positive" is to "negative" as *MS* is to *nM*, or as "red" is to "green".

Above all, however, it should also be emphasized that the sense of the primal structure would change completely were we to affirm that it is incontrovertible because p' (and p) are contradictions. If this were the case, the *élenchos* of the negation of the opposition of positive and negative would beg the question. This does not mean that *p'* (and *p*) are *not* contradictions, but that *p*, which is a contradiction, is not able to be the negation of the opposition of positive and negative which appears in the primal structure, in the sense that *p* is such a negation *only* by *also* being the negation of itself, and precisely for this reason is unable to be the negation of that opposition (just as the synthesis of *K* and not-*K* differs from *K*). The negation of the primal structure cannot be constituted, and that structure is the negation of *p* in the sense that it denies the *intention* that p be such a negation: the intention that consists in what *p* means *in actu exercito*. I like to say that the primal structure – and thus the opposition of positive and negative – is a target such that every arrow shot at it pierces itself and can thus never reach the target.

Note 1 – In saying that statement A and the negation of A are both true, or both true and false, it is necessary that the dialetheism assert the difference (opposition) between the meaning of A and the meaning of the negation of A. In other words, it is necessary that their difference appear; indeed, if no difference between A and not-A were to appear, the statement that A and the negation of A are both true or both true and false would not be a dialetheia (i.e., a particular negation of the PNC). This means on the one hand that the dialetheia is *in actu exercito* that which it denies *in actu signato*, or in other words denies being a dialetheia

in actu exercito; on the other hand, dialetheism is the simple faith that, *in actu exercito*, presupposes that A opposes not-A *in actu signato*, i.e., denies being a dialetheia *in actu exercito*.

But then, why must this opposition be asserted? The negation of the PNC can have a more radical meaning than that known to dialetheism.

Note 2 – Priest maintains that a *dialetheia* consists of two statements of the form *A* and not-*A,* where both are true, or where *A* is both true and false. But even dialetheism, or any form of knowledge or logic that holds sway today, does not assert that "true" and "false" can mean, respectively, the incontrovertible primal structure of the truth of destiny (and that which it necessarily entails), and the negation of that structure. Rather, they are more or less accredited hypotheses (postulates, faith, decisions) and negations of these hypotheses (postulates, etc.). Just as the PNC is only a hypothesis which for dialetheism cannot be denied in C1, so in a dialetheia saying that A and not-A are true, or that A is both true and false, are hypotheses (postulates, etc.) that contradict each other. This form of contradiction is how the normal contradiction takes shape in the dimension where people commonly believe they live, or in other words, in the dimension separated from the truth of destiny.

18. As the primal structure of the incontrovertible is the appearance of the opposition of positive and negative, the negation of their non-opposition, this structure is necessarily the appearance of this non-opposition. But this circumstance does *not* mean that, just as the negation of the opposition between *MS* and *nM* denies that which enables them to exist, so the negation of the opposition between positive and negative would be (given that it is necessarily the appearance of this non-opposition) the negation of that which enables them to exist. In fact, the non-opposition appearing in its negation is the positive meaning of Nothing, not the nothingness of the non-opposition, not a Nothing. In other words, it is not the case that the negation of the opposition is made possible by that which it denies, and that consequently the negation whereby the primal and incontrovertible structure of the destiny of truth denies the non-opposition is also self-negation.

It should be added that the negation of the non-opposition, by opposing the non-opposition, is an individuation of the universal opposition of positive and negative, whereas the negation of the opposition, by opposing the opposition (otherwise, it would not be its negation) is self-negation.

19. The primal structure of the incontrovertible includes the negation of the opposition (and the negation of the beings that appear). If this structure were *only* the appearing of the being's being itself and thus were not the appearing of the negation of the opposition (if it were *determinatio* without being *negatio*), this structure would be affirmation and negation of the opposition: it would be explicitly (*in actu signato*) the affirmation and implicitly (*in actu exercito*) the negation, because if it were the appearing of only the affirmation of the opposition it could not be the negation of the non-opposition. In other words, it would leave the possibility of the non-opposition open. The authentic primal structure, as the negation of the non-opposition, is also the negation of this inauthentic form of the primal structure.

20. It could be objected that everything that is denied by the incontrovertible – as the negation of the opposition is denied – is nothing, but nevertheless appears and thus is being. Demonstrating this contradiction – which as we have seen (section 16, last paragraph), is at the heart of the aporia of Nothing (see *La struttura originaria*, IV, *cit.* and *Intorno al senso del nulla, cit.*) and seems to belong to the primal structure – this objection does not obviate the need for the negation of the opposition to be self-negation, but demonstrates that this necessity, while remaining such, is joined to that contradiction. And not only, but as this contradiction is (like every contradiction) a negation of the opposition, considering this contradiction as something that must be denied is grounded upon the primal structure and thus cannot be its denial. In other words, it is necessary that the denial be only apparent.

21. As we have said (section 19), the primal structure of the incontrovertible *includes* the negation of the negation of the opposition: it does not coincide with it. This structure, in fact, is the appearing of being itself and not other than itself (it is the appearing of the opposition) on the part of being *qua* being, and thus on the part of every being and, primarily, *on the part of the beings that appear*, where both the negation of being itself and the negation *of the beings that appear* is self-negation. Thus, the primal structure *also includes* the negation of the negation of the existence of the beings that appear.

That something like appearing, affirmation, negation, opposition, the positive meaning of Nothing, contradiction, non-contradiction and so forth can exist is something incontrovertible because these determina-

tions are beings that appear together with the totality of the beings that appear in the primal structure of the incontrovertible. And the negation of their existence is self-negation *for the same reason* that the negation of the opposition between *MS* and *nM* is self-negation. For example, to deny that *these words* exist, it is necessary that *these words* appear in the negation, and thus exist, so this negation denies that part of itself which is the condition for its existence. This negation is consequently self-negation. The logical, natural and mathematical sciences presuppose that their content exists; phenomenology limits itself to the principle that everything that appears cannot be denied, but it does not show why.

22. Section 5 discussed how *RP* demonstrates that the universal negation of the opposition is self-negation: to the extent in which it intends to be the negation of the opposition, this negation rules out not being a negation. Accordingly, it is the negation (*in actu exercito*) of its own meaning what (*in actu signato*) it means, and thus denies itself. In the ascertainment of this self-negation, what brings it about is the *total* meaning of this negation, in the sense that it is precisely this *total* meaning which rules out that it can mean something other than what it means (in other words, it is this *total* meaning that opposes that which is other than itself, so that the negation of the opposition denies itself).

As regards the self-negation of the particular negation of the opposition between *MS* and *nM* (section 17, *ff*), on the other hand, what brings it about is that *part* of the total meaning of the negation which is the content it denies – i.e., it is the opposition between *MS* and *nM*. Thus, the negation denies itself not inasmuch as it is its own total meaning, but inasmuch as the content that it denies shows itself in it as the opposition that it denies. So the negation denies itself, and is not negation.

In any case, that the self-negation of the negation of the opposition is due to the total meaning of this negation is a property not only of the universal negation of the opposition, but also of the particular negations of the opposition. For example, the negation that *MS* is not *nM* in fact intends to be the negation that *MS* is not *nM*: it intends to be itself, or in other words what it is in its totality. So *in actu signato* it denies what it is *in actu exercito*, i.e., denies that it is the negation of what is other than itself.

On the other hand, that the self-negation of the negation of the opposition is due to that part of the total meaning of this negation which is the content it denies is a property not only of the particular negations, but also of the universal negation of the opposition. To deny that (every)

positive opposes (every) negative, it is necessary that the content denied by the negation (i.e., the opposition) appear, and that consequently – here as before – the negation deny *in actu signato* what it is *in actu exercito*, or in other words that it deny itself.

23. It was pointed out in section 17, fourth paragraph, that if *MS* were to show the same meaning as *nM,* the statement "*MS* is *nM",* as such, would *not* be a negation of the opposition between positive and negative.

We must now clarify that *everything* shown in a dimension other than the incontrovertible (and first of all by the primal structure of the incontrovertible) is its negation and consequently is also a negation of that primal trait of the incontrovertible that is the opposition between positive and negative. So if *MS* were to show the same meaning as *nM in a dimension other than the incontrovertible*, then "*MS* is *nM*" would also be a negation of the authentic opposition between positive and negative.

In the fifth paragraph of section 17, we also added that, in order to be the negation of that opposition, it is necessary that "*MS* is *nM*" be such that *MS* differs from *nM*, and so differing is the opposition of that positive which is *MS* to that negative which is *nM*. But here again, if *MS* differs from *nM* in a dimension other than the primal structure of destiny, then this differing is *not* that opposition of *MS* to *nM* that appears in this structure, and consequently this differing is also the negation of this opposing. In other words, for the opposition of *MS* to *nM* to be authentically incontrovertible, it is necessary that this opposition appear in the primal structure of destiny. And this necessity also exists in relation to the universal opposition of positive and negative.

This necessity concerns the primal form of the authentic sense of the *élenchos* of the negation of the opposition: by contrast with passage 1005b 35-1006a 26 of Aristotle's *Metaphysics*, where the relation between affirmation and negation of the *bebaiotáte arché* is *intersubjective* in character, or in other words is the relation between the supporter of that *archè* (the *phil sophos*, 1005b 6) and his "opponent" (*ho amphisbetôn*, 1006b 13) – a relation that, at the level in which the *élenchos* is established, can only be a simple, ungrounded presupposition.

24. All the properties of the *élenchos* of the negation of the primal structure of truth's destiny (e.g., the properties considered in the previous section) are necessarily a part of that *élenchos*. On the other hand, even to

the extent that the *élenchos* is distinct from its properties, it is the primal incontrovertible; and it is the primal incontrovertible even if these properties do not appear and the *élenchos* appears separately from them.

Inasmuch as it is separate, it does not show its concrete meaning and is thus a typical form of the *contradiction* that in my writings is called "contradiction C". This is a contradiction that is not overcome by its content (as is the case for "normal" contradictions), but by the appearance of its concreteness.

25. Conversely, the *élenchos* of the negation of the primal structure, unlike the properties considered in the previous section, is neither a property of the universal opposition of positive and negative, nor a property of the totality of the beings that appear: it is not such a property in the sense that the affirmation of this opposition and this totality, separated from the *élenchos* of their negation, are only postulates, faiths, forms of will or conventions.

On the other hand, inasmuch as they are traits of the primal structure, this opposition and this totality are not even truths grounded upon a more primal truth: they constitute the primal and thus not even the *élenchos* of their negation can be their ground. *RP* (pp. 71*ff*) demonstrates that the assertions that make up the *élenchos* of their negation are *individuations* of the universal opposition of positive and negative, and that the primal structure is authentically incontrovertible only inasmuch as these individuations appear *co-originally* with the appearing of the opposition of positive and negative and the appearing of the totality of the beings that appear – individuations in the same sense (though differing profoundly in other respects) as that whereby this red's not being this green is an individuation of every positive's not being its own negative (i.e., everything other than itself).

And the *élenchos* of the negation of the existence of that which appears is also an individuation of the universal opposition of positive and negative – i.e., not an individuation of the totality that appears, but a part of it.

26. In *RP*, the consideration of the self-negation of the negation of the primal structure essentially entails, as suggested in *La struttura originaria*, *cit.*, the impossibility of a time in which any being does not exist: essentially, it entails the "eternity" of every being, i.e., of the being *qua* being. By contrast, Aristotle's *élenchos* of the negation of the *bebaiotáte arché* is now entirely pervaded by the persuasion that it is necessary that

the being be "*when it is*" (*De interpretatione*, 19a 23-27), which means that for Aristotle the being *qua* being can also not exist (when it is not), or in other words that for certain beings (those of the *physis*) there is a time in which they do not exist. At the center of the content addressed by my writings, it appears that the assertion that any being does not exist affirms that this being is nothing, i.e., it affirms the impossible, the impossible identity of being and nothing: it affirms that which is nothing.

But this affirmation is not a nothing: it is a contradiction (a great contradiction, as the entire history of the West rests on it); and we have repeatedly pointed out in these pages that the contradiction (unlike its contradictory content, nothing) is a being, a meaning.

Aristotle's concept of being is thus a contradiction, a great contradiction. By affirming the impossibility that a being can be and not be (or that this is advisable and inadvisable for it at the same time), Book IV of Aristotle's *Metaphysics* affirms, without being able to realize it, the impossibility that that contradiction which is the *being* be or mean something other than itself. Aristotle believes that he is speaking of the being *qua* being, but – from the perspective of the destiny of the truth – he speaks of that particular being which is the contradiction in which his concept of being consists, and for this specific being he shows that the negation of its not being other than itself is (*in actu exercito*) a *horisménon* (see sections 12-15), and consequently this negation denies (*in actu signato*) the condition whereby it is constituted.

As Aristotle's *elenchos* of the negation of the *bebaiotáte arché* believes that it considers the being *qua* being, whereas it actually considers that specific being which is the contradiction in which the Aristotelean concept of being consists, Aristotle's *élenchos* is itself a contradiction. The importance that *RP* assigns to it depends on *RP's* aim of considering the formal structure of Aristotle's *élenchos* independently of another aspect which is nevertheless central in *RP*: the nihilistic sense that the being presents in Aristotle and Greek thought, and thus in the thinking and work of the West and, by now, the planet as a whole.

Postscript

1. In the first paragraph of section 26, we said that "At the center of the content addressed by my writings, it appears that the assertion that any being does not exist affirms that this being is nothing"; in other words,

it appears that this affirmation is a *contradiction*: the contradiction that affirms the existence of a time in which any being does not exist. This theme is also central to *RP*, where it draws on *La struttura originaria* (1958, *cit*.) and indeed was presented even earlier, in *La metafisica classica e Aristotele* (published as a supplement to the "Rivista di filosofia neoscolastica", 1956, Milano, and translated in 1958 as *Aristotle and Classical Metaphysics* in Volume 2 di Philosophy Today, Carthagena Ohio). The existence of a time in which any being does not exist (i.e., what that contradiction affirms is the existence of *becoming*, of *change*).

In the second note to the definitive version of his presentation, Graham Priest writes: "I find Severino's arguments that change violates the PNC convincing. Nevertheless, there can be other arguments as well, see Priest (2006)". This is all he has to say about this, but the sentence deals with a question of great interest. In fact, he may find my arguments convincing because from his point of view they confirm dialetheism. In this sense: that for Priest as well, change (becoming) *exists*, and is *real* (in other words, not even Priest can fail to agree with the conviction underpinning Western, and planetary, civilization: that beings become, i.e., they issue from their non-being and return to it. Accordingly, the thesis advanced in my writings that issuing from non-being and returning to it "violates the principle of non-contradiction" is in Priest's eyes a confirmation of dialetheism, or in other words a confirmation of the thesis that some contradictions are true – precisely because change, which is a contradiction, exists.

However, section 26 points out that, precisely because affirming any being's non-being, i.e., affirming that issuing from non-being and returning to it exists, is a contradiction, it is necessary that the being *qua* being, i.e., any being, be *eternal*. This need is demonstrated in the *Postscript* to *RP* (see *The Essence of Nihilism*, cit., pp. 85-145), where I show that *the passage from not-being to being and vice versa, i.e., the content of the contradiction of becoming, is not and cannot be a content of experience, is not and cannot be a phenomenological datum that can be observed, noted, experienced; it is not and cannot be something that appears*. This means that affirming that becoming is impossible, i.e., affirming that all beings are eternal, does not deny the presumed "evidence" of becoming. In other words, if we believe, as Priest does, that this existence is "evident", then we must say (as Priest says) that *RP,* by demonstrating that the existence of becoming violates the "principle of non-contradiction", offers a confirmation of dialetheism. But the primal structure of destiny shows that

it is impossible that the existence of becoming be "evident", and consequently the appearance of this impossibility, together with the appearance of the contradictoriness of becoming, is the appearance of the necessity that every being be eternal.

A second observation can be made concerning Priest's concurrence. "I find Severino's arguments – he says – that change violates the PNC convincing. Nevertheless, there can be other arguments as well, see Priest (2006)". But the dimension upon which these arguments are grounded is not the primal structure of destiny, it is not the absolutely incontrovertible, and consequently neither are these arguments, nor can they be. They are conjectures. And indeed, if Priest finds these arguments convincing, this *cannot* be the case, because he sees them to be entailed by the primal structure of the incontrovertible and his concurrence can thus only be apparent.

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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For a Refutation of the Dialetheist Logic

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The *élenchos* is the ascertainment of the self-supersession of all negations of *principle of universal opposition* of the positive and the negative. This brief note intends to show that the dialetheist negation does not escape this self-supersession.

Keywords:
positive, negative, opposition, negation, dialetheist negation, élenchos

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1. Introduction

The point on which it is necessary to focus the attention when we are discussing about the principle of non-contradiction is the following: why can't we assert the identity of being and not-being? The denier of the first principle, Aristotle notes, affirming, for example, that x «is a man and a not-man», cannot exclude the corresponding negations: he will say that x «is neither a man nor a not-man» (*Metaph.* IV, 4, 1008 a 4-7). If we then consider the expression x «is a man and a not-man» as if it was a single statement, then the opposite assertion too will be a single one, so that the denier of the first principle will also have to claim that x «is not a man and a not-man». Aristotle says that «our discussion with him is evidently about nothing at all; for he says nothing. For he says neither 'yes' nor 'no', but 'yes and no'; and again he denies both of these and says 'neither yes nor no'; for otherwise there would already be something definite» (*Metaph.* IV, 4, 1008 a 30-34). However, the denier of the first principle could respond that, in this way, we are assuming what we should demonstrate, namely that reality is determined, that it is consistent with the classical logic and its implications. The argument would therefore be flawed by a *petition principii*. Concerning the dialetheist negation things become complicated since it claims there are cases in which *the positive is and is not the negative,* that there are true and false statements, but not statements that are neither true nor false. Except that, as we shall see now, the winning move against the negation of the *principium firmissimum,* including the specific position proposed by the dialetheist logic, is not the one that contests the fact that it does not say anything (the contradiction is not, in fact, lack of meaning), but rather the observation that the negation of the first principle is a negation of itself. It happens therefore that, in the words of Aristotle, «for while disowning reason», that is, the transcendental value of non-contradiction, the denier too «listens to reason» (*Metaph.* IV, 4, 1006 a 26), declaring his non-existence. The

process that shows the incontrovertibility of that "logos" «which every one must have who understands anything that is» (*Metaph.* IV, 3, 1005b, 16-17), is the *élenchos.* One who has examined its structure, more than anyone else, is Emanuele Severino in the very famous VI paragraph of *Returning to Parmenides* (see Severino, 2016, pp. 59-80).

2. The *élenchos* and its figures

Severino identifies two fundamental figures of the *élenchos*: the first one evokes the Aristotelian formulation of the argument, but with the warning that the sense of identity and of non-contradiction, as it shows itself in the *primal structure of the truth,* which implies the eternity of being (see Goggi, 2019), is in its essence different from the one that appears in the nihilistic context marked by the *temporal understanding of being*, inside which the very inquiry of the Stagirite moves; the second one answers to solicitations which are not present in the Aristotelian text, but crucial in order to finalise the structure of the *élenchos,* permanently.

2.1. The first figure

The first figure of the *élenchos* is made of two assertions: [a] «the negation of the determinate is a determinate» and [b] «the negation of the determinate is negation of the determinate which is the negation itself» (see Severino, 2016, pp. 72-73). The "determinate" is the same identity-opposition of being, where being is the positive, that is, every non-nothing, and the determinateness of being is its not being other than itself, where the other than the considered being, its negative, is an anything else, that is, everything that, in different ways, is not the positive considered. It should be noted that the elenctic strategy does not consist of saying, simply, that that positive that is the negation of the opposition is contradictory, thereby assuming what we intend to show; what is crucial is the observation that, «if the opposition is, in *any* way, denied and the negation is to *be* negation […] then the negation *is opposed to* its negative; that is, it holds firm in that meaning for the sake of which it is negation, and differentiates this meaning from all other meanings» (Severino, 2016, p. 61). The negation of the opposition is removed since it is shown that

«such negation fails to live as negation, because in the act in which it constitutes itself as negation it is at once also affirmation. And so it is, most definitely, contradictory: but the negation is not supersedes insofar as it is formally ascertained to be contradictory – the negation is supersedes insofar as it is ascertained that it fails to posit itself as negation, unless it grounds itself upon that which it denies, and so only if it denies itself. The negation, failing to free itself from that which it denies, becomes its very bearer; not only does it fail to tear what it denies off its back, so that it can then hold it at arm's length and condemn it, but what it thinks it has before it and has condemned, actually stands behind it and directs all its thoughts, including the thought that announces the condemnation. The law of Being is the destiny of thought, and thought is always witness to this law; always affirming it, even when ignorant of it or when denying it» (Severino, 2016, pp. 64-65). Holding firmly in itself, the negation of the opposition opposes its negative: denying the principle of the opposition of the negative and the positive, the negation denies therefore what without which it would not exist, that is to say, it denies itself.

2.2. The second figure

The second figure of the *élenchos* answers to a solicitation that is not present in the Aristotelian text: what happens if the negation recognizes to be something determinate – and therefore not to be other than itself – and it limits itself to affirm the existence of a contradictory reality (in which the being is other than itself) outside the semantic area of which the negation itself consists? The diriment investigation is operated by the second figure of the *élenchos* that is composed, too, of two assertions: [a] «the negation of the opposition is (affirmation of the) opposition» and [b]] «the negation of the opposition is negation of the opposition that is part of the negation of the opposition» and therefore it is the negation of itself (see Severino, 2016, pp. 75-76). In this way, the *élenchos* receives the maximum extension that belongs to it. Severino writes: «The *élenchos* is the ascertainment of the *determinateness* of the negation of the opposition (where "determinateness" means nothing other than the positive's property of being opposed to its negative). This determinateness is proper *both* to the negation, considered as a semantic unity with respect to everything that is other than the negation, *and* to the single terms that make up the negation. If the negation does not remain distinct from its

other, there is no longer negation; if each term of the negation is not distinct from every other term (as occurs when no difference is posited between red and green, i.e. when red is affirmed to be green) again there is no negation (for if the terms are not seen to be different, positing a difference between them would be a negation of the opposition). In order for there to be negation, the negation must be determinate, both with respect to its other, and in the term that constitutes it; and therefore it presupposes and is grounded upon that which it denies» (Severino, 2016, pp. 67-68). In other words, in order for there to be negation of the opposition, and therefore the difference of the differing is denied, such a difference needs to appear and therefore to be affirmed, so that the negation is, contradictorily, a denying and an affirming the same, in which the checkmate operated by the *élenchos* does not actually reside in showing that the negation of the difference is contradictory (notwithstanding that it is, since it denies and affirms the same), but instead in detecting that the negation of the difference of the differing cannot constitute itself unless it assumes what it denies. If in the first figure of the *élenchos* the negation of the determinate presents itself as the affirmation of a part of the totality of the determinate that is denied, that is, the one the negation itself consists of, in the second figure the negation of the determinate presents itself as the affirmation of the totality of the determinate that is denied. It shall be said then that the principle of the opposition of the positive and the negative *is at the foundation of every thought*: it also founds its own negation, not in the sense that it validates it, but in the sense that, if the negation of the opposition – whatever the form in which it presents itself is – would not pose at its foundation the opposition, it could not even exist: it is founded on what it denies, and therefore it denies itself.

3. The *élenchos* of the dialetheist negation

But how does all of this apply to the dialetheist denier? It seems indeed that he manages to avoid the elenctic "trap", inviting to consider the possibility that some contradictions are true (we are then in the situation considered by the second figure of the *élenchos*), where however the opposition is not simply denied, but it is *both affirmed and denied*, therefore there can be a case of a positive (any being) that *is and is not its negative*

(what is other than the considered being). In this case we would be dealing with a negation that does *not* mean the simple "exclusion" (that is, the exclusion that is not also non-exclusion), but with a negation that is *exclusionary but also not exclusionary,* for this is precisely what is peculiar to the dialetheist position. In response to this, we shall consider again the ultimate meaning of the *élenchos.* We have seen that the negation of the opposition of positive and negative presupposes and is founded on what it denies, and therefore it denies itself; and this happens also in the case of that specific negation of the opposition that is the so called "true contradiction", where the positive is thought as what is and is-not the negative. Severino writes: «In thinking that the positive is and is-not the negative, one denies that the positive is not negative […] not simply in the sense that "the positive is and is-not the negative" includes "the positive is not the negative" – for, in this sense, the opposition is indeed denied, but is also affirmed – but in the sense that, in affirming-denying the opposition, one denies it insofar as it is an object *simpliciter* of affirmation, insofar, that is, as it refuses to become, at the same time, an object of negation. If the thought that the positive is and is-not the negative is a denial, in the sense we have indicated, of the positive's not being negative, i.e., is an identification of the positive and the negative, then we find again, at the root of this thought, that negation of the opposition which the *élenchos* supersedes by ascertaining (as in the case of the affirmation "red is green") that it grounded upon the affirmation of that which it denies» (Severino, 2016, p. 68). The dialetheist denier responds that «if we have […] to deal with a true contradiction, as believe those who affirm and deny the opposition, the truth of the claim that the positive categorically and in every way refuses to enter into a synthesis with its negative is unable to exclude the truth of the contradictory proposition» (Costantini, 2018, p. 866). This being the case, we are dealing with a positive that is not *only* other than its negative. Therefore, Severino says well: «in affirming-denying the opposition, one denies it insofar as it is an object *simpliciter* of affirmation». In fact, the dialetheist "true contradiction" is such only because the affirmation enters into synthesis with the negation, that is, denying the opposition insofar as it refuses to place itself in such a synthesis. Now, it should be noted that *if it did not deny the opposition like this, we would not be dealing with a "true contradiction".* And it is useless to repeat that such a negation is not able to be *exclusionary*: we would only repeat the same structure of the "true contradiction" that is in itself – «at the root of this thought» – identification of the positive and the

negative. However, the *élenchos* is able to remove (in the meaning that has been described) the negation of the opposition, and therefore also that kind of limited negation that is the dialetheist negation, highlighting that it is founded too on what it denies. The dialetheism is caught in its being negation of the opposition: in its being this "at the root", in the indicated sense. By removing the root, that is, observing that it is self-removal, the *élenchos* removes what is rooted in it.

4. Conclusion

In conclusion, every negation of the principle of the opposition of positive and negative – which is then the principle of the difference of the differing – is founded on the appearing of the difference, so that such a negation, of which the dialetheist negation is a particular kind, denies itself; *and it is precisely for this reason, that is, because that negation is self-negation, that it is necessary that being appears just as indicated by the language that testifies the primal structure.* To this should be added that the thought that contradicts itself *«is not a thinking nothing, but is a thinking the Nothing*. The identity of the positive and the negative […] is that which is-not […]. And insofar as Nothing lets thought look at it, it dons the mantle of the positive» (Severino, 2016, p. 79). So, we must distinguish between the contradiction and the content which is affirmed by the contradiction. This content is what is impossible, the absolute Nothing, while the contradiction, that affirms the nothing, is not a nothing. «Any contradiction – like, for that matter, the very meaning "nothing" – constitutes the positive meaning of Nothing» (*ivi*) and any contradiction must be denied *because of its meaning*.

Footnote

The dialetheist frequently refers to self-referential statements in order to justify the existence of contradictory dimensions. And the most popular of those statements is the paradox of the liar: "What I affirm is false". If that statement is true, then it is false; if it is false, then it is true. In closing this brief note, I would like to point out the solution Severino himself gave to this paradox: «Even if we admitted temporarily the validity of

these two inferences [if it is true then it is false; if it is false then it is true], however, we should conclude that the self-referential statement is a *contradiction,* and that therefore what exists is the contradiction, the contradicting oneself, *not* the content of the contradiction, that is, the *contradictory* content, which is invalid, the impossible […]. However, the validity […] of the two inferences related to the self-referential statements such as "What I affirm is false" (we shall indicate with q this statement) does not exist. The premises of the two inferences – *if q is true* (then it is false), *if q is false* (then it is true) – are actually negations of the primal structure of the destiny of truth. As a matter of fact it is impossible that q (that is, the affirmation of being false) belongs to the destiny of truth, that is, it is impossible to suppose […] that it is true (on the basis of the authentic meaning of the truth); and it is impossible to *suppose* that q is false, since the supposition coexists with the opposite supposition, while q is necessarily and originally false: q denies itself […]. The impossibility of the two premises makes therefore impossible the two conclusions that would have to show the opposite of the premises» (Severino, 2019, pp. 280-283).

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What it is like to be a Dialetheia
The Ontology of True Contradictions

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According to Dialetheism some contradictions *(p&~p)* are true. What would the world be like if this were the case? Radically indeterminate, according to a venerable answer. This follows from a tacit conflation of the principle of contradiction (PNC) with the Principle of Identity (PI). Accordingly, transcendental arguments (elenchos) purport to show the unassailability of PNC by showing the unassailability of PI. We agree that if PI were to fail, PNC would fail too; but this is not the only way in which PNC might fail. Dialetheias are two-footed creatures in that their truth requires the existence of two conflicting facts: one making p true, the other making *~p* true. Our answer to the question is that PNC can fail also if the world is over-determinate, rather than in-determinate. We conclude that Dialetheism lives and dies with the prospects of a positive account of negative truths.

Keywords:
Contradiction, Identity, Dialetheism, Truthmakers, Elenchos

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1. Introduction

In his Metaphysics, Gamma, Aristotle put forward what is perhaps the most famous and thorough formulation and defense of the principle of contradiction (PNC). In its ontological formulation, the principle says that "For the same thing to hold good and not to hold good simultaneously of the same thing and in the same respect is impossible (*Met.,* 1005b, 18-20; tr. Kirwan). Its logical variant affirms that "The opinion that opposite assertions are not simultaneously true is the firmest of all" (*Met,* 1011b, 13-14).

As scholars have pointed out, various formulations of the PNC are found in Aristotle's works, not all of which converge. Starting at least from Łukasiewicz's analyses (1910, 1971), subsequently elaborated by others, it is customary to distinguish the ontological formulations (which refer to things and their characteristics), from the semantic ones (which refer to the notions of true and false), logical-syntactic, psychological (it is impossible to explicitly *think* of something contradictory), and pragmatic (in real life we guard against dangers). Furthermore, even the famous canonical formulation actually seems to incorporate two distinct laws: what we would call today, respectively, the law of contradiction and the law of the excluded middle, integrating them into an overarching principle that has been dubbed the 'principle of contradictory pairs'. Since the purpose of this essay is not historical, we can leave aside the examination of the various Aristotelian passages and stick to what tradition has handed down as the canonical formulation of the principle[1]. As it is

1 On the complexity of Aristotelian formulations of the principle of non-contradiction, see, in addition to the classical works of Łukasiwicz (1910, 1971), the extensive essay by W. Cavini (2007-8), as well as E. Severino (2005), part I.

most often done, we shall take the ontological, or object-theoretic formulation to mean that:

[PNC] For any object, it is impossible that the same characteristic belong and does not belong to it at the same time.

Very few philosophers took seriously the idea that the principle may be false, since questioning it threatens to blow a fatal strike at the heart of rational thinking itself. It is unfortunate that the few philosophers who took up the challenge of denying it – most notably Heraclitus and, according to some interpretations, Hegel – are among the most obscure and cryptic thinkers of all times. The logician and philosopher Graham Priest, in more recent times, devoted a good part of his career to the herculean task of raising the vague contention that (some) contradictions might be true to the highest standards of clarity and analytic thinking. He calls the view that some contradictions are true *Dialetheism*, and true contradictions themselves *Dialetheias*.

This unprecedented accomplishment was made possible, among other things, by the discovery and development of logical systems that block the Principle of Explosion (*ex contraditione quodlibet*), according to which from a contradiction any proposition whatsoever can be legitimately deduced. These systems, known as paraconsistent logics, opened the way for a non-trivial treatment of true contradictions, or dialetheias. One paraconsistent logic that is particularly apt for this purpose is the so-called *Logic of Paradox* (LP), introduced by Priest in his (Priest, 1979).

The general question that we shall try to answer in this paper is: what must reality be like (in general) for the PNC to hold, and what must it be like for the principle to fail? In other words, what commitments about the general ontological structure of the world come with the endorsement (and with the denial) of the PNC?

A few clarifying remarks are in order. In general, when one speaks of the 'ontological structure of the world', one intends to refer to reality and its internal articulation. Reality, in this sense, is whatever makes truths true. The intuition behind this notion is that truths are true in virtue of something which exists, or, as it is sometimes said with a slogan: truth depends on being.

> Throughout my philosophical development […] I have retained, in spite of changes, certain fundamental beliefs, which I do not

> know how to demonstrate, but which I cannot bring myself to doubt. The first of these, which seems so obvious that I should blush to mention it but for the circumstance that the contrary opinion has been maintained, is that 'truth' depends upon some kind of relation to 'fact'. (Russell, 1959: 117)

There are countless ways to spell out this realist intuition. Philosophers of realist inclination are divided on a number of questions. Which are the primary bearers of truth values? Sentences? Thoughts? Judgements? Propositions? What kinds of things make truths true? Facts? Objects? States of affairs? Tropes? It is common usage to call a thing whose existence makes a truth true, whatever it is, a *truth-maker*. A truth-maker is that in virtue of which something (a truth-bearer) is true. There is disagreement about what kind of relation (if it is a relation) obtains between truths and their truth-bearers, but it is generally recognised that it is a trans-categorial asymmetric relation which obtains between something which exists and a truthbearer. The relation is 'trans-categorial' in that, generally, truth-makers are not themselves truth-bearers or truth-apt. The view that (at least) certain kinds of truth require something to make them true is known as the Truth-maker Principle.

A further question that divides philosophers and that is relevant for us is the exact scope of the truth-maker principle. This is the question of which kinds of truths require a truth-makers. All truths? Or only some particular kinds of them? Only contingent truth? Only particular truths? Only positive truth? At the maximalist end of the spectrum one finds the view that *all* truths require a truth-maker:

[Truth-maker Maximalism] "A truth, any truth, should depend for its truth for something 'outside' it, in virtue of which it is true" (Armstrong, 2004: 7).

Various authors have objected on various grounds that this principle is too inclusive[2]. Wittgenstein, for example, maintained that tautologies (contradictions) are not made true (false) by anything. He, and Russell

2 Theories of truth-making which limit the scope of the maximalist principle are collectively known as 'truth-maker optimalism' (see MacBride, 2020).

too, also argued that 'molecular truths' (truth of the kind: 'the rose is red *and* scented') do not require proprietary truth-makers, over and above the truth-makers for their conjuncts. Some have argued that only *contingent* truths require truth-makers. Others contended that general truths (e.g. 'all men are mortal') do not require truth-makers over and above the singular truths that make them true. Finally, and most importantly for our concerns, is the question of *negative* truths. A positive claim is a claim that an object has a certain (positive) characteristic, such as the claim that a particular rose is red. Negative claims are the negation of positive ones, such as the claim that a given rose is *not* red[3]. The question of interest to us is whether negative truths require truth-makers, over and above the fact that their correlative positive propositions ('the rose is red') *lack* a truth-maker. At the opposite, degenerate end of the truth-maker spectrum, finally, one finds the view that *no* truth requires a truth-maker (e.g. Dodd, 2007).

Now we are in the position to clarify the question that we wish to ask. To each answer to the above questions there correspond a different view of what the world (or reality) is like. Although we shall mention several arguments in favour and against some views of truthmaking, here we shall not argue for or against any of these options. We shall limit our survey of positions to the various scopes that the truth-maker principle might take. Our question is rather: which theories of truth-making are hospitable, and which inhospitable, to Dialetheism? Or, equivalently: if there were dialetheias, what must their truth-makers be like?

3 It has been often noted that there might not be a syntactic characterization of this distinction. Some syntactically positive claims are patently negative, as for example the claims that a given rose is odourless, or that a man is blind. Others are overtly negative, but conceptually positive, as for example the claim that a man is not blind. However, it is generally recognised that there is a (conceptual) distinction to be made, at least in most cases. The claim that there are Arctic penguins is made true by actual Arctic penguins. But the claim that there aren't Antarctic penguins is made true by… what? An absence of penguins?

2. The Principle of Contradiction and the determinacy of the world

A) The classical answer: an incoherent world is an indeterminate world

To answer our question we shall start by considering and critically evaluating Aristotle's own answer, as well as that of the Italian philosopher Emanuele Severino. Both philosophers agree that the denier of PNC is committed to the view that things are radically "indeterminate" (*aorista*). In general, these advocates of the PNC claim that the determinacy of things (in the broad sense of the term) stands and falls with it. For this reason, they think that the PNC is a necessary condition for the possibility of thought and language.

The notion that things are *determinate* (*hōrismena*) has been variously elucidated. Aristotle, for example, characterized the view that things are indeterminate as the view that things are not unitary (1007b26), in contrast with his own view (1006a 31-4, b7-10); or as the view that things do not have an essence (1007a 20-21), in contrast with his view (1006a32-34); or as the view that things are not definable, rather than definable (1012a 21f.) (on this and on the notion of indeterminacy in Aristotle's, see Politis, 2004: 147). This characterization exposed the Aristotelian defense of PNC to some criticisms, since it would presuppose unwarranted assumptions, such as the theory of substance, essentialism, etc., which are somewhat questionable. Be that as it may, the core of this idea can be reformulated in the following way, which aligns with Severino's understanding of the PNC (we shall call this the *Principle of Ontic Determinacy*):

[POD] Everything is what it is and it is how it is, and it is neither another thing, nor it is different from how it is.

This principle has often been unpacked into a positive and a negative part: the so-called Principle of Identity (PI) and the Principle of Double Negation (PDN) respectively:

[PI] Everything is what it is and how it is. (Sometimes confusingly formulated as: A=A)

[PDN] No thing is what it is not (sometimes formulated as: A is not A)

B) The elenchos

Both Aristotle and Severino agree that the PNC is too fundamental to be susceptible of a proof in the standard sense. However, they both think that the principle can be "shown" to be universally valid by showing that its deniers must use it and hence presuppose it in order to even express their denial. This sort of transcendental reasoning, known as the *elenchos*, comes in various flavors but its general strategy is this. First, to argue that the denier of PNC is *eo ipso* a denier of POD, and then move on to argue that the denier of POD cannot even univocally express this denial without using the principle. To better appreciate how the *elenchos* is supposed to work, consider the following reconstruction of Aristotle's 1006b18-34 offered by Politis (2004: 147):

P1. PNC is not true of things if, and only if, things are indeterminate.
P2. If things are indeterminate, then it is impossible to think and speak about things.
P3. It is possible to think and speak about things. Therefore,
C. It is not the case that PNC is not true of things; i.e. PNC is true of things.

In this section we shall discuss how proposition P1 should be interpreted and the virtues of some arguments put forward in favor of it. After a brief historical interlude (sec. C), we shall consider Łukasiewicz's objections to the classical integration of PNC and POD (sec. D) and then mention some considerations which mitigate his severe conclusion that the conflation is based on a confusion (sec. E-G).

C) A brief history of the principles of identity and non-contradiction

The view that the PNC is equivalent to, if not synonymous, with POD was not new in Aristotle's times. Parmenides famously claimed that those who, like perhaps Heraclitus, deny that reality conforms with the PNC, are "dazed, undiscriminating hordes [who believe] that to be and not to be are the same and not the same" (From fr. 6; see G.S. Kirk et al., eds., 1983, 247). This view as to the equivalence of the PNC and the POD had a long standing influence on most subsequent Western philosophers, and it remained the (often unargued for) received view at least until the development of modern logic.

The POD seems to be the result of an integration – or, critics would say, of a confusion – between the laws of contradiction and identity. Indeed, scholars have shown how the law of identity, which Aristotle did not explicitly formulate, first flanked and then absorbed the law of non-contradiction, starting from the Middle Ages up to the metaphysics of the moderns. We give here only some examples. Aquinas believed that, in the order of knowledge, the principle of contradiction followed from the apprehension of the self-identity of entities: "Our intellect, therefore, knows being [*ens*] naturally, and whatever essentially belongs to a being as such; and upon this knowledge is founded the knowledge of first principles, such as the impossibility of simultaneously affirming and denying, and the like" (*S.c.G.* II, c. 83, 31). Along similar lines, Antonius Andreae, a pupil of Scotus, referred to the principle of identity as a foundation of PNC: "I say that this principle: 'it is impossible that the same thing simultaneously be and not be', is not absolutely first, that is, firstly first. [...] if you ask which is the first complex […] I say that it is this: 'an entity is an entity [*ens est ens*]'" (Antonius Andreae, quoted by Göldel, 1935: 72).

Leibniz, in his second letter to Clarke, claimed that "The great foundation of mathematics is the principle of contradiction *or of identity*, that is to say that a proposition cannot be true and false at the same time; *and that thus A is A and not non-A.*" (Leibniz, Clarke, 2000, p. 7). Kant, in an important pre-critical essay, after denying that there can be a single supreme principle, states that "there are two absolutely first principles of all truths. One of them is the principle of affirmative truths, namely the proposition: whatever is, is; the other is the principle of negative truths, namely the proposition: whatever is not, is not. These two principles taken together are commonly called the principle of identity" (Kant, 1992: 7). Kant subsequently changed this formulation, reaching the canonical one, which is found in the *Critique of Pure Reason*, according to which: "the proposition that no predicate pertains to a thing that contradicts it is called the principle of contradiction" (B 190, Kant, 1998: 279). Finally, although it is controversial whether or not Hegel endorses the principle of non-contradiction, it is certain that he follows the formulations of modern metaphysics, and in particular the Kantian distinction according to which the principle of identity is articulated in the positive form (A = A) and in the negative one, also called the principle of contradiction, so that A cannot be together A and non-A (see Hegel, 2010: 360).

To sum up, the historically received answer to our question about the ontological commitments of Dialetheism is that it is committed to the

view that things are radically indeterminate, or, equivalently, to the view that the Principle of Identity is false. We agree with Aristotle and Severino that the view that things are radically indeterminate is implicitly committed to trivialism: the claim that everything is true. And we also agree that if dialetheism was committed to trivialism it would be self-defeating. However, there is another option open for the dialetheist. This is the view that things are *over-determinate* in the sense that incoherent facts can determinately coexist. If we are right, this makes elenchtic arguments of the kind mentioned above insufficient to show the universal validity of the PNC (beyond the scope of the determinacy of all things, including states of affairs).

To anticipate, the thrust of our criticism is that these transcendental arguments prove the determinateness of the various parts of reality (the truth-makers) but not that these parts must necessarily cohere.

D) Łukasiewicz's objection: is the conflation of the principles based on a confusion?

Before discussing our view, let us dispel some potential misunderstandings. To a modern mind, the claim that the PNC, in either its ontological or logical formulation, is equivalent to or even synonymous with the Principle of Identity (or of Double Negation) will sound straightforwardly false, or at best confused. There is, in fact, a patent difference of logical form between the PNC and the POD. As Łukasiewicz once noticed: "The principle of identity is different from the law of contradiction. The principle of contradiction cannot be formulated without the concepts of negation and logical multiplication, which are expressed in the words 'and at the same time'; while the principle of identity holds very well without recourse to those concepts." (Łukasiewicz, 1971: 494). In another, more extended analysis of Aristotle's treatment of contradiction, Łukasiewicz puts forward an argument to the effect that the PNC is neither synonymous nor equivalent to the PI. It is worth quoting him in full:

> The principle of identity affirms that if [an object] K has b, then it has b, and if at the same time it does not have b, then it does not have b. From these propositions one cannot deduce that K cannot simultaneously have b and not have b. The principle of contradiction therefore does not follow from either the principle of double negation or from the principle of identity. It follows a fortiori that

> neither of the latter principles is synonymous or equivalent to the former. (Łukasiewicz, 1910: 64, our translation from Italian)

While these considerations appear rather unassailable in their simplicity, we disagree with Łukasiewicz on his diagnosis of the once ubiquitous conflation of the two principles:

> Philosophical logic simply had no appreciation for the finer conceptual distinctions because it did not operate with sharply delineated concepts and unambiguously determined symbols; rather it sank into the swamp of the fluid and vague speech used in everyday life (Łukasievicz, 1971: 494).

Some mitigating considerations are in order and are relevant for what follows. We shall concentrate on the case of Leibniz and Severino, but analogous considerations could be made about most of the authors that we cited.

E) First mitigating consideration: Leibniz conception of truth as identity

As we have said, Leibniz gives several formulations of PNC. Some are canonical in modern terms, such as[4]

[PNC1] "For any proposition p, p is not both true and false".
Others are much closer to what we have called de Principle of Identity:

[PNC2] "For any proposition p, if p is an identical proposition, then p is true".

Now, is it plausible to think that Leibniz did not have the conceptual distinctions that are required to see that PNC1 is not an identical proposition? We think not. As many have noted, there are several ways to explain Leibniz's conflation of PNC1 and PNC2, short of questioning his clarity of mind. First, Leibniz (as Severino) held a view according to which all truths, including contingent ones are identities, in the sense that the predicate is contained explicitly or implicitly in the concept of

4 These quotations are taken from Rodriguez-Pereyra (2018: 46).

the subject. The truths that are not patently identical, according to this view, can be reduced to identities by analysis and definitions. The difference between contingent and necessary truths concerns the finite vs infinite number of steps of such demonstrations.

In what appears to be a transcendental argument for PNC not dissimilar from Aristotle's and Severino's, Leibniz claims that the principle is presupposed by any rational thinking, since otherwise one would be able to defend the opposite of what one is defending. Now, given the view that all demonstration is a reduction to the identity between the predicate and a part of the complete concept of the subject, it is easy to see why he should think that no demonstration would be possible if PNC2 were false (cf. Rodriguez-Pereyra, 2018).

It is very important for our purposes to consider how Leibniz thought that PNC1, which is patently not an identity, might be reduced to one. Leibniz (Ibid.) notices that if we define 'False' as 'Not true', PNC1 turns into an identity of truth-values:

[PNC3] "For any proposition p, p is not both true and not true".

This is of paramount importance for our concerns since, as we shall see, the prospect for dialetheism hinges on the possibility to distinguish False from Non-True.

F) Second mitigating consideration: from inconsistency to non-identity via indiscernibles

As a second mitigating consideration, it is worth noting that assuming the plausible principle that if things have different properties they cannot be identical, it follows that any violation of PNC1 would *eo ipso* constitute a violation of PNC2. The converse of Leibniz's principle of identity of indiscernible, sometimes called the Principle of Indiscernibility of Identicals, affirms that $x=y \rightarrow (Fx \leftrightarrow Fy)$. By contraposition one gets the principle that if $\sim(Fx \leftrightarrow Fy)$, then it cannot be true that x and y are identical: $\sim(Fx \leftrightarrow Fy) \rightarrow x \neq y$. Now, a violation of PNC1 takes the form (Fx&-Fx), from which one derives $\sim(Fx \leftrightarrow Fx)$. A simple application of the principle of indiscernibility of identicals then entails that if one is prepared to countenance violations of PNC1, one must thereby also countenance a violation of the PI. This is interesting for us since the above considera-

tions appear to vindicate the view according to which the PNC could only fail if the world was indeterminate (*aorista*)[5].

G) Third mitigating consideration: Severino's Principle of Identity

As regards Severino's position more specifically, it is certainly true that his formulation of the PNC ('Being is not not-Being', or: 'the positive is not the negative', see Severino, 2016: 56) is unusual in the eyes of contemporaries. It might seem that he has only in view the principle of self-identity of things, x=x, which concerns the identity function expressed by the verb to be, rather than its function as copula or of as predication involved in the PNC. This is partly true, in the sense that for Severino self-identity and the PNC are cognate, being integrated in the POD (see, also for Severino's interpretation of Aristotele, Severino 2005: part I, esp. 33ff., 69). Yet, Severino's principle "Being is not not-Being" is general enough to encompass all the specific senses of the verb 'to be': identity, copula and existence. Nonetheless, one can still be perplexed about the fact that a violation of the usual PNC (e.g. the cat is and is not on the sofa) would constitute *per se* also a violation of the principle of self-identity[6].

Why saying that the cat is and is not on the sofa is a violation of self-identity? Of what with what? The cat is the cat and the sofa is the sofa, even in cases where the cat could contradictorily be and not be on the sofa. In his contribution to this volume, Priest moves precisely this objection to Severino: that it is not true that a contradiction involves a semantic collapse for which different things (individuals, universals) would be identified. "That something is *F* and not *F* does not entail that either the universals *F*-ness and (not-*F*)-ness, or their extension, are identical" (§ 3.1). Or again: "Even if $A\&\neg A$ is true *A* means, in general, something different from $\neg A$." (§ 3.4). A detailed answer should consider not only

5 As we have already said, we disagree with Aristotle and Severino that the only way in which the PNC could fail is if the world was indeterminate (we shall argue that it can also fail by being over-determinate). The point we wish to make here, however, is that the association of the two principles cannot be dismissed as easily as Łukasievicz thought.

6 Incidentally, this relation between the PNC and self-identity is the pivotal point of Severino's defence of the PNC (See Severino, 2016: 64 ff.), directed against the partial denier of the PNC, as a dialetheist might be.

Returning to Parmenides (Severino 2016: sec. 6), but also Severino's analysis of many Aristotelian passages concerning the PNC and the notion of truth. It is not possible, however, to undertake this task here, due to lack of space (See Severino, 2005: 30-34). We limit ourselves to sketch a formulation that seems to us to express the gist of Severino's theoretical and exegetical arguments.

One can use a spatial metaphor, as Wittgenstein did. A spatial object (say two-dimensional, for convenience) has recognizable boundaries, that is, it is *determined* by a figure which distinguishes the object from what it is not. Now, what about a proposition and its denial? Wittgenstein (in some writings preceding the *Tractatus*) assimilated predicates to lines that divide a plane in two parts, and names to points that lie on one side or the other (See Wittgenstein, 1969: 100). In another passage, he similarly compared a proposition to a vertical line that bisects the (logical) space: "the form of a proposition is like a straight line which divides all points of a plane into right and left" (Ibid. 97). Wittgenstein will not fully retain this metaphor in the *Tractatus*; yet, it remains useful for present purposes. An object has a shape, has contours that identify it; analogously, also a state of affairs, a fact has contours in logical space: the line of Wittgenstein's metaphor, which distinguishes the left and right points representing, respectively, affirmation and negation. Understanding the meaning of a proposition is seeing this outline in logical space; it is contrasting one half of the plane with the remaining one. A contradiction, in this metaphor, cancels the line, because it jointly considers both the partitions that that line should divide. In this sense, no more determinate figure is left, logical space is no longer bisected and it turns out to be indeterminate. In other words: self-identity, both of objects and of states of affairs, is their having "boundaries". This is the alleged common root of both self-identity and the PNC. If these fall, their identity (i.e. the numerical identity of things, the numerical identity of states of affairs) is lost and the world turns out to be indeterminate.

Now, all that was said does not vindicate the view that the PNC is equivalent or synonymous with the POD (unless one is prepared to buy Leibniz's and Severino's peculiar analysis of contingency); nor that the PNC can be shown to be universally valid by showing that POD is universally valid. However, we think that these considerations show that the two principles are intimately related, and that care must be taken if the dialetheist wishes to resist committing to the indeterminacy of the world.

Summing up, while there is a grain of truth in the Aristotelian view

that the PNC and the PI are intimately related, we agree with Łukasiewicz that such relation is less intimate than the Aristotelian defender of the PNC may have hoped for. The lesson we wish to draw from Łukasiewicz's observations is twofold.

H) Our thesis: how to build a dialetheia

Firstly, we shall argue that the ontological ground of true contradictions (if there are any), i.e. their truth-makers, reflect their superficial logical form, α&β, even more than one can think at first glance. Dialetheias, so to speak, are necessarily *two-footed creatures* in the sense that the ground for their truth must consist in the obtaining of *two* ontologically determined and mutually independent facts: one making p true, the other making ~*p* true (or, equivalently, p false). Thus, in a sense, our answer to the question of how reality must be like if dialetheism is true will be that it must be *over-determinate*, rather than in-determinate. That these contradictory facts conform to the PI (or, equivalently, of POD), that is, that they determinately exist and have the characteristics that they have, we shall see, is essential for the existence of a dialetheia: if either fact was not determinately existing, if either was not definitively what it is and as it is, it could not fulfil the truthmaking role that it is called to play.

Secondly, we shall argue that whether one should be prepared to admit (some) true contradictions or not depends on one's view of what makes negative truths true. In particular, we shall see that the view according to which negative claims are made true by the mere absence (i.e. non existence) of a truth-maker for the positive claim are highly inhospitable to dialetheism. The account of negative truths that will emerge as most hospitable to dialetheism, we shall see, is the opposition account (sec. 6-9).

3. The tractarian view of negative truths and why it is inhospitable to dialetheism

Let us start by considering if one could take Łukasiewicz's observations as direct evidence for our thesis that dialetheias are essentially two-footed creatures. Contradictions, the argument goes, are essentially of the form p&~p. Therefore, if (contingent) propositions are made true by corre-

sponding states of affairs, or facts, a contradiction can be made true only by the existence of *two* facts, making respectively *p* and ~*p* true.

Most likely this argument will strike our reader as a *non sequitur*. Even granting that all positive (contingent) claims must be made true by dedicated parts of reality, and therefore that any proposition of the kind *p&q* (where p and q are logically independent propositions) must be made true by the existence of two such facts, why concede that this is the case also for pairs of *contradictory* propositions? If a proposition is made true (by a fact), isn't its negation automatically made (only) false by the existence of that very fact? As Russell (1919: 4) once put it, "there is implanted in the human breast an almost unquenchable desire to find some way of avoiding the admission that negative facts are as ultimate as those that are positive".

One clear statement of this conception of propositions and of their relation to reality can be found in Wittgenstein's *Tractatus* (4.0621) "It is important that '*p*' and '-*p*' can say the same thing. For it shows that nothing in reality corresponds to the sign '-'. As Simons (2008: 14) aptly put it: "This is the truth-maker end of Wittgenstein's insight that propositions are bi-polar: if a proposition has one truth-value, however it gets it, its contradictory opposite has the opposite truth-value without further ado". This mechanism (which Simons calls "truth by default") by which a negative proposition gets its truth-value "for free", so to speak, is supposed to explain how negative claims can be true (or false) without corresponding to proprietary, positively existing facts: "it seems more adequate to regard sentences of the given kind as true not in virtue of any truth-maker of their own, but simply in virtue of the fact that the corresponding positive sentences have no truth-maker" (Mulligan, Simons, Smith, 1984: 315).

Before discussing the difficulties of this intuitive picture of false-making, let us make some of its consequences explicit. An obvious consequence, as Stevens (2008) noticed, is that if a dialetheist were to adhere to this tractarian picture she would have to countenance situations in which reality simultaneously contains and does not contain the very same fact (as opposed to containing two facts opposing each other). Now, it is interesting for our purposes to notice that this comes close to admitting that the dialetheist is committed to the indeterminacy of the world, as Aristotle and Severino contend: whether a fact belongs to reality or not would not be an absolute matter. As we shall argue, however, the dialetheist should do well to stay away from such concession.

Notice, in fact, that the truth of either *p* or *~p* is essential for making the molecular proposition *p&~p* true. Therefore, to the extent to which the truth of *~p* entails that the truthmaker for *p* does *not* exist (and vice versa), it also entails that *p&~p* is *only* false, and hence not a dialetheia at all. Put differently, if the only way in which reality can make one of the conjuncts *p* or *~p* true is by failing to produce a truth-maker for the other, then it will never yield a truth-maker for the contradiction *p&~p*. If we are right, the prospects for dialetheism live and die with the prospect of resisting this tractarian picture of truthmaking and false-making. Priest (2006: 51) admits that this is the case: "A correspondence theory of truth requires an account of [truth-makers]. One of the most sophisticated accounts ever given is undoubtedly that of Wittgenstein's *Tractatus*. And certainly, according to this, there are no contradictory facts".

There are also more recent attempts to satisfy the desire to do without negative facts. The idea, also known as *Truth-maker Optimalism*, and often advertised with the slogan 'truth supervenes on being', is to suppose that negative states of affairs merely *supervene* (rather than depend) on positive ones, and to build the truthmaking relation on this supervenience relation. This is the truthmaking principle that ensues:

[Truth supervenes on being] "If something is true then it would not be possible for it to be false unless either certain things were to exist which don't, or else certain things had not existed which do" (Bigelow, 1988: 133).

In short, as it happens in the tractarian view, negative (and general) truths would be true not because some positive truth-makers exist, but because "they lack false-makers" (Lewis, 1992: 216, 2001: 610). All these variants of the tractarian view are equally hostile to Dialetheism.

4. Breaking Wittgenstein's dream

A) Living without negative facts

Fortunately for the dialetheist, however, the tractarian view is deeply problematic. Shortly after commenting on our unquenchable desire to do without negative facts, Russell observes that:

> There might be an attempt to substitute for a negative fact the mere absence of a fact. If A loves B, it may be said, that is a good substantial fact; while if A does not love B, that merely expresses the absence of a fact composed of A and loving and B, and by no means involves the actual existence of a negative fact. But the absence of a fact is itself a negative fact; it is the fact that there is not such a fact as A loving B. Thus, we cannot escape from negative facts in this way (1919: 4-5).

The belief that truth must depend somehow on some relations with the facts stems from the observation that the mere existence of a thing and of a property does not suffice for making it true that that thing *has* that property. Something more is needed to explain how reality makes it true that the property is instantiated. The gist of Russell's objection is that the mere existence of the object and of the property are not suffice to make it true that the object does *not* have the property either. Reality must make its positive contribution either way, as it were.

It should be clear that the view that truth supervenes on reality is equally exposed to to this sort of objection. Martin, for example, has objected to Bigelow's optimalism (in a Russellian spirit) that the statement that something is absent is itself a negative statement in need of truthmaking, and that for this reason it "can't be used to explain or show how [a negative truth] needs no truth-making state of the world for it to be true" (Martin, 1996: 61).

Bigelow's theory has a further problem. While the above condition certainly states a *necessary* condition for any realist theory of truthmaking, many have objected that it cannot also state a *sufficient* condition. Molnar, for example, objected to this view on the grounds that "[t]ruthmaker theory is a theory of the groundedness of truth-values. Minimally, such a theory should enable one to identify whatever it is that explains why the truth-bearers have the truth-values they have" (Molnar, 2000: 82).

The problem is that the theory merely specifies that if a proposition is true in a world and false in another, there must be *something* that exists in one but not in the other or vice versa. Molnar's objection is that the view does not specify *what* this something is. For example, the truth that there is no wine on the table, intuitively, must be made true by something that has to do with wine, not just by *anything*. The worry is that in an attempt to specify this condition of relevance the view would relapse into some more maximalist theory. It has also been argued, finally, that

the supervenience version of the truth-maker principle makes the relation of truthmaking symmetrical, which flies in the face of the intuition that it is *reality* which grounds (and determines) truth, not vice versa.

Here we shall not take a definite stance about these theories of truthmaking. We content ourselves with the observation that, if some variant of it turns out to be the correct account of negative truths, then so much the worse for the dialetheist friend of truth-makers.

B) The Achilles' heel of the Tractatus: formal and material incompatibility

The tractarian project runs into further difficulties precisely at the juncture where dialetheism may find its logical space. As Wittgenstein soon realised, not all potentially contradictory proposition are of the form $p\&\sim p$, nor would be ultimately reducible to propositions of this form. Wittgenstein's project to reduce all alethic contradictions into truth-functional ones had to confront the problem of empirical incompatibilities, which turned out to be so intractable that Wittgenstein was later driven to abandon the tractarian project altogether. The claim that a given patch in the visual field is wholly blue and wholly red, for example, is contradictory, since it entails that it is both blue and not blue. Now, while the latter claim is certainly a transparent contradiction, what would make it true (if indeed this was a dialetheia) would be *two* positive states of affairs: that the patch is blue and that it is red. If things were so, reality would be making a contradiction true not by being indeterminate as to which facts belong to it (i.e. in the sense that one and the same fact both exists and does not exist), but, on the contrary, by being over-determinate, i.e. by determinately containing two facts that – though existentially independent from each other –, mutually oppose each other. The patch could be either only red or only blue, without one fact presupposing, implying or requiring the existence of the other. In an early commentary on the *Tractatus*, Ramsey appears to be acutely aware of this problem:

> Mr. Wittgenstein admits that a point in the visual field cannot be both red and blue; and, indeed, otherwise, since he thinks induction has no logical basis, we should have no reason for thinking that we may not come upon a visual point which is both red and blue. Hence he says that "This is both red and blue" is a contradiction. This implies that the apparently simple concepts red, blue (suppos-

> ing us to mean by those words absolutely specific shades) are really complex and formally incompatible (Ramsey, 1923: 473).

It is instructive to notice that Wittgenstein appears also to be aware of the problem, since he attempts (unsuccessfully) to reduce the phenomenal difference to other, presumably more basic distinctions, in the hope that this will reveal the tautologous essence of the contradiction. Ramsey, understandably, puts pressure on Wittgenstein's maneuver. Here is how he expresses the worry:

> He [Wittgensetein] tries to show how this may be, by analysing them in terms of vibrations. But even supposing that the physicist thus provides an analysis of what we mean by "red" Mr. Wittgenstein is only reducing the difficulty to that of the necessary properties of space, time, and matter, or the ether. He explicitly makes it depend on the impossibility of a particle being in two places at the same time. These necessary properties of space and time are hardly capable of a further reduction of this kind. For example, considering between in point of time as regards my experiences; if B is between A and D and C between B and D, then C must be between A and D; but it is hard to see how this can be a formal tautology (Ibid. 473).

To anticipate our diagnosis, contingent contradictions of the above kind should be thought of as two-footed creatures with regard to their ontological ground. It should be clear that in these circumstances, the opposition between the two conflicting states of affairs does not consist in the impossibility of their co-existence as absolute parts of the same reality, but in that they *jointly* make it simultaneously true and false that something is the case.

C) Existential, material and alethic opposition

To prepare the ground for our analysis, let us make the following distinctions. When two (possible) facts f_1 and f_2 are such as to make a proposition p and (respectively) its negation $\sim p$ true, we shall say that f_1 and f_2 are in *alethic opposition*. This may happen for two reasons.

In the first scenario, the existence of either fact excludes the existence of the other. In this case we shall say that f_1 and f_2 are in *existential opposition*. Clearly, if the possible truth-makers of, respectively, p and $\sim p$

are in existential opposition, they are also in alethic opposition, since whenever one of them exists to make p or $\sim p$ true, the other fails to exist (thus failing to make it true), and therefore p and $\sim p$ cannot be simultaneously true. If our analysis is right, however, the dialetheist must think that the converse implication may fail: sometimes (when a contradiction is true) the grounding facts must be in alethic opposition without being in existential opposition.

In the second scenario – the only one compatible with dialetheism, we argue – f_1 and f_2 are in alethic opposition, i.e. they make p and $\sim p$ respectively true, but they are *not* in existential opposition, i.e. they are capable of co-existing. In this case we shall say that the two facts are *materially opposed* but not *existentially opposed*.

There are two ways in which such material opposition can be operative in making a negative sentence true. The opposition can occur (1) among positive facts, like when an object is said to be *not* square because it is round; or (2) among a positive and a negative fact, like when the truth that there are no Arctic penguins is supposed to be made true by the negative fact that there are no Arctic penguins. We shall consider these scenarios in turn, starting from the first (sec. 7-8).

5. The opposition between facts

A) Preparing the ground: primitive oppositions

An early attempt to obviate to the difficulty of accounting for negative truths by resorting to a primitive relation of "opposition" between propositions can be found in Demos 1917. This relation is primitive in that it is indefinable, but its crucial characteristic is that no two such opposite propositions may be simultaneously true:

> The relation of opposition is such that, if p opposes q, p and q *are not both true* (at least one of them is false). This must not to be taken as a definition, for it makes use of the notion "not" which, I said, is equivalent to the notion "opposite". In fact, opposition seems epistemologically to be a primitive notion (Demos, 1917: 191, our emphasis).

Notice that this view, if correct, would exclude the existence of dialetheias by default. It is therefore interesting for our purposes to see why

it fails. Indeed, the possibility to account for negative truthmaking in terms of this sort of alethic opposition alone is the first option that Russell 1919 considers and quickly dismisses on the way to his reluctant acceptance of negative facts. In objecting to Demos' proposal, Russell advances a circularity objection similar to that raised against the simple "absence" view of false-making:

> Usually it is said that, when we deny something, we are really asserting something else which is incompatible with what we deny. If we say "roses are not blue," we mean "roses are white or red or yellow." But such a view will not bear a moment's scrutiny. *It is only plausible when the positive quality by which our denial is supposed to be replaced is incapable of existing together with the quality denied* (Russell, 1919: 4, our emphasis)

Clearly, Russell's last caveat is meant to ensure at the same time that (1) the relevant facts are indeed alethically opposed to each other, e.g. that the fact that roses are red entail that it is false that they are blue; and (2) that these facts all cohere with each other (PNC). If there is any logical space for true (contingent) contradictions, we argue, there must be a fact which makes wannabe contradictory states of affairs alethically opposed, without making them "incapable of existing together". It is plain that this possibility entirely depends on the details of one's theory of false-making and on one's account of what makes opposing facts "incompatible". Russell justifies his dismissal of this kind of opposition as a candidate for an ultimate explanation of negative truths thus:

> The only reason we can deny "the table is square" by "the table is round" is that what is round is not square. And this has to be a fact, though just as negative as the fact that this table is not square. Thus it is plain that incompatibility cannot exist without negative facts (Ibid.)

In short, one can account for the truth of $\sim p$ by making reference to the truth of p only if p and q are incompatible, that is only if the proposition 'p and q are not compatible' is true. But this is just as negative a fact as that which makes $\sim p$ true (see also Grossmann 1992 and Molnar 2000: 78 for analogous arguments). Here we are not interested in Russell's conclusion that negative truths must be made true by negative facts. Be that as it may, the admission that blue and red are not *logically* op-

posed – so much so that their opposition would require a mysterious negative fact to be made true – entails that their hypothetical coexistence is *also* not a logical truth-functional contradiction. And this, we argue, creates the logical space for a form of dialetheism that appears to evade standard transcendental arguments against it.

The admission that blue and red are not *logically* opposed, and that no amount of analysis could make them so, in fact, entails that their co-existence is *also* not a truth-functional contradiction. This means that the mere fact that blue and red are alethically opposed – that if it is true that something is red then it is false that it is blue, and vice versa – is not sufficient to prove that the two opposing truth-makers cannot co-exist, thus producing a contradiction. To be sure, nothing we said makes it at all plausible that they *can* so co-exist. As a matter of fact, no one has ever suggested that these phenomenal facts are actually compatible in the relevant sense. All that follows from these observations is that such plausible existential exclusions between facts is not something that can be achieved without argument, for free.

To illustrate our thesis, we now turn our attention to two concrete proposals: Priest's Hegelian account of motion (sec. B) and Fine's Fragmentalism (sec. C).

B) The opposition between spatial locations: Priest's Hegelian account of motion

Zeno's arguments appear to show that time and change are contradictory. At the beginning of last Century, Russell believed to have finally found a solution to these ancient antinomies. It consisted of an application of basic notions of calculus, as these had been recently rigorized by Cantor, Weierstrass and others. Some have argued that the main attempt to remove these contradictions without denying time and change altogether, the now widely accepted Russellian account, proves to be at best a restatement of the problem (see for example Arntzenius 2000; Tooley 1988; Bigelow and Pargetter 1990; Carroll 2002 and Boccardi 2018). We are thus faced with a dilemma. Either accept the phenomenological datum that things change and time passes, at the cost of accepting that at least some contradictions are true; or hold fast to the PNC, and repudiate time and change as mere appearances. Priest (1987) has shown that the first option is not as abhorrent as one may think and that it ought to

be seriously explored. This will be our first concrete example of an opposition ontology for dialetheism.

If an object *is* determinately at one location, then it is *not* determinately at another disjoint location (and vice versa). Drawing from familiar and venerable considerations dating back to Zeno of Elea, and inspired by Hegel's thoughts about change, Priest put forward an account of motion (and of the passage of time) which postulates that objects in motion are inconsistently, simultaneously located at different places. A brief discussion of Priest's Hegelian account of motion should help clarify how alethic (but not existential) opposition is supposed to give rise to true contradictions.

Unlike Russell, Hegel did hold a state of motion to be intrinsic: there is an instantaneous difference between a moving body and a stationary one. As Hegel himself puts it in *The Science of Logic*: "motion is itself contradiction's immediate existence. Something moves, not because now it is here and there at another now, but because in one and the same now it is here and not here" (Hegel, 2010: 382; cf. Priest, 1987). Hegel is not denying that if something is in motion it will be in different places at different times. Rather, the point is that this is not *sufficient* for it to be in motion. What is required for it to be in motion at a certain time, according to this view, is for it both to occupy and not to occupy a certain place at that time:

> So let us inquire why, exactly, Hegel held this view of motion. The reason is roughly as follows. Consider a body in motion – say, a point particle. At a certain instant of time, t, it occupies a certain point of space, x, and, *since it is there, it is not anywhere else.* But now consider a time very, very close to t, t'. Let us suppose that over such small intervals of time as that between t and t' it is impossible to localise a body. Thus, the body is *equally* at the place it occupies at t', x' ($\neq$ x). Hence, at this instant the body is both at x and at x' and, equally, not at either. This is essentially why Hegel thought that motion realizes a contradiction (Priest, 1987: 176, our emphasis).

A few considerations are in order. First, notice that the sort of dialetheia that motion would realize if the theory was correct is of the two-footed kind that we have been discussing. The body is "equally" (though inconsistently) at *all* the locations it occupies at any given time. It is essential, for this to be the case, that *all* the facts which correspond to the

various locations occupied at a time determinately co-exist at that time. In our terminology, these facts are materially (and hence alethically) opposed, but not existentially opposed. If they were existentially opposed – say because the existence of the fact that the body is in position x at t entails that the fact that it is in x' at t does not exist – the proposition that the object is in x would not be (also) false. As Zeno thought, the object could not move.

Second, as the expression "*since* it is there, it is *not* anywhere else" makes clear, the body being located in x at time t is simultaneously the truthmaker for the proposition that it is located in x *and* the false-maker for the proposition that it is located elsewhere (say, in x'). This is precisely the sort of material opposition between positive facts that we are suggesting constitutes the grounds for all (possible) contingent dialetheias.[7] As we shall see in a later section, this view is passible of two interpretation, depending on whether the relevant material oppositions are supposed to obtain between positive facts (as we have assumed here), or between positive and negative facts.

We shall now turn to another example of a view according to which the world determinately contains incoherent truth-makers: Kit Fine's Fragmentalism.

C) One step away from dialetheism: Kit Fine's Fragmentalism

Another (related) domain of facts which has been argued to engender contradiction is the domain of tensed facts. Tensed facts – also known as A-facts – are the truth-makers of propositions that make (implicit or explicit) reference to when events are located relative to the present. Whatever fact makes it true that Napoleon's death occurred in the past, for example, is a tensed fact, since it mentions the tensed property (A-property) *being past*. That this death occurred *before* your birth, instead, is not a tensed fact. If it is true that time passes, it seems natural to suppose that this is because temporarily present facts become objectively past, that is, because A-determinations keep shifting. McTaggart (1908) famously claimed that it is impossible that events instantiate shifting A-properties. This would require them to inconsistently instantiate each of the *incom-*

7 In Boccardi 2019 one of the authors of this paper has argued that Priest's account is insufficient to overcome the objections levelled against the rival Russellian account.

patible determinations of pastness, presentness and futurity (the A-determinations). It is of no use to insist that these determinations are never had *simultaneously*, he thinks. To point out that, for example, the presentness of your existence succeeds that of the French revolution does nothing but re-propose at a second order level the same predicament that afflicted us in the first place: it is tantamount to saying that the presentness of your existence was future when that of the French revolution was present etc., and so on *ad infinitum*.

Kit Fine (2005) has advanced a similar argument to the effect that the reality of temporal passage entails the obtainment of incoherent states of affairs. Your breakfast yesterday, for example, has been present. Since it has been true for you to say: "I'm having breakfast", there must have been a fact making this proposition true. This fact is incompatible with the (different) fact making now true that yesterday's breakfast is past. But yesterday's breakfast *is* past! For reasons that need not detain us here, Fine believes that the ontology that is most hospitable to the view that time passes (called *Fragmentalism*) is one according to which all these conflicting facts obtain, or coexist (2005: 281):

> Reality may be irredeemably incoherent. […] Under such a view, reality will be fragmentary. Certain of the facts constituting reality will 'cohere' and some will not. Any fact is plausibly taken to belong to a 'fragment' or maximally coherent collection of facts; and so reality will divide up into a number of different but possibly overlapping fragments.

He proposes that we take this relation of coherence between facts as a primitive notion (Ibid.). It is by this coherence relation that the maximal 'fragments' are individuated. Now, this is a perfect example of a contradiction that would emerge out of the material incompatibility of (positive) facts. A fundamental pillar of this ontology is the determined (co-)existence of all the opposing facts: "The constitution of reality is an absolute matter" (Fine, 2005: 271). Incoherence emerges out of an over-determination of reality, not out of an indetermination. Once again, the logical space of dialetheism is found inside the cracks of the tractarian account of tautologies and contradictions.

To be precise, Fine does not think that the co-existence of incoherent facts gives rise to dialetheias (and for this reason his ontology does not require the adoption of a paraconsistent logic). What blocks the derivation

of true contradictions of the form p&~p, as noted by Lipman 2015, is that the coexistence of incoherent facts, i.e. the fact that they belong to different fragments, does not entail that they obtain *together*, or that they "co-obtain": formally, if we indicate the relation of co-obtainment by the symbol '∘' this amounts to the fact that co-obtainment does not satisfy adjunction: p,~p⊭p∘~p.

Thus, there might be a fact making true that you are sitting and also one making true that you are not sitting; but it doesn't follow from this that you are ever both sitting and not sitting. Of course, this puts some pressure on fragmentalism: in what sense are two incompatible facts incompatible?[8] What is important for us, however, is that Fine's fragments are in *alethic* opposition according to our definition, since there are in reality both truth-makers and a false-makers for the same propositions. To make Fragmentalism into a full-blown dialetheist picture, one just needs to postulate a relation of co-obtainment that allows adjunction and adopt a paraconsistent logic to block explosion. This is a paradigmatic case of the kind of opposition view we are suggesting dialetheists should favour.

If we are right that the prospect for making dialetheism true (in the robust, truth-maker sense) live and die with the prospect of a material opposition view of negative truths, then the scope of dialetheism, i.e. which kinds of truths are apt to engender dialetheias, is equally bound to the scope of material opposition. The account we are considering proposes to make (logical) room for dialetheias by postulating relations of material opposition between *positive* facts[9].

D) Negative facts

Let us take stock. We have said (section 5) that the tractarian, sheer absence views of negative truths are inhospitable to dialetheism. In a tractar-

8 As Lipman (2015: 3125) puts it: "The fragmentalist must offer some understanding of incompatible facts that allows us to see how two incompatible facts can both belong to reality. The most promising proposal is that facts are incompatible if and only if it is metaphysically impossible that they cohere".

9 It should be noted that, as many have observed (e.g. Molnar, 2000), the opposition between positive facts is confined to the opposition between determinate properties (e.g. between being red vs being blue), and does not occur between determinable properties (e.g. between being a scented liquid vs being an odourless liquid). If this is so, the view under consideration here would restrict the possibility of dialetheias to the case of determinate properties only.

ian world, a true contradiction would be impossible for it would require the simultaneous presence and absence of the facts which make it true. We argued that an account of negative truths based on the notion of opposition between simultaneously existing facts is more promising for dialetheism. In the last two sections we discussed a version of this idea based on the material opposition between *positive* facts. We discussed some of its shortcomings and potential limits: it probably still requires a (further) negative fact to make the oppositions themselves true (Russell, 1919; Grossmann, 1992); and it appears to be limited to the case in which the negated properties are determinates of determinables (Molnar, 2000).

The variant of the opposition account that we shall consider here exploits the Russellian idea that reality comprises *sui generis* negative facts. We have already discussed some of the reasons which might force us to postulate these admittedly mysterious entities. To be clear, 'negative facts' are called 'negative' only because they make *negative* truths true. However, *qua* entities, they are just as positive as apples are. But what sort of things can they be? How do they differ from positive facts? Commenting on the natural repugnance one has about negative facts, Priest says:

> What is this repugnance? One source of it is, I suspect, the obvious truth that everything that exists is. Add to this the thought that negative facts are not, and it follows that no such facts exist. This is a confusion, however as old as Parmenides: negative facts are not, in the sense that they ground truths of the form 'it is not the case that so and so', but they are in exactly the same way that all existent things are, viz. they are part of reality (2006: 53).

Another similar objection to negative facts stems from considering their putative internal structure. Although *positive* facts are themselves theoretical constructs mysterious enough to a minimalist mind, they are yet familiar enough as to contain entities, properties and relations as their constituents. "But the things, properties, and relations which are the supposed constituents of negative states of affairs, do not exist. Should we therefore say that negative states of affairs are complexes of non-existent elements? It seems that only Meinong had the courage to bite this bullet" (Molnar, 2000: 77, see also Findlay, 1963, pp. 50-58)[10]. This objection,

10 It is interesting to notice that Priest manifested sympathies for a Mainongian picture of non existents (cf. Priest 2005).

we think, must be qualified. Granted that negative facts are rather mysterious entities, why assume that the things, properties, and relations which are the supposed constituents of them do not exist or that they are not part of negative facts? Sure, this *may* be the case, but it need not be. It is the case, for example, of the truth that the golden mountain does not exist. But it does not appear to be the case of more mundane negatives, such as the claim that the train has not arrived yet. As the view presented in the next section illustrates, it is the latter kind of negative truths that are the best candidates to be involved in dialetheias.

E) Priest's polarity view of facts

To better appreciate how a theory of negative facts might work in more details, we shall consider a view developed by Priest 2000 and Beall 2000: the Polarity Theory. A standard model of a (positive) fact is the ordered tuple $<R_n,o_1,...,o_n>$, where R_n is a (n-ary) relation and $o_1,...,o_n$ are objects. This standard view is clearly unsuitable to model negative facts in any straightforward fashion. The Polarity view, instead, proposes to model positive facts as tuples of the form and negative ones as tuples of the form $<R_n,o_1,...,o_n,+>$. The burden of distinguishing the obtaining from the non-obtaining of the fact is (formally) left on the undefined polarities '+' and '-'[11].

Many have objected that this set-theoretic model of negative facts does nothing to answer the metaphysical question of what kind of entities negative facts are. Are the polarities '+' and '-' mere models, or are they supposed to correspond to something in reality (Dodd, 2007: 390)? Priest and Beall are well aware that their account is explanatorily unsatisfactory. However, they note that many respectable theoretical constructs share the same mysteriousness:

> It is certainly the case that this polarity is built into reality. But there are lots of polarities built into physical reality (like, for example, being a left hand or a right hand, or the spin of an atomic particle). I do not see why metaphysical polarities should be any worse than these (Priest, 2000: p. 318; see also Beall, 2000: p. 26).

11 Cf. Priest, 2000: pp. 315-316; Beall, 2000: 265.

This response is likely to make many metaphysicians raise their eyebrows. After all, we have an empirical concept of a left hand, and we know that spin is a *physical* property. What kind of thing is a polarity? "What is lacking", contends Dodd, for example, "is an account of the nature of these polarities, and it is this […] that provides a decisive disanalogy between Priest and Beall's polarities and the polarities to be found in physical reality" (Dodd, 2007: 290).

We think that this objection has some teeth, but that some considerations are in order. True, Priest and Beall don't tell us what kind of thing polarities are. But, for that matter, typical accounts of truth-makers in terms of facts don't tell us what kind of things facts are, other than that they are perhaps abstract entities, and that they "glue" relations and objects together into a single unity. Isn't *this* mysterious too? One plausible rationale for postulating (positive) facts is that the mere existence of the objects and of the relations does not suffice, alone, to make it true that these objects truly *stand* in that relation. As we have already noted, however, the mere existence of the components does neither suffice to make it true that they do *not* stand in the relation: that the objects and the relations are separated, rather than united. Why shouldn't we take the negative polarity to signify such primitive notion of separation? A spatial metaphor may perhaps be of help in clarifying this consideration. That two objects are adjacent to each other is a (contingent) fact that needs to be made true by a truth-maker (the position of the objects, or their distance, say). But surely, also the truth that the objects are *not* adjacent, that is, that they are separated is equally in need of being made true by a similar truth-maker (again, plausibly, the position or distance between the objects).

F) Rewriting the Tractatus

A potentially more serious objection against Priest and Beall's polarity view is that it is compatible is compatible with the idea that negative truths are made true by the sheer lack of a truth-maker.

> [T]he important question is whether the polarity theorist can offer a suitable account of the nature of polarities that succeeds in representing them as anything more than absences. To do that they must reveal what more they are. But here polarity theory runs out of explanatory resources. The problem is that all attempts to define polarities so as to avoid the above criticism are doomed to circularity (Stevens, 2008: 299).

If this criticism were sound, this would be disaster for the prospects of applying the polarity view to dialetheism (for example, to Priest's Hegelian account of motion). However, we think that more needs to be done to show that the polarity account relapses to the mere absence view of negatives. It is true in a sense that, as Stevens observes, "the polarities of facts signal nothing more than the instantiation or non-instantiation of properties and/or relations" (Ibid.: 299). But this statement has to be qualified. In fact, one could raise the same objection against good old *positive* facts. What does a standard tuple $<R_n,o_1,...,o_n>$ signal, any more than that the objects $o_1,...,o_n$ stand in the relation R_n? We could not agree more with Stevens when he claims that "[u]nless ~A is understood as having a truthmaker distinct from the mere absence of A's truthmaker, there is surely no conceivable way in which reality can produce a truthmaker for A ∧ ~A." (Ibid.: 294); but we disagree that Priest's and Beall's account is implicitly committed to this a view, or incapable of excluding it. Interestingly, Priest observes that one could rethink the tractarian world to make room for negative facts: "[i]ndeed, as far as I can see, one could simply rewrite Tractatus substituting the above theory of facts for the one given there. The result would be almost exactly the same, except that the logic of the world would be first-degree entailment and not classical logic." (Priest, 2000: 316). One could squeeze negative facts into a tractarian world, thereby obtaining a dialetheist version of it.

Here we shall not pursue this matter further, other than by noting that Priest's and Beall's insistence that realism about negative facts is an optimal ontological environment for Dialetheism is in line with our overall analysis: Dialetheism can afford truthmakers only by endorsing an opposition theory of false-making. After considering and dismissing a number of proposals Molnar concludes on a pessimistic note:

> The Holy Grail of positive truthmakers for negative truths remains undiscovered. We need positive truthmakers for negative truths but we have no good theory of what these might be. That is the sad conclusion from the arguments of this paper. I have criticised proposals by other philosophers for solving the problem of negative truths, but that criticism must be tempered by the acknowledgment that where they have failed, so have I. It is an impasse and at present I cannot see the way out (Molnar, 2000).

If Molnar is right about the prospect of the opposition theories, then equally undiscovered are the possible truth-makers of dialetheias. There

remains the option of abandoning the idea of truth-makers altogether. Dodd, for example, arguing that the problems that we mentioned are intractable, concludes that: "[s]ince there cannot be a truthmaker theory that solves the problem of negative truths whilst remaining well motivated, we should give up on truthmaking altogether." (Dodd, 2007: 400) Surely, a view that denies that even contingent truths need truth-makers is more hospitable to dialetheism than its rivals. Notice, in fact, that of all three notions of opposition that we have discussed – alethic, material, and existential –, only the first makes any sense in a world without truth-makers. And since, as we have seen, there are contradictions that are not tautologous, only a classical preconception about how truth values and negation work could block the conclusion that some contradictions may be true. Now, we find this draconian move unpalatable to the extreme, especially in the case of contingent truths. But we won't argue for this thesis here, leaving it to the reader to pick up his or her favourite theory of negative truths.

6. Single fact contradictions

A) Logical and semantic paradoxes

If we are right, dialetheias could only be made true by the existence of two facts (either both positive or of different polarities). At this juncture one may reasonably ask why a single determinately existing fact could not make simultaneously true a proposition *and* its negation, thus engendering a single-footed dialetheia. A friend of the tractarian understanding of propositions would surely bulk at this hypothesis. Propositions, according to this theory, only have one slot to which a truth-value can be assigned, so to speak. Once a proposition is made true (by a fact) there is simply no more room for another assignment: the falsity (indeed, untruth) of its negation is assigned by default, with "no further ado". Now, this defence would simply begs the question if it were thought of as a defence of an elenchtic "proof" of the universal validity of PNC. To claim that propositions can get at most one truth-value, in fact, is tantamount to claiming that dialetheias cannot be true, that is to a logical formulation of the PNC.

It is interesting to notice, however, that in cases where a proposition logically entails its negation ($p \supset \sim p$), we have a guarantee that any truth-maker for p would thereby (by default) be a truthmaker for $\sim p$ as well,

with no further ado. This is clearly the case (perhaps only the case?) of the logical paradoxes. These include the semantic paradoxes of truth, denotation, predication (the liar, Grelling's, Berry's, Richard's, Köenig's, etc); and the set-theoretic ones of membership, cardinality, etc (Russell's, Cantor's, Burali-Forti's, Mirimanoff's, etc.).

The dialetheist strategy, in these cases, is to take the formulation of these arguments as *bona fide* sound arguments (cf. Priest, 1987). These cases appear to contradict our thesis that dialetheias are necessarily two-footed. Although a detailed treatment of these cases will have to wait for another paper, let us make a couple of considerations.

First, as many have argued, it is not clear that these paradoxes *can* be taken as *bona fide* arguments, since the contradictory propositions in question may be plausibly argued to simply lack an ontological ground (truth-makers). This is, for example, Kripke's influential response (see Kripke, 1975: 57). However, it appears as a weak response to the dialetheist proposal, since arguably the sole ground for supposing that these propositions lack truth-makers is that if they did they could produce true contradictions. As Kirkham put it: "Kripke's solution is no more and no less ad hoc than is […] Tarski's. He has no independent reasons, other than to solve the paradox, for placing the restrictions he does on what can and cannot have a truthvalue." (Kirkham, 1992: 291).

A second response would be to claim that the truth-maker principle should be limited to contingent truths. Necessary truths, such as the truths of mathematics and logic, according to this less than maximalist truth-maker principle, do not stand in need of truth-makers. The rationale for this restriction of the principle is that necessary truths are true not in virtue of how the world is, but *however* the world may be: they don't need any contribution from the actual world.

Now, one must be careful, in a post-tractarian era, to qualify this statement. If necessary truths don't need a contribution from the world, this is not in virtue of them being modal claims *per se*. As we have seen, pace Wittgenstein, there may well be necessary truths that *do* need such a contribution. What makes these tautological truths vacuously true, or "true by default", is rather that in these cases truth and falsity might be argued to exhaust the whole logical space, not leaving any room for a distinction between untrue and false. This would clearly block the dialetheist maneuver. But it would also clearly beg the question against it. The sole reason one has to argue that the logical space in these cases is exhausted by

the exclusion of truth and falsity, in fact, is the requirement that these behave classically.

A better response, we think, is to claim that what makes a self-referential non-empirical proposition true (if it is true), is whatever proof we have for its truth. As Stevens suggests, for example: "the proof of the Liar sentence in a semantically closed language L is its truth-maker, and that the proof of the falsity of the sentence in L is the fact which shows the Liar to be false" (Stevens, 2007: 294). Now, it is true that, as Stevens immediately notices, if this was the appropriate response in these cases it would contradict the postulation of *sui generis* negative facts (e.g. the Polar View). However, nothing forces the dialetheist to endorse a single unified account of *all* truth-making. It is rather plausible, we think, to assume that, if non-empirical truths need truth-makers at all, these would not be the same kind of entities as those needed to make empirical propositions true. For our concerns what matters is that under this account the truth-makers of dialetheias would be two-footed, rather than based on the simultaneous presence and absence of a single truth-maker.

So much for the possibility of one-footed, non-empirical dialetheias. What about *empirical* ones?

B) Contradictory objects

Why shouldn't the dialetheist think that a *single* empirical fact could make a proposition simultaneously true and false? This would be the case, for example, if an individual entity could instantiate an inconsistent property. Now, in most cases where this has been suggested to be possible, the inconsistent property in question is not a simple property, but the logical product of two (or more) simple properties. Take for example the property of being a squared circle. Clearly this is a property obtained by conjoining the properties of being squared and circular. Thus, if an entity were capable of instantiating such a property, it could only do so by participating to *two* opposing facts. The dialetheia in question, that is, would be two-footed, in spite of the apparent superficial form of the proposition. We think that all plausible cases of empirical dialetheias will be seen to comply with this analysis, if properly construed.

A possible exception to our view is the case of gluons. Gluons are inconsistent objects postulated by Priest (2014) to solve the ancient paradox of the One and the Many: how can a whole be *one* if it consists of nothing but a *plurality* of parts? Merely invoking their unity doesn't solve

the problem, since it is merely a further element equally in need of being unified. Once again, in the face of a paradox, Priest's strategy is to bite the bullet and accept that reality is contradictory. Gluons are identical to all their parts, by definition. But they are also not identical to their parts, since they have properties that none of their parts have (like being identical to the *other* parts). They are therefore identical and not identical to their parts. Isn't this an exception to our view?

Our response to this challenge is analogous to the one we gave in the case of semantic and logical paradoxes. In non-empirical cases such as this, where the entities involved are theoretical constructs and abstract definitions, it is plausible to suppose that the truth-makers of true propositions (if there are any) are their proofs themselves. In discussing the case of semantic and logical paradoxes we noted that this view fits well with our contention that dialetheias are necessarily two-footed. Just like it happens in the case of Kantian antinomies, in those cases the reasons for believing a proposition (its proof) were never identical to the reasons for believing its negation. We think that the case of gluons is analogous in this respect. The reason for stating that a gluon is identical to its part is the definition of gluon, while the reason for supposing that it is *not* identical to them is a more or less complicated chain of deductions. Never does the same proof support both p and $\sim p$. At any rate, nowhere in Priest's treatment does it appear that what makes it true or false that gluons are different from their parts is the absence of a truth-maker for it.

Let us now conclude our survey with a few considerations about the nature of the opposition relation. This relation, we have argued, is the Holy Grail of dialetheism.

7. Opposition and exclusion

A) The intuition of exclusion

It is interesting to ask what – short of a formal tautology – could make it true that two states of affairs are alethically opposed to each other. Surely it must be a fact, albeit perhaps a brute fact. Before we try to answer this question, however, let us test the tenability and the scope of this account of negative truths. What could the relation of material opposition consist of, if it is to guarantee alethic opposition without excluding coexistence? Surely, there is a sense in which two materially opposed facts are compat-

ible, since they can coexist. Yet, in another sense, they must also be incompatible, since they are alethically opposed.

Let us answer this question by first digging dipper into the role that the relation of opposition is supposed to play. Pondering on how we should conceptualise the negation operator, Sainsbury claimed that our grasp of incompatibility is more basic than our grasp of truth and falsity:

> Understanding negation involves a sensitivity to incompatibility, but this notion does not have to be specified [by direct reference to truth and falsity]. For instance, one might suggest that the basic notion of incompatibility in directly semantic terms consists in the fact that incompatible sentences must have opposite truth values, which makes true contradictions conjunctions of incompatibles. However, one might prefer to avoid an account of understanding which involved attributing such semantic notions to speakers, for example on the grounds that the account would not be neutral with respect to realist and intuitionist preconceptions (Sainsbury, 1997: 224)

Indeed, as Francesco Berto (2007: 304) rightly observes commenting on this passage, an account of incompatibility that made direct reference to what we called alethic opposition, i.e. an account according to which two facts are incompatible if and only if they make a proposition respectively true and false, might not be neutral with respect to dialetheist preconceptions too, which is our concern here. Sainsbury continues to argue that our experience of incompatibility is more primitive than our use of negation, and that the use of the negation operator may plausibly be "explained initially as a means of registering (privately or publicly) a perceived incompatibility" (Ibid.: 226-8).

Could we use this primitive notion of incompatibility to characterize our notion of material opposition? Not without substantial disambiguation, we think. As we have already mentioned, the notion of incompatibility becomes ambiguous in the context of assessing the virtues of dialetheism. One must clearly distinguish the incompatibility which ensues from existential opposition from that which ensues from mere material opposition[12]. To which notion should we take Sainsbury's primitive incompatibility to correspond?

12 This ambiguity is analogous to one we mentioned when talking about Kit Fine's

Prima facie, given the reference to "perceived incompatibility" we may take it to correspond to our notion of existential opposition. As we said, in cases where two facts are existentially opposed, dialetheias are excluded by default, since the candidate dialetheia necessarily lacks one of its required feet. Indeed, building on Sainsbury's considerations, Berto suggested that dialetheists should construct a notion of negation (NOT) which captures the classical notion of *excluding* incompatibility. It is worth delving into some details of this proposal, since it shall be useful for expressing our view in a concise manner.

Many have noted that, since dialetheists refuse to ascribe to the negation operator its standard excluding role, they would have a hard time expressing in what sense they disagree with their opponents. After all, how is a dialetheist to disagree with Aristotle, for example, if not by claiming that the PNC is *not* universally valid? And how is she to exclude that by making this claim she is not (also) agreeing with Aristotle? Priest's response to this objection on behalf of dialetheism is two-fold.

On the one hand, since the PNC, in its formal guise $\sim(p\&\sim p)$ is an axiom also in most paraconsistent logics (including LP), it is argued that the dialetheist is not committed to the claim that the principle is false but only to the claim that it is *also* false (Priest 1987: 284). This manoeuvre, however, is unlikely to satisfy the critic. Shouldn't the dialetheist at least be capable to disagree with *something*? As Berto put it: "Wouldn't it be nice to find *at least* a formulation [of the PNC] which the dialetheist is forced not to accept?" (Ibid., p. 301).

Here enters Priest's second combatting manoeuvre. This is to claim that the "not" of natural language is ambiguous between a content modifier (which behaves paraconsistently) and the act of denial, i.e. a force/speech act indicator. The advantage of this strategy is that speech act indicators cannot be embedded into the contents of propositions: "a force operator does not interact with the content of what is uttered" (2006: 208; see also Berto, 2008). In short, the idea is that the dialetheist can *reject* the universal validity of the PNC, but this rejection cannot be unambiguously captured by the standard negation operator. It is crucial for the

Fragmentalism. There, the issue was to distinguish the compatibility between facts belonging to a same fragment ("co-obtainment") with the compatibility between different fragments (co-existence). Here, instead, we are in the business of distinguishing material incompatibility from existential incompatibility.

success of Priest's manoeuvre that acceptance and rejection be *not* compatible. And this time it better be the case that this incompatibility be *exclusive*, i.e. that it be made true by the facts of acceptance and rejection being *existentially* opposed. These pragmatic acts are supposed to bear the whole burden of exclusivity. But how could Priest even express *this*?

B) The excluding negation: NOT

Berto proposes an interesting way to get away from this impasse, which we think can be useful to clarify the distinction between existential and material opposition. Drawing from a suggestion originally made by Dunn (1996), Berto recommends that the dialetheist avail herself of an exclusive negation (denoted by NOT), which substantially behaves like a classical negation. Dunn's idea is that "one can define a negation in terms of one primitive relation of incompatibility […] in a metaphysical framework (1996: 9). This idea stems from the notion of ortho-negation introduced by Birkhoff and von Neumann (1936) and Goldblatt (1974) in the context of quantum logic. Berto's proposal is to exploit ortho-negation (indicated by the symbol $\perp$) to build an exclusive negation as follows. Given the ordered pair $<S,\perp>$, where S is a set of properties, the exclusive negation operator is: $NOT\, P_1\, x =_{def} \exists P_2\, (P_2\, x \,\&\, P_1 \perp P_2)$.

Our suggestion is to take the operator NOT as signaling, at the sematic level, the contrast between *True* and *Untrue* (lack of truth); and at the ontological level the contrast between the existence and non-existence of a truth-maker. In other words, if it is the case that $NOT\, P_1\, a$, that is, if $NOT\, P_1\, x =_{def} \exists P_2\, (P_2\, x \,\&\, P_1 \perp P_2)$, then $NOT\, P_2\, a$ is true and $NOT\, P_1\, a$ untrue (not merely false). In this case, the facts that would make $P_1\, a$ or $P_2\, a$ true are in *existential* opposition. However, if we only know that $\sim P_1\, a$, then we do not have enough information to deduce that it is also the case that $NOT\, P_1\, a$, that is, that there doesn't exist a truth-maker for $P_1\, a$. To express the thought that two facts $P_1\, a$ and $P_2\, a$ are in *material* but not existential opposition, the dialetheist will have to supply the further information that they are NOT (mind the capital letters!) in existential opposition: NOT $(P_1 \perp P_2)$.

It is not clear whether in order to accept this strong form of negation the dialetheist needs to give up the pragmatic/psychological understanding of exclusion (see Berto 2007: 311). On the one hand, one could argue that unlike a force indicator the 'NOT' operator *does* interact with the content of the proposition negated: it must interact in a way that is

different from that of '∼'. On the other hand, this concession threatens to open the way to reformulations of the paradoxes of self-reference against which the dialetheist's weapons would be blunted (see Carrara, Martino 2017). We wish to remain neutral about this issue. For our part, we have introduced the exclusive negation to capture the two sides of the debate in a concise manner, not to suggest that the dialetheist should commit to two possible ways of being false. The dialetheist might want to avoid this conclusion. This depends on whether she concedes that sometimes (when the excluding negation is involved) negative truths are made true by the sheer absence of a false-maker or not. We have seen that there are reasons to resist this concession. One may think of three reasons why two propositions are alethically opposed: (1) because their possible truth-makers are materially opposed, (2) because they are existentially opposed, or (3) because one of the propositions (the negative one) does not need a truth-maker to be true. What we are saying here is that accepting to use the excluding negation does not *per se* force the dialetheist to choose between existential exclusion (options 2) and the tractarian alternative (option 3) as its proper ontological underpinning. Bearing this in mind, let us apply these notions.

C) Using exclusion to formulate the PNC

Using the operator NOT, Berto (Ibid.: 315) moves on to express the PNC in terms of it:

[Exclusive-PNC] For any object, it is impossible that the same characteristic belong and NOT belong to it at the same time.

The view that we have argued is most inhospitable to dialetheism, i.e. that all negative truths are made true by the sheer absence of a truth-maker, could be characterised as:

[The tractarian view of negation] Necessarily, for all proposition p, *not* p if and only if *NOT* p.

We have argued that tractarian views make dialetheias impossible. The reason is that they make it impossible that false-makers co-obtain with truth-makers: they impose falseness to be equivalent to absence of truth. The tractarian theorist will then take the exclusion version of the

PNC as equivalent to the standard version, and will agree with the claim that abandoning it would amount to abandoning the Principle of Ontological Determinacy (POD). As a consequence, we recommended that dialetheists adopt an *opposition view* of negative truths. This can be characterised as the negation of the tractarian view. It is based on the recognition that some necessities – and therefore some contradictions – are not truth-functional necessities (contradictions). Parts of the world which determinately exist (they do NOT *existentially* oppose each other) may nonetheless be *alethically* opposed. This relation is what we have called: *material opposition*. As we have seen, opposition views come in two varieties, depending on whether the co-obtaining opposing facts are positive (as in Fine's Fragmentalism) or negative (as in Priest's Hegelian account of motion if one adopts the Polarity View of negative truths).

Should the dialetheist reject these exclusion principles? Arguably not. First, note that Exclusive-PNC is weaker than plain PNC, for it excludes less things: precisely the simultaneous co-existence of facts in existential opposition. We have seen that the dialetheist should better reject that *these* contradictions are ever possible. She should therefore accept this formulation of the principle, lest she wants to refuse to use or conceive the exclusive negations *tout court*. As noted by Berto, however, the option to eschew this stronger notion of exclusion altogether is not an advisable manoeuvre for the dialetheist: "If the dialetheist refuses to subscribe to the characterization of NOT by the intuitive notion of exclusion, she actually seems to end up as unable to express the exclusion of any position (is she trying to exclude exclusion?)" (2007: 316) The dialetheist is then well advised to concede this minor victory. As Grimm (2004: 68) claimed, commenting on a negation operator very similar to Berto's NOT:

> One option for the dialetheist is to concede a minor battle and hold out for victory in a larger way. The victory of the [PNC] applies only to a particular form of the [PNC] phrased in terms of that sense of contradiction [that expressed by NOT]. Any defeat for dialetheism is therefore a minor defeat.

D) What is the disagreement about?

Granted this, what then *should* the dialetheist reject? We think plausible that dialetheists should concentrate their limited use of the exclusive negation to *exclude* that the tractarian picture of facts is correct. Something that can be done in many ways. These two are particularly interest-

ing. She can either exclude the formal characterization of the tractarian picture itself: 'It is NOT the case that for all proposition p, *not* p if and only if *NOT* p'; or, equivalently, she can exclude that violations of the PNC be impossible:

[STRONG-PNC] For any object, it is NOT possible that the same characteristic belong and not belong to it at the same time.

Surely this *is* a principle that the dialetheist should want to reject. Once again, the elenchtic defender of the PNC, given her commitment to a tractarian worldview, will find that there is no difference in content between this and the standard formulation. But the formulation is interesting because it highlights the extent of the dialetheist's disagreement. It is also interesting because it expresses neatly the fact that in a tractarian world, which makes this principle true by default, there is no logical space for dialetheias. Moreover, STRONG-PNC encapsulates in one breath all the three classical laws of thought: PNC, PI and the Excluded Middle. This is just what scholars have found to be the case of Aristotle's formulations of PNC (see Cavini, 2007-8: §2). This indirectly vindicates the correctness of our characterisation.

E) Are existential diealetheias banished by default?

The dialetheist's rejection of STRONG-PNC simply signals the possibility of true contradictions, but it doesn't tell us which propositions *could* actually be made true. All? Could the world be such as to make *all* propositions true (trivialism)? It should be clear that we are not asking whether there are reasons for thinking that trivialism is true. There probably aren't. (See Bueno, 2007 for an opinion to the contrary). We are asking if rejecting the strict tractarian diet doesn't commit the dialetheist to a total liberalism about the possibility of dialetheias. To illustrate the problem, consider the case of existential contradictions, e.g. that there are and there aren't any Arctic penguins. Could *this* be a dialetheia? As with any other contradiction this one could be made true only by two facts. In this case these will be a positive fact (plausibly the penguins themselves) and a negative existential fact, i.e. a fact whose existence guarantees that there are no Arctic penguins. Moreover, these two facts must be able to coexist side by side in order to make the dialetheia true: they must be in alethic but not in existential opposition. Now, this is surely repugnant. In what sense

could the negative existential fact be *that* particular fact it is (an anti-penguin fact) if it exists next to the Arctic penguins, i.e. next to the very things that it should guarantee do not exist? It seems that the dialetheist friend of trumakers will have to live without existential dialetheias.

However, there are also reasons for thinking the opposite. Suppose that there was only one red rose left on earth, which happens to be at the same time also yellow, i.e. it is red and not red. And suppose we were to claim that there is a red rose. Now, this would be made true by the only rose that exists, since it is red. But it would also be made false, because the rose is also not red: the red rose exists and does not exist. Generalizing, for any predicate involved in a dialetheia, there are objects that fall and at the same time do not fall within its extension. It seems that if dialetheias are possible at all then *existential* dialetheias must be possible too. This is puzzling.

We cannot say *of* an object that *it* exists and does not exist, but we can say *that* an object that satisfies a given description exists and does not exist. However, this is only an apparent paradox. As Ayer once said in criticizing the view that existence is a property: "when we ascribe an attribute to a thing, we covertly assert that it exists: so that if existence were itself an attribute, it would follow that all positive existential propositions were tautologies, and all negative existential propositions self-contradictory; and this is not the case" (1936: 26). If the quantificational understanding of existential propositions is correct, we never say *of* a thing that it exists, but always that there is something which satisfies a given description. Existential dialetheias then do not affirm *of* an entity that *it* exists and does not exist, but that there is an entity that satisfies and does not satisfy the description. The truth-maker of the proposition that there are elephants in Africa would not be the elephants themselves, but the fact that certain entities satisfy the description of an elephant. Analogously, the truth-maker of the proposition that there are no Arctic penguins is the fact that entities there don't satisfy the relevant description. If something were to determinately satisfy and not satisfy the description, it would be true to say that Arctic penguins exist and not exist.

Notice that what needs to exist in order for it to be true that there are Arctic penguins is a (positive) fact to the effect that certain entities have the relevant property; and what needs to exist in order for the proposition to be false, is not the sheer absence of those very same entities, but the existence of a (negative) fact to the effect that the inhabitant of the Arctic *do not* have this property. In short, existential di-

aletheias are not forbidden in a non tractarian world. Again, what is forbidden is that some existential claim be true and simultaneously fail to be true. This would require that the *same* fact simultaneously exist and fail to exist.

Finally, we have said that Priest manifested Meinongian sympathies. Now, in a Meinongian world existence *is* a property. Does this jeopardise our response? No. In a Meinongian world the quantificational conception applies not to standard existential claims, but to everything that is. Thus this view escapes from Ayer's objection: it is not tautological to say that something exists, because not all that is necessarily exists. Once again, the only kind of dialetheia that is banished by default is one to the effect that something simultaneously is and fails to be.

F) The real achievement of elenchtic arguments

At the beginning of this paper we discussed at length the complicated relationship between the PNC and the Principle of Identity (PI). In criticizing Aristotle, we have seen, Łukasiewicz put forward a simple and sharp argument to show that the two principles are neither synonymous nor equivalent:

> The principle of identity affirms that if [an object] K has b, then it has b, and if at the same time it does not have b, then it does not have b. From these propositions one cannot deduce that K cannot simultaneously have b and not have b.

Indeed, one cannot. And from this simple formal observation alone, perhaps, one could glimpse the fatal rock over which the Wittgensteinian project stumbled. If one adopts a wittgensteinian stance, then one is going to interpret the principle of identity thus:

[Exclusive Principle of Identity] If an object K has b, then it has b, and if it does NOT have b, then it does NOT have b.

Now, the standard PNC does not follow from this principle (without assuming the equivalence of 'NOT' and 'not'). What does follow, though, is the Exclusive PNC, which affirms that K cannot simultaneously have and NOT have b. If one assumes the tractarian view of negative truths, a proposition can be false *only* if it fails to be true, and it can

fail to be true *only* if fails to have a truth-maker. This makes it impossible for it to be *also* true, for reasons that should be familiar by now.

As it happened for the exclusive version of PNC, also in this case the dialetheist should accept this version of the principle. At the level of the constitution of reality by the facts, this principle affirms that if reality contains a fact, then it does contain that fact: it does not also fail to contain that same fact. *Vice versa*, if reality fails to contain a fact, then it does not also contain it. We have already seen that the dialetheist should commit at least to *this* version of the Principle of Ontic Determinacy. On this, we argue, everybody should agree. And this is, in our view, the proper achievement of the elenchtic arguments that we have mentioned. However, the ambition of elenchtic arguments is to achieve more than this: they aim and fail at showing that PNC, and not only STRONG-PNC is universally valid.

8. Conclusions

The question we asked in this paper was: what must the world be like for the PNC to be false? The classical answer to this question is that it must be radically indeterminate. According to these views, the dialetheist would be committed to deny the POD. It comes as no surprise, then, that these authors are persuaded by those transcendental arguments that purport to show the unassailability of PNC by showing the unassailability of the POD.

We agree with these authors that if the POD were to fail, the PNC would fail too, and that if the PNC were to fail for *this* reason, then rational thinking or even the mere possibility to meaningfully talk about the world would be jeopardised. However, we disagree that this is the *only* way in which the PNC might fail. We have argued that a much more promising ontology for dialetheism – one which appears to have escaped these authors – is one according to which the world is *overdetermined* by containing mutually incoherent facts. In our terminology, these facts are in material opposition but not in existential opposition: they do determinately coexist. Material oppositions can obtain either between positive facts (as is the case in Fine's Fragmentalism), or between a positive and a negative fact (as in Priest's account of motion if one adopts his polarity view of negative facts).

In a nutshell, we have argued that Dialetheism lives and dies with the prospects of a positive account of negative truths.

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