



Università  
Ca' Foscari  
Venezia

**Scuola Dottorale di Ateneo  
Graduate School**

**Dottorato di ricerca  
In Filosofia  
Ciclo XXVII  
Anno di discussione 2015**

***The metaphysics of the empty world***

**SETTORE SCIENTIFICO DISCIPLINARE DI AFFERENZA: M-FIL/01  
Tesi di Dottorato di Marco Simionato, matricola 986552**

**Coordinatore del Dottorato**

**Prof. Carlo Natali**

**Tutore del Dottorando**

**Prof. Luigi Vero Tarca**

*A Silvia,  
che rende il mio mondo non-vuoto*

## CONTENTS

<b>0. Preface</b>	06
0.1. Overview	06
0.2. Lexical indications	08
<i>Acknowledgements</i>	10
<b>1. An empty world is better than nothing</b>	11
1.1. Breaking Carnap's ban: Priest, Voltolini, Oliver and Smiley's accounts for the phrase 'nothingness'	11
1.1.1. Carnap on Heidegger's use of 'nothing'	11
1.1.2. Priest: nothing and <b>nothing</b>	14
1.1.3. Voltolini and the vindication of Heidegger's nothingness	14
1.1.4. Oliver and Smiley: nothing and zilch	17
1.1.5. Remarks	19
1.2. Nothing and empty set	22
1.2.1. The (metaphysical) question of empty set: a brief overview	22
1.2.2. Nothing and the empty set according to Dubois	24
1.2.3. Priest: <b>nothing</b> and the empty fusion	25
1.2.4. Remarks	26
1.3. Nothing and the empty world	27
1.3.1. Possible worlds: a brief overview	27
1.3.2. Empty world and metaphysical nihilism	32
1.4. Why an empty world is better than nothing	36

<b>2. Metaphysical nihilism and anti-nihilism</b>	45
2.1. The subtraction argument by Baldwin and its alternative versions	45
2.1.1 The subtraction argument by Baldwin	45
2.1.2. The subtraction argument* by Rodriguez-Pereyra	47
2.1.3. Paseau’s objection on premise (A3*)	49
2.1.4. Efir-Stoneham’s version of the subtraction argument	50
2.2. Against metaphysical nihilism	51
2.2.1. The argument against strong metaphysical nihilism by Lowe	51
2.2.2. The argument against weak metaphysical nihilism by Lowe	53
2.2.3. Van Inwagen’s arguments against metaphysical nihilism	54
2.2.4. Heil and McDaniel against the empty possible world	57
2.2.5. Fuhrmann against the subtraction argument and Nef’s argument against the empty world	60
2.2.6. Goldschmidt on the subtraction argument	61
2.2.7. Cameron against Efir-Stoneham’s subtraction argument	62
2.2.8. Remarks	64
<b>3. Two arguments for metaphysical nihilism</b>	71
3.1. The “meontological argument” for metaphysical nihilism	71
3.1.1. Premises and development	71
3.1.2. Absolutely unrestricted quantification and the all-inclusive domain of discourse.	73
3.1.3. Objections to generality absolutism	75
3.1.4. Replies to objections	78
3.1.5. The “idealistic” strategy	83
3.1.6. <i>Omnis determinatio est negatio</i>	85
3.1.7. Objections against meontological argument	89

3.2. The “elenctic argument” for metaphysical nihilism	94
3.2.1. Premises and development	94
3.2.2. Any object is not contradictory	97
3.2.3. Objections against the elenctic argument and replies	100
<b>4. Empty world, metaphysical nihilism and...</b>	<b>103</b>
4.1. ...the accounts of possible worlds	103
4.2. ... thruthmakers	114
4.2.1 The puzzle of negative truths	114
4.2.2. The puzzle of negative truth for metaphysical nihilism	116
4.3. Appendix: From creation out of nothing to original nothingness	123
<b>5. Is the empty world useful for metaphysical anti-nihilist? Two relevant cases across analytic and continental metaphysics</b>	<b>127</b>
5.1. The opening of Hegel’s Logic and the empty world: from being to nothing without becoming	127
5.1.1. Being, nothing, becoming and determinate being in Hegel’s Science of Logic	127
5.1.2. The empty world at work: approaching Hegel’s opening of <i>Logic</i> by means of possible worlds	131
5.1.3. General objections	137
5.2. The puzzle of nothingness in Emanuele Severino’s ontology and the empty world	142
5.2.1. The <i>aporia</i> of nothingness and its solution according to Severino	142
5.2.2. Objections to Severino’s solution and replies	148
5.2.3. Another way for spelling out the aporia of nothingness	151
5.2.4. The empty world at work: approaching Severino’s question on nothingness by means of possible worlds	155
<b>Bibliography</b>	<b>162</b>

## Preface

I found out that it's necessary,  
absolutely necessary, to believe in nothing

(Shunryu Suzuki Roshi, *Zen Mind, Beginner's Mind*)

### I. Overview

This work deals with the question of nothing(ness)<sup>1</sup> and metaphysical nihilism in (contemporary) analytic philosophy<sup>2</sup>. There are two ways according to which the phrase 'nothing' is spelled out in contemporary philosophical debate, in addition to the usual Carnap's way of reducing it to a quantifier phrase (discrediting any attempt to treat 'nothing' as a noun phrase). The first is based on the notion of the empty possible world and it is strictly linked to metaphysical nihilism, namely the thesis that there might be nothing: by means of possible worlds, a sentence like

(1) There might be nothing

is in fact logically equivalent to

(2) There is an empty possible world, i.e. a world with no objects in it<sup>3</sup>

The second way is given by some non-orthodox strategies that offer original devices in order to account for the phrase 'nothing' when it is not reduced to a quantifier phrase. Of course, such a way presupposes that there are some cases according to which the traditional quantifier-phrase account of nothing is flawed. At this end, I think that

---

<sup>1</sup> See section II of this introduction for my use of 'nothing', 'nothing(ness)' and 'nothingness'.

<sup>2</sup> However the last chapter will deal with Hegel and Severino's conceptions of nothingness, in the light of the previous chapters. They cannot be considered analytic philosophers (at least *stricto sensu*).

<sup>3</sup> See section 1.3.

Priest's arguments are in particular very convincing, since they show that a non-quantificational account of nothing is indispensable in order to clarify our sentences (e.g. sentences about creation out of nothing, different cosmologies, and so on)<sup>4</sup>.

The above-mentioned ways for spelling out the phrase 'nothing' are not usually related, maybe because the second way is very new<sup>5</sup>. Besides there is also a certain aversion to those conceptions that aim to account for nothing without reducing it to a quantifier phrase. Instead one of the aim of the present work (see chapter 1 in particular) is to show the fundamental link between the notion of the empty world – and consequently metaphysical nihilism – and *any* account of nothing(ness) that does not appeal to Carnap's strategy of treating the phrase 'nothing' either as a quantifier phrase, or as a nonsense.

At least from Parmenides, 'nothing' was also used as a noun phrase. Plato notoriously tried to solve Parmenidean puzzle of nothingness, distinguishing 'nothing' as absolute non-being and 'nothing' as different-being. After that, Plato's strategy has been assumed as the best way in order to disentangle the phrase 'nothing(ness)'. Yet Plato probably didn't consider his own strategy a solution; rather he considered it a way of escape from the puzzling question about nothingness that exactly was implicitly maintained<sup>6</sup>.

Within analytic philosophy, Graham Priest has the main merit for the identification of the aporia of nothing(ness) (see Priest 2000, 2002, 2014a, 2014b), by means of his reading of Heidegger's question about nothingness. We will see (chapter 1) that my approach will not follow Priest's one, although the starting point will be the same, namely the following assumptions:

- (i) There are sentences where 'nothing' cannot be spelled out by means of a quantifier phrase;
- (ii) Those occurrences of 'nothing' refer to the absence of (unrestrictedly) everything

Therefore, what we need to account for is the phrase 'absence of all objects'. Chapter 1 deals exactly with that question.

<sup>4</sup> See chapter 1. However, I will not endorse Priest's account of nothingness. I will just endorse his preparatory arguments that justify the longing of an account of nothingness.

<sup>5</sup> Indeed, within the analytic tradition, the works that constitute such a way have appeared in the last ten years – more or less.

<sup>6</sup> See Severino (1958), chapter IV.

After establishing an account of nothingness, chapters 2 and 3 of the dissertation deal with the arguments for metaphysical nihilism. Chapter 2 recaps the so-called “subtraction argument” and the criticism against it. Chapter 3 proposes two original arguments for metaphysical nihilism, appealing in particular to absolutely unrestricted quantification.

In chapter 4, I spell out which account(s) of possible worlds is/are compatible with the notion of the absolutely empty world and I will deal with the question of truthmakers for metaphysical nihilism.

Finally, chapter 5 shows two relevant uses of the notion of the empty world for respectively reading Hegel’s opening of *Logic* and Emanuele Severino’s (1958, 2013) account of nothingness (and its related aporia). Since I will consider both anti-nihilist philosophers (namely philosophers that rule out the possibility of nothingness), chapter 5 somehow proves that the notion of the empty world is useful apart from the truth of metaphysical nihilism (indeed we should discern between the use of the empty world as account of nothingness from the thesis according to which the empty possible world exists).

Section 5.2., in particular, shows the close connection between my way of accounting for nothing(ness) and Emanuele Severino’s (1958) account of nothing(ness).

## II. Lexical indications

In order to avoid (as much as possible) any misunderstanding about the use of ‘nothing’ and ‘nothingness’ in the present work, I will mainly employ the following devices:

- (i) I will use the quotation marks (‘...’) for accounting for the use/mention distinction (therefore: nothing/’nothing’ and nothingness/’nothingness’);
- (ii) I will use the phrase ‘non-quantificational account of nothing’ for referring to any account of nothing that is employed in order to explain the phrase ‘nothing’ when the latter cannot be reduced to a quantifier phrase;



(iii) I will use ‘nothing’ for referring to the quantifier phrase (no-thing) and I will use ‘nothingness’ for referring to any non-quantificational account of nothing (therefore: nothingness);

(iv) I will use ‘nothing(ness)’ when *I do not want to disentangle* the phrase ‘nothing’ (distinguishing ‘nothing’ as quantifier phrase from ‘nothing’ as non-quantificational phrase).

(v) Rules (i)-(iv) will not be respected when I present an account of nothingness that employs its own particular device (e.g. the boldface type in Priest’s (2014a) account). However, when I discuss those accounts, sometimes I will use also my own device. The context of the discussion should disentangle any misunderstanding related to those cases.

(vi) I will sometimes use the phrases ‘*nihil absolutum*’ and ‘*nihil negativum*’ for referring respectively to the absence of all objects and to any contradictory object.

## Acknowledgements

Many people have helped me during the development of this work. I am very thankful to them, in particular to: Prof. Luigi Vero Tarca, Matteo Plebani, Prof. Francesco Berto and Prof. Emanuele Severino.

I presented some parts of the dissertation (related to chapters 1; 3; 5) in some workshops and conferences (in 2013-2014): their participants and speakers gave me very important tips for improving my work. Thanks are due in particular to the members of the following conferences: *4<sup>th</sup> Salzburg conference for young analytic philosophy* (University of Salzburg); *Conference on modal metaphysics “Issues on the (im)possible”* (Institute of philosophy-Slovak Academy of sciences); *International workshop on Hegel’s Science of Logic* (University of Padua); *Conference on analytic metaphysics* (Dutch-Flemish Association for Analytic Philosophy – University of Groningen); *11<sup>th</sup> national conference of the Italian Society for Analytic Philosophy* (SIFA – University of L’Aquila).

Finally, I would like to thank Ca’ Foscari University of Venice (Department of Philosophy and Cultural Heritage), Latvia University of Riga (Faculty of History and Philosophy) and Istituto Italiano per gli Studi Storici of Naples, where I wrote this book.

## Chapter 1

### AN EMPTY WORLD IS BETTER THAN NOTHING

Chapter 1 summarizes the main topics about the notion of nothing that occur in analytic philosophy: the topic of the distinction between ‘nothing’ as negative quantifier and ‘nothing(ness)’ as noun (that could denote an object); the topic of the relation between nothing(ness) and the empty set and the puzzles related to the empty set; the topic of the relation between nothing(ness) and the empty (possible) world. Finally this chapter offers an account of nothing(ness) based on the notion of the possible empty world, arguing that it can avoid some disadvantages that undermine the other accounts (mainly the accounts by Graham Priest, Alex Oliver and Timothy Smiley, Alberto Voltolini). Besides the last section aims to show that any non-quantificational account of the phrase ‘nothing’ (i.e. nothingness) should appeal to the notion of empty world; therefore the empty world will turn out to be the best way to account for nothingness.<sup>7</sup>

Keywords: nothing; empty set; possible world; empty world; contradictory object; empty term.

#### 1.1. Breaking Carnap’s ban: Priest, Voltolini, Oliver-Smiley

##### 1.1.1. Carnap against Heidegger’s use of ‘nothing’

The refusal to use the phrase ‘nothing’ as a noun phrase has been one of the most exemplar attitude of the so-called “analytic” philosophy and one of the mark of distinction between it and the so-called “continental” philosophy<sup>8</sup>. However, the interest of analytic philosophy for metaphysics has brought to a revival of the question of nothing, breaking – in some cases – Carnap’s ban of using ‘nothing’ as a non-quantificational phrase.

---

<sup>7</sup> The reference to Heidegger’s thought about nothingness that sometimes occurs in this chapter does not entail any worthy interpretation of Heidegger’s philosophy by means of the following sections. Indeed Heidegger’s philosophy will be simplified for the sake of the arguments. Anyway, it is not necessarily true that a simplification is inappropriate or theoretically wrong.

<sup>8</sup> I use the analytic/continental distinction, although it is more and more clear that such a distinction is not well-founded. Nevertheless I think that it can be particularly useful to the question of nothing.

According to Carnap (1932), the construction of sentences where ‘nothing’ occurs as a philosophical (metaphysical-ontological) topic

is simply based on the mistake of employing the word "nothing" as a noun, because it is customary in ordinary language to use it in this form in order to construct a negative existential statement [...] In a correct language, on the other hand, it is not a particular name, but a certain logical form of the sentence that serves this purpose (p. 70)

It is well known that in this quotation Carnap in particular refers to Heidegger’s famous passage from *What is metaphysics?*

What is to be investigated is being only and—nothing else; being alone and further—*nothing*; solely being, and beyond being— *nothing*. *What about this Nothing?* . . . *Does the Nothing exist only because the Not, i.e. the Negation, exists?* Or is it the other way around? *Does Negation and the Not exist only because the Nothing exists?* . . . We assert: *the Nothing is prior to the Not and the Negation.* . . . Where do we seek the Nothing? How do we find the Nothing. . . . We know the Nothing. . . . *Anxiety reveals the Nothing.* . . . That for which and because of which we were anxious, was 'really'—nothing. Indeed: the Nothing itself—as such—was present. . . . *What about this Nothing?—The Nothing itself nothings* (Selected passages from Heidegger’s work, quoted by Carnap 1932, p. 69).

Therefore, according to Carnap a sentence like

(1) The Nothing is outside

should be paraphrased as follows:

(1\*) There is nothing (does not exist anything) which is outside

i.e.

(1\*\*)  $\neg(\exists x). Ou(x)$  <sup>9</sup>

---

<sup>9</sup> See Carnap (1932), p. 70.

So, Carnap admits the use of ‘nothing’ just as a (negative) quantifier phrase<sup>10</sup>, whereas Heidegger seems to use it (also) as a noun phrase. Besides, the author of *What is metaphysics?* – as Carnap notes – cannot be defended by stating that he is using that word by introducing a special meaning:

the first sentence of the quotation at the beginning of this section proves that this interpretation is not possible. The combination of "only" and "nothing else" shows unmistakably that the word "nothing" here has the usual meaning of a logical particle that serves for the formulation of a negative existential statement (Carnap 1932, p.71)

Indeed, “being only and *nothing* else” would prove that Heidegger is thinking of the negation of something, since “what is investigated” is included in the domain of (all) entities and beyond it *there are no entities at all*: ‘nothing’ is (at least) implicitly used a negative quantifier.

There is an additional attack by Carnap: even if we admitted ‘nothing’ as a noun phrase that denotes an object, we could not affirm, as Heidegger seems to do, that Nothing exists without falling into a blatant contradiction, because “the existence of this entity would be denied in its very definition” (1932, p.71), since Heidegger should not assign the property of *being* to the alleged object Nothing, that is an object beyond the domain of all entities, as the German philosopher seems to affirm when he considers it exactly beyond being<sup>11</sup>.

Finally Carnap criticizes the use of the verb ‘to nothing’ because it is completely invented by Heidegger without any link to a meaningful word.

Recently Priest (2002, 2014a, 2014b), Voltolini (2012) and Oliver-Smiley (2013) have tried to overcome the critic of Carnap in order to reconsider more deeply Heidegger’s thesis, adopting very interesting strategies that I am going to show in the following paragraphs.

---

<sup>10</sup> Similarly, ‘not’ should be used just as logical connective and it cannot be used as a noun.

<sup>11</sup> Maybe we could discern existing objects from non-existent objects, but probably that is not what Heidegger has in mind, since he is worried about the fact that Nothing is not an object at all, although we somehow refer to it. At this end, see Priest (2014b).

### 1.1.2. Priest: nothing and **nothing**

Priest (2002) argues that ‘nothing’ can be used not only as a quantifier, but also as a substantive:

‘Nothing’ can be used as a substantive. If this is not clear, merely ponder the sentence ‘Heidegger and Hegel both talked about nothing, but they made different claims about it’. ‘Nothing’ cannot be a quantifier here. Or consider the sentence:

(\*) God brought the universe into being out of nothing.

This means that God arranged for nothingness to give way to the universe. In (\*) ‘nothing’ cannot be parsed as a quantifier. If we do so, we obtain: For no x did God bring the universe into existence out of x. And whilst no doubt this is true if God brought the universe into existence out of nothing, it is equally true if the universe has existed for all time: if it was not brought into existence at a time, it was not brought into existence *out of* anything. And the eternal existence of the universe is, in part, what (\*) is denying (p. 241).

So, what does the phrase ‘nothing’ mean when it cannot be reduced to a quantifier phrase like in (1\*\*)? Priest (2002, 2014a, 2014b) offers the follow reply: **nothing**<sup>12</sup> is the absence of all things (absolutely nothing). Therefore it is also essentially related to a quantifier, since it is *no entity, no object*. But it cannot be considered *only* a quantifier: *it is an object* that is the absence of all objects. So – Priest concludes – **nothing** is a contradictory object, “it both is and is not an object; it both is and is not something” (2014a, p. 7).

Then Priest (2014a, 2014b) links this topic to non-existent objects and mereology in order to offer an account of **nothing**, as I will recall in section 2.1.3

### 1.1.3. Voltolini: the vindication of Heidegger’s nothing

According to Voltolini (2012), the sentence

---

<sup>12</sup> Following Priest (2014a, 2014b)’s device, I write ‘nothing’ in boldface (**nothing**) when I use ‘nothing’ in order to refer to point out its difference from ‘nothing’ as quantifier phrase.

(2) Nothing nothings [Das Nicht nichtet]

può essere letta in un modo logicamente corretto; una volta sia opportunamente compreso, non c'è dunque alcun problema con la sua forma logica. In secondo luogo, sosterrò che il predicato “nulleggia” è pienamente significativa (2012, p. 100).

I am going to focus on the main points of Voltolini's article. First, Voltolini's strategy is represented by the treatment of 'nothing' as a definite description ('il nulla', 'the nothing') that should be eliminated by Russellian strategy<sup>13</sup>. To this end, Voltolini introduces the property of *being a thing such that there is no thing that is identical to it*, i.e.  $\lambda x ((\neg\exists y)(y = x))$  (2012, p. 101); consequently 'nothing' can be considered the thing that has this property, i.e. the thing that is identical to no thing (the thing such that there exists no thing that is identical to it)

By means of Russellian elimination of definite descriptions, (2) can be paraphrased as:

$$(2^*) (\exists x)((\neg\exists y)(y = x) \wedge (\forall z)((\neg\exists y)(y = z) \rightarrow (z = x)) \wedge Nx)$$

in cui il ruolo di quantificazione svolto da 'nulla' è dato dal *secondo* quantificatore esistenziale - " $\exists y$ " - che ricorre nell'enunciato formalizzato, il quantificatore contenuto dal predicato mediante il quale (*inter alia*) la descrizione definita “il nulla” è “eliminata via” (2012, p. 102)

---

<sup>13</sup> Russell's strategy is well known. Consider for example a sentence like “the present King of France is bald”. According to Russell, it should be spelled out in the following way:

- (R1) At least one person is presently King of France;  
And  
(R2) At most one person is presently King of France  
And  
(R3) Whoever is presently King of France is bald.

In the case of “(The) nothing nothings”, the paraphrase is the following:

- (V1) At least one thing is such that there exists no entity that is identical to it  
And  
(V2) At most one thing is such that there exists no entity that is identical to it  
And  
(V3) Whatever is such a thing, it nothings

Secondly, Voltolini argues that the above mentioned definite description could have a Russellian denotation only if such a denotation was an impossible object (therefore only in an ontology that allows *impossibilia*). According to Voltolini, the thing that is identical to no thing is an impossible entity because only an impossible object could instantiate the property  $\lambda x ((\neg\exists y)(y = x))$ . Indeed, each object is self-identical, but this object cannot be identical to itself because it cannot be identical to anything. However, as an entity, it is at least identical to itself. Therefore

quell'entità sarà tale che al tempo stesso è identica a qualcosa, cioè se stessa, e non è identica a qualcosa, perché è identica a nulla (2012, pp. 104-105).

Appealing to impossible objects induces Voltolini to review his treatment of 'nothing' in order to reply to the objection according to which 'nothing' could not have a denotation, since there is no object that could instantiate the property  $\lambda x ((\neg\exists y)(y = x))$ . At this end, he uses a sort of Meinongian strategy (2012, p. 105 ff). Let us consider, for example, an impossible object as a square-non-square. It is a thing such that *it is a square and it is a non-square*, rather than a thing such that it is a square and it is not a square. Following this strategy, 'nothing' as a definite description should be considered *a thing that is identical to something and it is not-(identical to something)*, rather than a thing according to which there is no thing that is identical to it and there is something that is identical to it. Since the property of *being not-(identical to something)* is the property of *being not identical to each thing*, i.e.  $\lambda x ((\forall y)(y \neq x))$ , we should read (2) as follows:

$$(2^{**}) (\exists x)((\forall y)(y \neq x) \wedge (\forall z)((\forall y)(y \neq z) \Rightarrow (z = x)) \wedge Nx)$$

Since this thing is at the same time non identical to every thing, but it is identical to something, it is an impossible object...and this thing 'nothings' (*nichtet*)! According to Voltolini (2012, p.110), a good way to read the predicate 'nichtet' is the following: 'x is such that for all y, y is not identical to it'; therefore:

$$(2^{***}) (\exists x)((\forall y)(y \neq x) \wedge (\forall z)((\forall y)(y \neq z) \Rightarrow (z = x)) \wedge (\forall y)(y \neq x))$$



So, the controversial sentence “Nothing nothings” could be simply interpreted in this way: the thing such that every thing is not identical to it (i.e. nothing) is such that each thing is not identical to it (i.e. it *nothings*). As Voltolini notes, this reading of Heidegger’s sentence seems very trivial; however he also proposes to consider it in a more interesting way:

In tale lettura l’enunciato verrà a dire che la sola cosa tale che tutto è non identico ad essa è altresì tale che *ogni possibile* è non identico a essa. [...] nella misura in cui la cosa che è non identica a tutto non è una cosa *possibile*, evapora dall’unica realtà che conta – il sottodominio dei *possibilia* – in altri termini, si annulla (2012, p. 111).

Anyway, the aim of this chapter is not to provide a (non-trivial) interpretation of Heidegger’s philosophy; rather it is just summarizing the accounts of nothing(ness) in contemporary analytic philosophy.

#### 1.1.4. Oliver and Smiley: nothing and Zilch

Oliver and Smiley (2013) propose to distinguish (the use of) ‘nothing’ as a quantifier from (the use of) ‘nothing’ as an empty term. To this end, they introduce the empty term ‘zilch’, with its symbol  $O$ , a term such that

[it] is empty as a matter of logical necessity. Any logically unsatisfiable condition will do to define it via description. [...] With an eye on formalization, we opt for ‘the non self-identical thing’,  $\text{!}x x \neq x$  (2013, p. 602).

Since everything is self-identical, ‘zilch’ does not denote anything, neither an impossible object. Through this strategy, one can avoid, for example, the following misunderstood. Suppose I state in a particular context:

(3) Today I have studied nothing; since nothing is better than studying our own stuff day by day, today I have done more than my own duty.

Of course, (3) is a joking equivocation. But we can clarify it by means of ‘zilch’ in order to avoid the absurd conclusion:

(3\*) Today I have studied zilch; since nothing is better than studying our own stuff day by day, today I have done more than my own duty.

In (3\*) the conclusion cannot be derived. Indeed, today I have studied zilch, i.e. the non self-identical thing; therefore I have not studied more than my own stuff because the object of my study neither exists, nor subsists. And, of course, in the sentence <nothing is better than studying our own stuff day by day> nothing is a quantifier phrase: there is no thing that is better than studying our own stuff day by day.

Another typical joking misunderstood:

(4) Nothing is bigger than the Universe; my hand is bigger than nothing; then my hand is bigger than Universe

It can be paraphrased as:

(4\*) Nothing is bigger than the Universe; my hand is bigger than zilch; then my hand is bigger than Universe.

where the conclusion cannot be derived, because the first occurrence of nothing is a quantifier phrase, whereas the second occurrence of ‘nothing’ as it appears in (4) has been replaced by ‘zilch’.

Since the authors consider ‘zilch’ an empty term, they also introduce a distinction between strong identity ( $\equiv$ ) and weak identity ( $=$ ) and they define them as follows:

Strong and weak identity are interdefinable:  $a \equiv b =_{df} a = b$  or neither  $a$  nor  $b$  exist; working the other way around,  $a = b =_{df} a \equiv b$  and either  $a$  or  $b$  or both exist (2013, pp. 602-603).

The strong identity relation is read as ‘...is not different from...’. Besides, the authors note that

$F(O)$  is certainly not equivalent to  $\neg\exists xF(x)$ . In general, there are not even any one-way implications between them (2013, p. 603)<sup>14</sup>.

According to Oliver-Smiley, the use of ‘zilch’ can show that Heidegger’s sentence <Nothing nothings> is meaningful and logically true. Since Nothing for Heidegger is “neither an object nor more generally an existent” (2013, p. 610) – as zilch exactly is -, they replace ‘Nothing’ with ‘zilch’, arguing that such an operation even respects Heidegger’s aim of considering Nothing as prior to ‘Not’ and ‘Negation’ (as I quoted in the first section). Indeed Oliver-Smiley propose to treat  $O$  as a primitive term and by means of them they define negation as follows:

$$\neg A \stackrel{\text{df}}{=} A \rightarrow O = O$$

By means of this strategy, the authors avoid a possible objection according to which zilch could not be prior to negation, since it is introduced as the *non*-self-identical thing. Their definition of negation, indeed, is not circular because  $O$  is assumed as a “primitive term, stipulated to be empty as a matter of logical necessity” (2013, p. 610).

Finally, they propose to read the predicate ‘...nothings’ simply as ‘...is zilch’; therefore <Nothing nothings> becomes <Zilch is zilch>, i.e.  $O \equiv O$ , so that <das Nicht nichtet> is “far from being a metaphysical pseudo-statement, it is a straightforward logical truth” (2013, p. 611).

At this end, one should note that the self-identity of ‘zilch’ does not contradict the non-self-identity of the non-self-identical thing that ‘zilch’ denotes. The ancient puzzle of nothing can be solved by stating that the empty term that denotes the non-self-identical thing is identical to itself without undermining the non-self-identity of the denoted thing (and I recall that a proposition like <‘zilch’ denotes the non-self-identical thing> simply means that ‘zilch’ does not denote anything, i.e. it is an empty term).

#### 1.1.5. Remarks

In this paragraph I will consider the possible links among the accounts of nothing that I presented before.

---

<sup>14</sup> However they also point out some particular exception. See (2013).

First, both Priest, Voltolini and Oliver-Smiley agree that ‘nothing’ should not be treated just as (negative) quantifier and I think that the arguments they offer for such a thesis are sound, since they all propose good counterexamples to Carnap’s view. Then the very important questions are the following:

(Q1) does ‘nothingness’ denote an object?

(Q2) if ‘nothingness’ denotes an object, is it a contradictory object?

As we have seen, according to Priest and Voltolini, ‘nothingness’ denotes a *contradictory* object, whereas for Oliver-Smiley ‘nothing’ as ‘zilch’ does not denote an object. Priest’s account states that

(P) Nothingness (**nothing**) is the object that is the absence of all objects

therefore it is self-contradictory; Voltolini’s account affirms that

(V) Nothingness is the object that is identical to itself and it is not-(identical to each thing)

therefore it is self-contradictory. However, (P) seems to converge to (V): since the absence of all objects is an object that is non-(identical to each thing) – because it is no thing at all – and since such an object is identical to itself (because it is the absence of all objects and it is not something other), (P)-account of nothingness exactly presents the same contradictory features of (V)-account of nothingness. Instead Oliver-Smiley’s account is not committed to the contradiction between the self-identity of the object nothingness and its non-self-identity, since they predicate the self-identity just to the empty term ‘zilch’, whereas the non-self-identical object is not at all, since it is neither existent, nor subsistent, neither real, nor imaginary, neither concrete, nor abstract, neither possible, nor impossible<sup>15</sup>.

As we have seen, the reply to (Q2) is positive, at least according to the accounts (P) and (V); however I will reconsider such a question in chapter 1.4, after introducing another account of nothingness. In order to reply to (Q1) one could test the different accounts of nothingness for establishing which is better for paraphrasing sentences like

---

<sup>15</sup> See Oliver-Smiley (2013), p. 602.

(\*). Since (P) converges to (V), for the moment I just compare (V) with Oliver-Smiley's account – say

(OS) 'zilch' is an empty term that denotes the non-self-identical thing, i.e. it does not denote anything at all

By means of (V), (\*) becomes:

(\*v) God brought the universe into being out of the object that is identical to itself and it is not-(identical to every thing)

Since the idea of the creation out of nothing(ness) implies that there is absolutely no objects out of which God creates, it seems that this account – as well as Priest's one – fails. Indeed, there would be at least that contradictory object from which God creates, undermining the notion of creation out of *nihil absolutum*. Of course, (P) and (V) both allow us to refer to the absence of everything ((P) in an explicit way, (V) by means of the predicate '...is non-(identical to something)), so that they both offer an account of *nihil absolutum*. But their commitment to a (contradictory) object inevitably invalidates the success of the paraphrase.

By means of (OS), (\*) becomes:

(\*os) God brought the universe into being out of zilch

This paraphrase *prima facie* seems more convincing than the other one because it avoids the commitment to an alleged object out of which God would have created the universe and, by means of the empty term 'zilch', it can refer to the real absence of everything. (Anyway, one should note that the introduction of the non-self-identical thing could exactly bring the some problems of the other account, if Oliver-Smiley admitted such a thing as something on which one can quantify, as (P) and (V) do). But there is another complication: as Priest notes in the quotation I recalled in 1.1.2., it is necessary that there is an object out of which God creates the universe if we want to consider (\*) true, otherwise (\*) would state that God creates out of *no* thing, i.e. something very similar to the sentence that the universe eternally exists. Therefore, from this point of view, (P) and (V) accounts are more advisable than (OS) because they are able to distinguish (\*)

from sentences like “There is no entity out of which God created the universe” that would be a sort of negation of (\*).

Finally, we have obtained a sort of puzzle: if one considers nothingness a (contradictory) object, then one can give an account of sentences as (\*), but through it one loses the notion itself of nothingness as absolute absence of everything, i.e. the notion of being non-(identical to each thing), since that object would be something and would be self-identical. On the other hand, if one considers nothingness an empty term that does not denote any object, one can avoid the loss of the genuine notion of nothingness as absolute absence of everything, but one cannot give an account of (\*) such that it allows us to distinguish (\*) from its negation (e.g. “The universe eternally exists”).

In chapter 1.4 I will propose a strategy for solving that puzzle.

## 1.2. Nothing and the empty set

### 1.2.1 The (metaphysical) question of the empty set: a brief overview

In this paragraph and in the following sections I am going to evaluate if the notion of the empty set can account for the notion of nothingness.

Let us start from the naïve notion of collection such that  $b$  is a collection if  $b = \{x \mid x \in b\}$ . (Potter 2004, p. 31).

We say that a collection  $a$  is empty if  $(\forall x)(x \notin a)$  (2004, p. 31)

Let us define  $\emptyset = \{x \mid x \neq x\}$

Since there is no entity that is non-self-identical,  $\emptyset$  is empty. Besides, this collection is unique because

if  $a$  and  $a'$  are both empty, i.e. if  $(\forall x)(x \notin a)$  and  $(\forall x)(x \notin a')$ , then  $(\forall x)(x \in a \Leftrightarrow x \in a')$ , from which it follows by the extensionality principle that  $a = a'$

16

---

<sup>16</sup> Potter (2004), p.32. The extensionality principle states that if two collections have the same members, then they are the same collection. Therefore, a collection is determined by its elements.

In Zermelo-Fraenkel set theory the existence of the empty set is guaranteed by the axiom of the empty set:

$$\exists x \neg \exists y (y \in x)$$

Although it is clear that the empty set has a technical utility, the existence of the empty set is not uncontroversial from a philosophical-metaphysical point of view. Indeed, there are two difficulties with the empty set. First, if we assume that any set depends for its existence on its members, then an empty set cannot exist, since it has no members at all; secondly, if we try to distinguish the empty set from the individuals, we find out (at least *prima facie*) that the empty set has exactly the same identity condition of any individual, i.e. being memberless.

The first difficulty could be solved in the following way:

Sets might be regarded as, say, *container* of some sort. And the notion of an empty container is not at all troubling (Pollard 1985, p. 355)

Anyway, this answer does not seem very satisfactory: if we assume that a set is an abstract object that existentially depends on its members, then the container-solution does not allow us to admit an empty set easily, because the empty container is troubling when it is not a spatio-temporal object that can be empty or non-empty.

According to the overview by Potter (2004, p. 60), the second puzzle of the empty set can be solved by following two alternative strategies. The first strategy assumes that an individual is not memberless since we can assume that any individual has itself as member. Therefore the empty set would be the only memberless object, since any non-empty set and any individual would have at least one member. But this solution is very controversial, since it assumes the counterintuitive idea that  $x = \{x\}$ :

The principal disadvantage of proceeding in this way [...] is that it is so obviously just a device: there is no ground whatever for thinking that individuals really do belong to themselves (2004, p. 60).

The second strategy “is to say that the empty set is an individual, but one picked at random to fulfil this role” (2004, p.60).

Also this solution appears a technical device, rather than a reply with a metaphysical depth. We will see in the next section a reply by Dubois (2013) that could be considered a metaphysical approach.

### 1.2.2. Nothing and the empty set according to Dubois

Dubois (2013) proposes an account of the empty set that allows us to solve the above-mentioned difficulties of such a set, building it from the notion of nothing. Dubois begins with the naïve image of a set as a container or a box that contains objects (anyway the existential dependence-trouble of the empty set could not be solved only by means of such an imagine. I pointed out in the previous section that the container-approach is not sufficient for solving that problem). In any box there is free space or “void”, as well as in any set there is free space among the elements; similarly a box can contains just empty space, as well as the empty space contains just free space. Dubois calls this “void” or empty free space as the “Nothing” and he symbolizes it by means of  $\Lambda$  in order to distinguish the empty set  $\emptyset$  from what is contained in that set.

Besides Dubois proposes to distinguish  $\Lambda$  from the elements of a set (as well as the free space in a box is different from the objects of that box) in the following way:

“ $x \in y$ ” will express that  $x$  is an “element” of  $y$  only when  $x \neq \Lambda$  (corresponding to the usual way of belonging)

“ $\Lambda \in y$ ” will express that  $\Lambda$  is “present in  $y$ ”: and we use then the word “pre-element” instead of “element” to avoid any confusion (2013, p. 3)

So, the empty set is the set that contains only  $\Lambda$ ; but any set contains  $\Lambda$ , since “a set can contain sets or objects thanks to the free space denoted by  $\Lambda$  (2013, p. 16)”

This is called by Dubois as the function of Nothing by means of which it gives to the set an *internal* condition of possibility. There is also an external condition of possibility



that Nothing provides, since “Lambda plays the role of the physical space, of cut, between sets and allows to have distinct sets” (2013)

Dubois’ account of Nothing as Lambda gives a solution to the puzzles of the empty set that I have recalled in 1.2.1. Indeed, since one can state that any set existentially depends on its elements or on its pre-element, then the empty set existentially depends on its pre-element and this represents a solution for the first puzzle. The second puzzle can be similarly solved by stating that the empty set is different from any individual since it is not defined by the notion of memberless, but it is defined by the notion of including only Lambda.

### 1.2.3. Priest: **nothing** and the empty fusion

In section 1.1.2 I recalled Priest’s notion of **nothing**, i.e. a contradictory object that is the absence of all objects. In order to account for this strange object, Priest use non-existent objects and mereology. That strategy – as I am going to show – is strictly linked also to the empty set.

According to Priest (2014a), there are existent objects and non-existent objects; he assumes that ‘to exist’ means ‘to have the potential to enter into causal interactions’ (2014a, p. 2). Since **nothing** is the absence of all things, it is a non-existent object because it could not enter into causal interactions. Mereology offers us a chance to establish what is **nothing**:

What could nothingness be? An obvious answer is that it is the fusion of the empty set [...]. **Nothing** is what you get when you fuse no things. There is nothing in the empty set, so **nothing** is absolute absence: the absence of all objects, as one would expect (2014a, p.7)

Certainly Priest can propose this strategy since **nothing** is nothing, and the “content” of the empty set is exactly no thing at all. The question is whether one can obtain a mereological fusion when one considers the members of the empty set, i.e. no members at all! Priest assumes the following defining characterisation for a mereological fusion:

(MF) Every collection of objects has a mereological fusion if its members are not a disparate bunch<sup>17</sup>

Let us consider the notion of disparate bunch. Such a notion refers to a bunch in which some members fail to “cohere” with others, as for example a bunch composed by the roof of my house, a flower in Central Park and a coin in my pocket. Certainly it is quite difficult to find a good criterion for distinguishing a disparate bunch from a coherent one; anyway this problem does not undermine Priest’s account because:

the members of the empty set are not a disparate collection; it has no members which fail to cohere with others – whatever that means. The members are all as intimately connected as one might wish! (2014, p. 7).

Priest’s strategy could give us a solution to the puzzles of the empty set. The empty set existentially depends on the object **nothing**. The empty set can be distinguished from any individual because it cannot be considered just memberless: the empty set includes *only nothing*, i.e. the fusion of no things. Priest (2014a) argues that the empty fusion is a part of everything (p. 8), so it is also a part of any individual. However, the empty set is different from any individual since it is a set that includes only the empty fusion.

#### 1.2.4. Remarks

Both Dubois’ strategy and Priest’s one are good ways to approach the notion of the empty set, avoiding the puzzles about its existence and identity conditions by means of the notion of nothingness. Anyway, it seems that also in these cases the genuine notion of the empty set is undermined for the same reason that Priest’s account of nothingness betrays the genuine notion of nothingness (as I have pointed out in 1.1.5.). Indeed, if the naïve notion of the empty set is the set that “contains” the absolute absence of *all* objects, both in Dubois and in Priest there is an object . respectively Lambda (or the Nothing) and **nothing** - in the empty set, *contra* the naïve notion itself.

However both Dubois and Priest start from the notion of the absence of all things and they derive their notion of nothingness in order to account for that. So one could also affirm that they do not invalidate the genuine meaning of the notion of the

---

<sup>17</sup> See 2014, p. 10

empty set, but the result of such a way is very controversial, since one should state that the empty set is empty if and only if the empty set contains *the object* nothingness (i.e. Lambda or **nothing**). That conclusion could be read as a confirmation for considering odd the existence of the empty set<sup>18</sup>.

Therefore, by means of Dubois or Priest's strategies, we are able to avoid the classical puzzles of the empty set, but we are forced to introduce a new puzzle: the empty set is empty if and only if it is not empty. The treatment seems to be worse than the disease. I will reconsider this issue in section 4.1.

### 1.3. Nothing and the empty world

#### 1.3.1 Possible worlds: a brief overview

The last topic that I will consider in this chapter is the relation between nothingness and the empty possible world. In fact, in analytic metaphysics, the most current way of accounting for nothing(ness) is the use of an empty possible world. Therefore in this paragraph I will briefly recall the main conceptions of possible world, focusing just on what can be relevant for the topic of the empty world, and in the following paragraphs I will recall what means to be an empty world and the question whether there is such a world.

Possible worlds are primarily used in order to account for modality:

Philosophers typically recognize four central and interrelated *cases* of modality: possibility (can, might, may, could); impossibility (cannot, could not, must not); necessity (must, has to be, could not be otherwise); and contingency (maybe and maybe not; might have been and might not have been, could have been otherwise) (Divers 2002, p. 3).

Through possible worlds-approach, one can understand claims about possibility, impossibility, necessity and contingency as following:

(P) It is possible that *A* if and only if there is a (possible) world at which *A* is true

(I) It is impossible that *A* if and only if there is no (possible) world at which *A* is true

<sup>18</sup> Of course, Priest also points out that the object nothingness is not an object: it is and it is not an object. Yet for a non-dialetheist such a strategy is more problematic than the existence of the empty set.

(N) It is necessary that  $A$  if and only if  $A$  is true in every (possible) world

(C) It is contingent that  $A$  if and only if  $A$  is true/false in the actual world but there is some other possible world where it is false/true

Let us assume the following general definition of possible world for the sake of the arguments I will spell out in section 1.4:

(W) An entity  $w$  is a world if and only if  $w$  represents a maximal consistent situation according to which things could be<sup>19</sup>

The metaphysical question about possible worlds deals with the question about what the possible worlds are. That is the issue that mainly affects the topic of the empty world, as I will show in chapter 4. Generally, there are three conceptions of possible world: concretism, abstractionism and combinatorialism<sup>20</sup>.

Concretism is mainly based on Lewis' strong modal realism. According to Lewis (1986), a possible world is a maximal mereological sum of spatiotemporally interrelated things:

(W1) An individual  $x$  is a world iff any parts of  $x$  are spatiotemporally related to each other, and anything spatiotemporally related to any part of  $x$  is itself a part of  $x$  (see Divers 2002, p. 46).

In other words, a world is a maximal connected object, since

An object  $a$  is *connected* if any two of its parts bear some spatiotemporally relation to each other, and [...]  $a$  is *maximal* if none of its parts is spatiotemporally related to anything that is not also one of its parts (Menzel 2013)

---

<sup>19</sup> I will return to this topic in section 4.1. For the moment I just note that I would assume (W)-definition of possible world as a pre-theoretical or pre-metaphysical notion of possible world, namely a notion of world such that can be fit for any account of world. Anyway I suppose that it is not easy to find such a – say – “neutral” definition. In particular, in (W) I use the notion of representation and it maybe commits me to a – say – “ersatzist” account of possible world. See 4.1. for more informations.

<sup>20</sup> I use the same terminology by Menzel (2013) As Menzel notes, there are also other accounts of possible world that deserve to be considered. I will return to this topic in section 4.1.

Therefore, a world is a *concrete* object, i.e. – broadly speaking – a physical object, composed by – say - physical parts. The distinction between abstract and concrete objects is surely controversial in metaphysics. Lewis (1986) does not consider useful that distinction; anyway he offers a very useful recap of the main strategies for accounting for abstractness and concreteness such that none of them allow us to conceive his world as an abstract object. In order to better understand the notion of world in concretism, I recall that an ontological assumption of concretism is that everything is either an individual or a set; if we assume that sets are not individual, then world is an individual, so it is not a set. Since any world is a *maximal* mereological sum of *spatiotemporally* interrelated things, any world is spatio-temporally isolated from the other worlds; therefore any world is causally isolated from any other world (i.e. what happens in a world cannot enter into causal relation with some entities in another world). Since a world is a *mereological* sum of things, one can state that  $\langle x \text{ exists in world } w \rangle$  means  $\langle x \text{ is a part of world } w \rangle$ , i.e.  $\langle x \text{ is in the spatiotemporally boundaries of } w \rangle$ ; besides

Every individual that is a part of a world is a part of exactly one world (Divers 2002, p. 46).

Therefore, to say – for example – that I might have been a famous dancer is to say that there is a possible world at which a *counterpart* of me is a famous dancer; a counterpart can be defined in the following way:

For all  $x$ , for all  $y$ ,  $x$  is a counterpart of  $y$  iff there are worlds  $w, v$  such that  $x$  is part of  $w$ ,  $y$  is part of  $v$  and there is similarity in some respect  $R$  and some degree  $n$  such that  $x$  bears  $R$  in degree  $n$  to  $y$  (Divers 2002, p. 50).

Finally, in concretism actuality is indexical: our world is actual only because we refer to it from “the point of view” of being *parts of it*; ‘actual’ is indexical as well as ‘now’ and ‘here’. So, our world has no ontological privilege among all possible worlds.

According to abstractionism, worlds are maximal consistent ways according to which things could be, i.e. they are total consistent situations or they represent total consistent situations. Unlike concretism, the abstractionist’s world is an abstract entity. Since there are several “abstractionist” accounts of possible world, I will follow

Menzel's choice, focusing on Plantinga's account, that allows us to recall the most fundamental notions for understanding the peculiar features of abstractionism. According to this conception:

(W2) A possible world is a state of affair that is both possible and maximal (Divers 2002, p. 173)

A state of affair is – broadly speaking – an intensional abstract entity that represents the situation according to which things are, usually by means of sentential gerundive like “Marco's being a famous dancer”. It is possible if and only if it is consistent. Maximality can be defined as follows:

for any states of affairs S, S\*: S is *maximal* iff for every S\*, S includes S\* or S precludes S\*; S *includes* S\* iff it is not possible that (S obtains and S\* does not obtain); S *precludes* S\* iff it is not possible that (S obtains and S\* obtains)<sup>21</sup>

A state of affair obtains if and only if it is actual, i.e. it is a situation, a condition that the concrete world is actually in, i.e. how things concretely are. The domain of all states of affairs can be divided in actual and non-actual states of affairs; they *all exist*, but the non-actual states of affairs *do not obtain*, unlike the actual ones. Unlike concretism – where actuality is indexical – in abstractionism actuality is a property that just belongs to our *actualized* world, i.e. the *only* maximal consistent state of affair that *obtains*. At this end, Menzel (2013) recalls that

For most abstractionists, the distinctiveness of the actual world does not lie simply in its actuality but in its ontological comprehensiveness: the actual world encompasses all that there is. In a word: most abstractionists are *actualists*.

Actualism is the thesis that everything that there is, everything that has *being* in any sense, is actual. In terms of possible worlds: Everything that exists in any world exists in the actual world

Therefore, all possible worlds that are not the actualized world exist in the actualized world as abstract entities. Finally, unlike concretism – where any individual exist as part of its world – in abstractionism:

---

<sup>21</sup> Divers 2002, p. 174

At  $w$ , an individual  $x$  exists iff necessarily (if  $w$  obtains then  $x$  exists (*simpliciter*) – i.e. it is not possible that ( $w$  obtains and (it is not the case that  $x$  exists (*simpliciter*))) (Divers 2002, p. 174).

Therefore, any individual is not worldbound, i.e. any individual can exist in more than one possible world.

Combinatorialism is a term for referring to those accounts of possible world according to which a world is just the “re-combination, or rearrangements, of certain metaphysical simples” (Menzel 2013), where these simples are: simple individuals, i.e. individuals that lack proper parts; and simple properties, i.e. properties that do not have other properties as constituents. According to combinatorial realism

There exist (actually or *simpliciter*) simple individuals ( $a, b, c, \dots$ ) and the (instantiated) simple  $n$ -adic properties and relations ( $P^1, Q^1, \dots, P^2, Q^2, \dots, P^n, Q^n, \dots$ ).[...] The simple individuals and properties are collected in the *combinatorial base set*  $B$ :

$$(B) \quad B = \{P^1, Q^1, \dots, P^2, Q^2, \dots, P^n, Q^n, \dots, a, b, c, \dots\}$$

The *combinatorial range set*  $R$ , is the set of all and only the  $(n+1)$ -membered sequences from  $B$  consisting in any  $n$ -adic property followed by  $n$  distinct individuals – thus:

$$(R) \quad R = \{\langle P^1, a \rangle, \langle P^1, b \rangle, \langle Q^1, a \rangle, \langle Q^1, b \rangle, \dots, \langle P^2, a, b \rangle, \langle P^2, b, a \rangle, \langle P^2, a, c \rangle, \langle P^2, c, a \rangle, \dots, \langle Q^1, a, b \rangle, \langle Q^2, b, a \rangle, \dots, \langle P^i, a, b, c, \dots, a_i \rangle, \dots\}$$

*Simple states of affairs* are all and only the members of  $R$ ; the *possible worlds* are all and only the subsets of  $R$ ; the *actualized world* is the subset of  $R$  whose members are all and only those simple states of affairs that obtain; *a state of affairs obtains* iff the relevant sequence of individual instantiates the relevant property. For any possible worlds  $w, v$ : *at*  $w, v$  *is actualized* iff  $v=w$ ; *at*  $w, a$  *simple individual*  $x$  *exists* iff  $x$  is a member of a sequence (simple state of affairs) that is a member of  $w$ ; *at*  $w, a$  *simple property*  $F$  *exists (or is instantiated)* iff  $F$  is a member of a sequence (simple state of affairs) that is a member of  $w$ ; *at*  $w, a$  *simple state of affairs, s, obtains* iff  $s$  is a member of  $w$ ; *at*  $w, a$  *simple state of affairs, s, exists* iff  $s$  is a member of the combinatorial range set  $R_w$  (Divers 2002, pp. 175-176)

This is just a brief overview on possible worlds' main conceptions. I will reconsider such a issue in section 4.1. in order to evaluate their compatibility to the notion of the empty world that I am going to introduce in the next paragraph.

### 1.3.2. Empty world and metaphysical nihilism

Let us assume the following biconditional:

(EMPTINESS) A world is empty IFF a world does not contain any concrete objects or it does not contain any (concrete and abstract objects).

I use the verb 'to contain' – broadly speaking - because it seems fit to express the relation between a world and its objects without any heavy ontological commitment. In other words, I would ask the reader to assume that there is a pre-metaphysical notion of possible world that employs the notion of contain/container, although it could be only used in a metaphorical fashion. So let us assume a sort of agnostic view of possible world such that the relation between world and objects is spelled out – pre-metaphysically - as a relation between container and contents. The reader will find more information in section 4.1.<sup>22</sup>

According to (EMPTINESS), one can points out that we have two notions of the empty world – say: strong and weak version. The strong one is given by a world with no objects at all; the weak version is given by a world with no concrete objects in it. Certainly the two versions would overlap if one rejected the existence of abstract objects.

Is there space-time in an empty world? I think one can reply in two different ways. If one assumes that worlds are container made by absolute space-time, then an empty world is absolute empty space-time, i.e. a space-time container without content. Therefore it would not be correct to affirm that there is space-time *in* an empty world, since the empty world *would be* the space-time itself<sup>23</sup>. Certainly, this reply assumes a very controversial absolutist account of space-time, as Coggins (2003) notes. If one assumes that worlds are different from space time containers, then – according to

---

<sup>22</sup> See also Coggins (2010) for a complete overview on that topic.

<sup>23</sup> Anyway, since in concretism existence therein means being part of the world, then space-time points/regions are in an empty world, by using a concretist account of possible world. Certainly there could be the case that an empty world is not compatible with concretism (see 4.1.).



(EMPTINESS) - an empty world can contain space-time points or regions if they are considered abstract objects. However, if one rejected the existence of abstract objects, then space-time points or regions would be concrete (given that abstract/concrete distinction is exhaustive); therefore a world that contains space-time points or regions would not be an empty world according to (EMPTINESS).

In order to avoid possible misunderstanding, I prefer to introduce the following biconditional:

(ABSOLUTE EMPTINESS) A world is (absolutely) empty IFF it does not contain any entities at all.

By means of this biconditional, one should affirm that there are no space-time points or regions in an empty world. Besides, this definition is not influenced by the possible introduction of an alleged third type of objects that are neither abstract, nor concrete, since the term 'entity' ranges over absolutely everything. Except where otherwise noted, I will mainly use (ABSOLUTE EMPTINESS) in paragraph 1.4 and in chapters 3, 4 and 5.

By (P), let us say that it is possible that *there is nothing* if and only if there is a (possible) world at which  $\langle \textit{There is nothing} \rangle$  is true<sup>24</sup>. Let us assume the following definition of metaphysical nihilism: metaphysical nihilism is the thesis according to which

(MN) There might be *nothing*, i.e. there is a possible empty world

is a true sentence. By means of (EMPTINESS), we can distinguish two versions of metaphysical nihilism: strong metaphysical nihilism and weak metaphysical nihilism:

(Strong- MN) There might be *nothing*, i.e. there is a possible world with neither concrete, nor abstract objects in it

(Weak – MN) There might be *nothing*, i.e. there is a possible world with no concrete objects in it

---

<sup>24</sup> At this end, there is a trouble with truth-maker for the proposition that there is nothing. See section 4.2.

In the contemporary debate, authors usually consider just Weak-MN<sup>25</sup> and they refer to it simply by means of the phrase ‘metaphysical nihilism’. Coggins (2010) proposes the following lexical distinction:

[...] it could be argued that by an empty world we mean a world with no abstract or concrete objects – no objects at all. We could call this position – that there could have been no abstract or concrete objects at all – absolute nihilism, in order to distinguish it from metaphysical nihilism. Absolute nihilism is a species of metaphysical nihilism – if absolute nihilism is true (there is a world with no objects) then metaphysical nihilism is true (there is a world with no concrete objects). This is because the world with no objects will obviously have no concrete objects<sup>26</sup>

Since the different notions of the empty world can overlap, if one rejects the existence of abstract objects, then Strong-MN and Weak-MN can consequently overlap.

As I will present in chapter 2, in contemporary analytic metaphysics there is mainly one argument for the truth of metaphysical nihilism – the so-called *subtraction argument* by Baldwin (1996) – that shows the truth of Weak-MN, but it is not able to show the truth of the other version of MN. Besides, there are some alternative versions of the subtraction argument (see Coggins 2010 and chapter 2 of this dissertation for an overview) that modifies in some degree the original argument by Baldwin. There aren’t basically structured arguments that show the truth of Strong-MN. In this dissertation I will propose two arguments for the truth of Strong-MN in chapter 3. Therefore, I will propose an argument for both version of metaphysical nihilism, unlike subtraction argument that would prove just the weak version of metaphysical nihilism. Anyway, there is an important clarification that one should consider. If we interpret Weak-MN as equivalent to

(Weak\*-MN) There might be *nothing*, i.e. there is a possible world with only abstract objects in it<sup>27</sup>

then the truth of Strong-MN does not necessarily imply the truth of Weak\*-MN, because one could assume, for example, that *abstracta* always existentially depend on

---

<sup>25</sup> See Coggins 2010 and chapter 2 of this dissertation.

<sup>26</sup> Coggins 2010, p. 58.

<sup>27</sup> In contemporary metaphysical nihilism it is the most common way to understand Weak-MN. See chapter II.

*concreta*. Therefore, a world with no objects or with no entities at all could be admitted, whereas a world with only abstract objects would be considered impossible. However, I think that for metaphysics is more fundamental to prove the existence of an absolutely empty world rather than the truth of a restricted metaphysical nihilism<sup>28</sup>.

Let us consider the so-called anti-nihilism, i.e. the thesis according to which there is no empty possible world. As Coggins (2010) notes, there are two types of anti-nihilism:

(AN1) There is a necessary entity, therefore every possible world is non-empty, since there is that entity in every possible world

(AN2) It is necessary that there is some entity, therefore every possible world is non-empty, since in every possible world there is at least one entity, but it is not the same entity at every world.

Coggins (2010) restricts anti-nihilism by using the phrase ‘concrete object’ instead of ‘entity’ or simply ‘object’, as well as her book deals mainly with Weak-MN and Weak\*-MN, like the most part of the contemporary debate on metaphysical nihilism. Anyway, since my aim is to consider also Strong-MN, I prefer to use just ‘entity’ without restricting it to concrete object(s). The proponents of AN1 are usually metaphysicians that endorse a version of the modal ontological argument, whereas advocates of AN2 use several arguments that we will show in chapter 2.

Let us consider some aspects of AN1 and AN2, just from a *prima facie* point of view, in order to reconsider them thoroughly in chapter 2. AN1 rules out *any* version of metaphysical nihilism if the alleged necessary entity is assumed as a concrete object; instead, if one assumed it as an abstract object, one could admit – at least *prima facie* - Weak-MN or Weak-MN\*. Similarly, AN2 could not rule out Weak-MN or Weak-MN\* - at least *prima facie* -, because one could hold at the same time that there is a world with no *concreta* and necessarily there are some abstract entities in every possible world.

---

<sup>28</sup> For the reader who is totally in the dark about metaphysical nihilism, I recall that neither weak, nor strong metaphysical nihilism is the thesis according to which our *actual* world is empty. Therefore metaphysical nihilism does not affirm that what surrounds us is nothing(ness).

#### 1.4. Why an empty world is better than nothing

In this paragraph I will argue why the empty world-account of nothingness is the more advisable account among those that I have presented in the previous paragraphs. I will use (ABSOLUTE EMPTINESS) for conceiving the empty world (see 1.3.2). As I pointed out in the introduction, I generally use ‘nothingness’ in order to refer to the non-quantificational accounts of nothing. Let us briefly recap the accounts that occurred in the previous sections, by means of the following table<sup>29</sup>:

	<b>Carnap’s account [C]</b>	<b>Priest’s account [P]</b>	<b>Olive r-Smil ey’s account [OS]</b>	<b>Voltolini’s account<sup>30</sup> [V]</b>	<b>Dubois’ account [D]</b>	<b>Empty world-account<sup>31</sup> [EW]</b>
‘Nothingness’	is a nonsense or a logical mistake	is a noun phrase	is an empty term	Could be a non-empty term	is a non-empty term	Is a non-empty term
‘Nothingness’	Does not denote an object or an entity	Does denote an object	does not denote an object	could denote an object	Does denote an object	does denote an entity
Nothingness	-----	is a contradictory object	-----	could be a contradictory object	is not a contradictory object	is not a contradictory object <sup>32</sup>
Nothingness	-----	is the object that is the absence of every object, i.e. the fusion of the empty set	-----	could be the object that is identical to itself and it is not-(identical to something)	is the empty free “space” of any set and among sets that both allows a set to contain elements and it allows sets to be different	is a possible world that represents no entities at all

In order to compare these accounts, one should note that they all but [C] implicitly or explicitly assume the pre-theoretical or naïve notion of nothingness as

<sup>29</sup> I don’t insert Heidegger’s account of Nothing, since it would deserve a dissertation for itself, although these accounts somehow are linked to Heidegger’s philosophy, as we have seen.

<sup>30</sup> In this column I use the conditional ‘could’ because Voltolini (2012) does not simply affirm that ‘nothingness’ has a denotation; rather it affirms that ‘nothingness’ has a denotation if we assume an ontology that includes impossible objects.

<sup>31</sup> I have very briefly introduced this account in section 1.3.2, but I will deal with it mainly in this section and in chapters 3,4,5.

<sup>32</sup> Anyway, in section 3.2 I will show which consequences would obtain, if we assumed that the empty world is a contradictory entity. At this end, see also chapter 5.

absolute absence of every thing (I don't consider Carnap's exception relevant for my topic, since he does not admit that nothing(ness) is also different from a quantifier phrase). [P] explicitly adopts that traditional notion; [OS], [V] and [D] implicitly adopts it respectively for the following reasons: the non-self-identical object is – *de facto* – the absence of every entity since, according to Oliver-Smilely (2013) – there is no entity such that it is non-self-identical; [V] introduces the object that is not-(identical to every thing), therefore we get – again – the absence of every object (although such an absence, as in Priest, is at the same time something); finally [D] speaks about a free empty space, that is – also in this case – the absence of every object or the absence of every set, “inside” which objects and sets can be distinguished. [EW] refers to the absence of every thing by means of an entity – a possible empty world – that represents it.

The first reason for choosing [EW] rather than the other accounts is quite simple. When one refers to the absence of every thing, one is referring to the all-encompassing consistent situation according to which there are no objects at all. Since, by (W), an all-encompassing consistent situation is represented by a possible world, then one is referring to a world that represents no objects at all, i.e., by (ABSOLUTE EMPTINESS), an (absolutely) empty world. Since every relevant account of nothingness (but Carnap's one) implicitly or explicitly appeals to the notion of the absolute absence of every thing or *global absence*, then every relevant account of nothingness should be – at least *prima facie* - paraphrased by means of [EW]. So my argument runs as follows:

(i) every relevant account of nothingness – implicitly or explicitly - appeals to the notion of the absolute absence of every thing (global absence)

(ii) the notion of the absolute absence of every thing cannot be *separated* from the notion of empty world

Therefore:

(iii) every relevant account of nothingness – implicitly or explicitly – appeals to the notion of the empty world

Let us focus on (ii). One should note that the absence of all objects cannot be – say – *separated* from the empty world, because the absence of all objects is the maximal consistent situation according to which there are no objects at all and such a situation is represented exactly by the empty possible world. But this thesis does not mean that the absence of all objects is not different from the empty world itself: as in each world, one can *distinguish* the world as such from its “content”, i.e. from what it represents.

The second reason for choosing [EW] is that such an account allows us to solve the puzzle that I presented in section 1.1.5. I briefly recall it. Priest (2002, 2014a, 2014b) and Oliver-Smiley (2013) have rightly argued that we need an account for the phrase ‘nothing’ in order to distinguish its non-quantificational occurrences (say ‘nothingness’) from its quantifier occurrences. Following Priest’s example, I have used the sentence

(\*) God brought the universe into being out of nothing

in order to testify the output of the accounts of nothingness. The results have been the following<sup>33</sup>: [P], [OS] and [V] are all able to distinguish ‘nothing’ as quantifier phrase from ‘nothing’ as non-quantificational phrase (‘nothingness’). But both [P] and [V] undermine the notion of the absence of every thing since they both consider it an object; besides they both need to admit in their ontology at least a contradictory or impossible object. [OS] can avoid these advantages but it is not able to distinguish (\*) from its (partial) negations (like – e.g. – <The universe eternally exists>), whereas [P] and [V] are able. Let us also test [D]. According to it, (\*) would become:

(d\*) God brought the universe into being out of the object that is the absence of all objects

Unlike the paraphrase of (\*) by means of [P] and [V], now we can avoid the commitment to a contradictory object<sup>34</sup>; however, like [P] and [V], [D] undermines the notion of the absence of every thing by considering it a thing. Besides, given Priest’s suggestions, it seems hard to admit that the absence of every thing is an entity without

<sup>33</sup> I don’t consider [C], since it does not assume the based premise, i.e. the existence of a distinction between ‘nothing’ as quantifier phrase and ‘nothing’ as non-quantificational phrase (even when it assumes such a distinction, [C] considers nothingness as a nonsense).

<sup>34</sup> Although Priest’s **nothing** is a non-existent object, there is a commitment to a contradictory object that represents the real trouble for a non-dialetheist.

considering it a *contradictory* entity. Therefore, [D] implicitly seems to be afflicted by the same problems of [P] and [V]. So, let us try to test [EW]. By means of it, (\*) would become:

(\*ew) God brought the universe into being out of the absence of all objects that is represented by the empty possible world, i.e. an entity that exactly represents the maximal consistent situation according to which there are no objects at all

[EW] is able to distinguish ‘nothing’ as quantifier phrase from ‘nothing’ as non-quantificational phrase. This account does not undermine the notion of the absence of all objects, since the empty world allows us to represent it without considering such an absolute absence a (contradictory) *object*. Indeed, the absence of all objects is not an object, but it is *represented* by an entity that is a possible world. Besides, by means of [EW], one can avoid to appeal to a *contradictory* object<sup>35</sup>. Finally, this account is able to distinguish the sentence (\*) from its negation, since [EW] does not entail that God created the universe out of *no* thing, but it affirms that God created the universe out of the absolute absence of all things that is represented by something (namely the empty world).<sup>36</sup>

At this end, one could object that [OS] could be apt as well as [EW]: where [EW] uses an empty world for representing the absence of all entities, [OS] proposes an empty term for denoting the non-self-identical thing, i.e. no entities at all. However I think that their account should be reduced to [EW] for the following reason. Let us consider the sentence

(Z1) ‘Zilch’ does not denote anything

as Oliver and Smiley state. Therefore ‘zilch’ denotes no entity at all. So (Z1) could be read as

(Z1\*) ‘Zilch’ denotes the absence of all entities;

---

<sup>35</sup> Certainly from Priest’s point of view the commitment to a contradictory object is not a problem and such a result is not an unintended consequence of his account. However, the empty world allows us to account for nothing(ness) with more parsimony and by means of a strategy that can be also accepted by a non-dialetheist.

<sup>36</sup> The paraphrase seems to be puzzling, since one could intend it as “God created the universe out of the empty world”. I will return to this topic later.

that is

(Z1\*\*) ‘Zilch’ denotes the all-encompassing situation according to which there are no entities at all

that is

(Z1\*\*\*) ‘Zilch’ denotes the global absence that is represented by an absolutely empty (possible) world<sup>37</sup>

Finally, I would underline the following point: [EW] allows us to distinguish (\*) from its negations, since a sentence as “God brought the universe into being out of *no* thing” (i.e. a sentence that contradicts the genuine meaning of (\*)) is different from “God brought the universe into being out of the absence of all things that is represented by an absolutely empty world>. Certainly, one could object that also [EW] undermines the notion of the absence of all objects, since it appeal to the existence of an entity, i.e. the empty world. But I would reply by recalling that the notion of the empty world does not merely coincide with the notion of the absence of everything, since the latter is not the former; rather it is what is represented by the former, whereas in Priest’s account the notion of the absence of everything coincides with an object (i.e. the contradictory object **nothing**). Instead, the absence of all things is *different* from the empty world itself, although it cannot be *separated* from the empty world<sup>38</sup>, as I said before.

Therefore, [EW] is able to solve the above-mentioned puzzle.

At this point one could again object that [EW]’s paraphrase of a sentence like “God brought the universe into being out of *no* thing” is not a good paraphrase because it seems that there was an entity – the empty world – other than God, before the creation. Before replying, I am going to recap another exemplary sentence used by Priest (in Priest 2000) for showing that the phrase ‘nothing’ cannot be always reduced to a quantifier phrase. That sentence will generate the same problems for all accounts of

---

<sup>37</sup> The last step is based on the relation between the global absence and the entity that represents it, i.e. the empty world.

<sup>38</sup> One could object that the philosophers – like Heidegger - that use ‘nothing’ as a noun phrase do not mean to refer to a possible world. I would reply that the naïve notion of nothing as absence of all entities is exactly what the above-mentioned philosophers try to think about and such a conception is exactly what is accounted by means of empty possible world, as I have shown. Therefore, the empty world does not change the naïve notion of nothing.



nothingness and the same objection I am considering. After that, I will propose a reply that should be fit also for the new sentence. The new sentence is the following:

(B) The cosmos came into existence out of nothing

Consider the cosmos [...]. Either it stretches back infinitely into time past, or at some particular time it came into existence. In the first case, it had no beginning, but was always there; in the second, it began at some particular time. [...] just consider the second possibility. In this case, the cosmos came into existence out of nothing – or nothing physical, anyway, the cosmos being the totality of everything physical. Now consider that sentence, ‘The cosmos came into existence out of nothing’. Let  $c$  be the cosmos, and let us write ‘ $x$  came into existence out of  $y$ ’ as  $xEy$ . Then given our understanding of quantifiers, this sentence should mean  $\neg\exists x cEx$ . But it does not mean this; for this is equally true in the first alternative cosmology. (Priest 2000, p. 23).

Similarly to the paraphrase of (\*), according to Priest, also in the case of (B) we should appeal to the object **nothing** (that in Priest 2000 is called simply ‘nothingness’ for distinguishing it from the use of ‘nothing’ as quantifier phrase), in order to distinguish (B) – and so the second cosmological theory - from the first cosmological theory (i.e. the eternal existence of the cosmos). Therefore, arguing as before, Priest’s paraphrase of (B) would be:

(Bp) The cosmos came into existence out of **nothing**, i.e. out of the absence of all objects that is a (contradictory) object;

Oliver-Smiley’s paraphrase of (B) would be:

(Bos) The cosmos came into existence out of zilch<sup>39</sup>

---

<sup>39</sup> In Oliver-Smiley (2013) there is a sentence, i.e. <Nothing comes from nothing>, that is paraphrased as <Nothing comes from zilch>, where the first ‘nothing’ is the quantifier phrase and the second ‘nothing’ or ‘zilch’ is the empty term. Without a non-quantificational account of the phrase ‘nothing’, the sentence would be reduced to <There are no objects that comes from no objects>, whereas by means of zilch-account the sentence becomes: <There are no objects that comes from zilch>. The basic intuition under the sentence is that there are no objects that comes from the absence of all objects (where ‘the absence of all objects’ is our pre-philosophical or naïve conception of nothingness). Now – as I pointed out in the case of (\*) – Oliver-Smiley’s strategy is not really able to account for the difference between <There are no objects that come from no object> and what we want really affirm, i.e. <There are no objects that come from the absence of all objects>. Indeed ‘zilch’ is an empty term, therefore it does not pick out any object. Therefore their paraphrase in fact expresses the same of <There are no objects that come from no

My paraphrase by means of the empty world-account would be:

(Bm) The cosmos came into existence out of the absence of all objects that is represented by the empty world, i.e. an entity that represents the maximal situation according to which there are no objects at all.

I am not going to repeat again the arguments about these paraphrases, since they are the same arguments about the paraphrases of (\*).

Let us return to the objection I was considering before. It seems to work also in this case; indeed the empty world would be an entity that there is before the cosmos and so – if we assume for the sake of the argument that the cosmos is everything (unrestrictedly, both physical and non-physical) – the empty world would be a “part” of the cosmos (being an entity) and it would not be a part of the cosmos since the latter came into existence “after” the empty world: contradiction! I would reply by employing the difference between what is for a world *to exist* and *to obtain* or what is for a world to be *actual existent* and what is for a world to be *actualized*. (see 1.3.1. and 4.1). If the absolutely empty world *obtained* or *was actualized*, then there would be neither abstract, nor concrete objects, *included the world itself*. Therefore, if we consider the above-mentioned second cosmology, at the instant of time  $t_0$ , before cosmos coming into existence, the empty world *obtains* or *is actualized*, therefore one cannot affirm that there is at least one entity (the empty world) at  $t_0$ .<sup>40</sup> Similarly, when God created the universe, there was just the empty world, but it obtained, so one cannot affirm that there was an entity (the empty world) before God’s creation.<sup>41</sup>

One could object that possible worlds are atemporal; therefore we cannot use them for representing a *temporal* sequence of situations, namely the maximal consistent situation at  $t_0$  according to which there are no objects at all and the maximal consistent situation(s) at  $t_1, t_2, \dots, t_n$  according to which there are some objects. However, the objection can be avoided by assuming that the empty world and the actual world overlap before God’s creation or before the coming into existence of the cosmos. Then, after

---

objects>. Of course I pointed also out that their ‘zilch’ should be reduced to a term that refers to the absence of all objects (and so – if we want to avoid Priest’s contradictory object – zilch-account should be reduced to the empty world-account). Yet such a reduction is beyond Oliver-Smiley’s intentions.

<sup>40</sup> It doesn’t matter to us if the second cosmology is compatible with contemporary physics or not. It just matters if we can discern our different cosmologies by means of the quantifier-account of nothing or not.

<sup>41</sup> The reader can find further considerations about God’s creation out of nothing in section 4.3.

God’s creation or after the coming into existence of the cosmos, the actual world does not overlap with the actual world, as well as we can conceive that our actual world and a possible world  $w$  overlap in respect to what is true of that world in a range of time  $r$ , being identical only for the “content” within that range, whereas they are different for the “content” outside that range (for example, suppose that our actual world is identical to a possible world  $w$  for the range of time from the beginning until 1789, and it is different from  $w$  for the range of time after 1789, since at the first world there was the French Revolution, whereas at  $w$  there was not).

Another good reason for choosing [EW] is its capability of satisfying two *desiderata* that characterize the conception of nothingness endorsed by [V], i.e. the idea that nothingness is not-(identical to something) and that it is identical to itself, at the same time. I think it can hold together the intuitive idea of nothingness as not-(identical to something)<sup>42</sup> and nothingness as identical to itself. Indeed, the empty world *as world* is self-identical, since it is an existing (probably abstract) object, but what it represents is not-(identical to something) since there is no objects at all in such an empty world. Therefore, given that all objects are self-identical, the “content” of the empty world – i.e. what is represented by the empty world – vacuously satisfies the property of being not-(identical to something), whereas – of course – the empty world is identical to itself. In this way, if one uses ‘nothingness’ for referring to the empty world, then one can state that nothingness is self-identical and at the same time, but in different respect (so avoiding the contradiction), one can state that it is not-(identical to something) because by means of the empty world one is representing the absence of all entities, and therefore the content of the world is not-(identical to something).

It is very interesting to note that [P], [V] and [D] somehow recall the ancient puzzle of nothingness that occurs in Plato’s *Sophist*. But [P] and [V] (and implicitly [D]) do not solve the puzzle; rather they consider what is the puzzling point, i.e. the alleged contradictory or impossibility of *nothing*, as the solution itself, since they consider *nothing* a contradictory or impossible object. Instead, [EW] can solve the puzzle without appealing to an ontology with *impossibilia* or with contradictory entities, as I have shown.

It could be useful recall Hegelian use of ‘moment’ (*das Moment*). A moment is not an instant of time, but it is an aspect of a structure that *cannot be separated* from the

<sup>42</sup>  $\lambda x ((\forall y)(y \neq x))$

structure itself or from the other aspects of it; yet such an aspect *can be distinguished* from the structure or from the other aspects of it. The empty world as possible world and the “content” of the empty world, i.e. the absence of everything, are two moments of the same structure, i.e. two moments of the empty world. One can use ‘nothing’ in order to refer to the empty world as world (therefore as an entity) or to the absence of everything that the empty world represents. But one should not forget that *referring to a moment implies referring to the other* moment. So one cannot refer to the absence of everything without implicitly referring to the empty world and *viceversa*.<sup>43</sup>

Finally, I would note *en passant* that [EW] also gives us a strategy for paraphrasing Heidegger’s sentence <Nothing nothings>. It simply could become:

(2\*\*\*\*) The empty world represents the absence of every entity

where the predicate ‘to nothing’ exactly means ‘to represent the absolute absence of every thing’.

---

<sup>43</sup> For further considerations about Hegel’s moments and the empty world, see chapter 5.

## Chapter 2

### METAPHYSICAL NIHILISM AND ANTI-NIHILISM

In this chapter I present and analyze the arguments for the truth of weak metaphysical nihilism that have appeared in the contemporary philosophical debate. There will be a particular focus on the so-called subtraction argument by Baldwin (1996) and its alternative versions by Rodriguez-Pereyra and Efrid and Stoneham, since it is the fundamental argument for metaphysical nihilism. Then I will present and analyze the arguments against metaphysical nihilism, in particular Lowe and Van Inwagen's criticism.

Keywords: Metaphysical nihilism; anti-nihilism; possible worlds; subtraction argument; concrete objects; abstract objects; nothing.

#### **2.1. The subtraction argument by Baldwin and its alternative versions**

##### 2.1.1. The subtraction argument by Baldwin

Baldwin (1996) proposes an argument for the truth of metaphysical nihilism that is the base for all available arguments in this field<sup>44</sup>. The original subtraction argument has three premises:

(A1) There might be a world with a finite domain of concrete objects

(A2) These concrete objects are all contingent

(A3) The non-existence of any one of these objects does not necessarily imply the existence of any concrete object

---

<sup>44</sup> However, in chapter 3 I will propose two original arguments for metaphysical nihilism, based on *[reference removed for blind review]*.

From the actual world, we can access to a world  $w_1$  that contains<sup>45</sup> a finite number of concrete objects; such a world is a possible world by (A1). Since all concrete objects are contingent, then each of them could be non-existent; therefore there is a possible world  $w_2$  that is accessible from  $w_1$  and at which the domain of concrete objects is the same of  $w_1$ , but without an object. We can say – broadly speaking – that we can *subtract* an object from a world in order to conceive another possible world. If one iterates this operation, then one will obtain a world – say  $w_{min}$  – at which there is just one concrete object. So, subtracting this last object, one obtains a world with no concrete objects at all – say  $w_{nil}$  – , because – by (A3) – the non-existence of any concrete object does not necessitate the existence of another concrete object. If we assume that the relation of accessibility between worlds is transitive, “it follows that  $w_{nil}$  is accessible from, or possible relative to, the actual world” (p. 232).

Baldwin adopts the following notion of *concreteness*: an object is concrete if and only if it fails to satisfy the identity of indiscernibles. According to this principle, if, for every property  $F$ , object  $x$  has  $F$  if and only if object  $y$  has  $F$ , then  $x$  is identical to  $y$ . So, let us consider two exactly similar objects. By means of Baldwin’s criterion of concreteness, if these objects do not pass the test of the identity of indiscernibles, then they are concrete objects. In other words, in order to be concrete objects, they must share all their intrinsic properties, *but they must be different*. As may the case be? Baldwin explains that point in the following way: two exactly similar objects can be distinguished by their *different* space-time location. In this way he connects his criterion of concreteness to another criterion, namely- broadly speaking - the spatio-temporal one, i.e.: an object is concrete if and only if it exists in space-time or at least in time.

Let us consider each premise of the subtraction argument. According to Baldwin, (A1) is true because the two kinds of objects that could undermine it – i.e. unit sets and spatio-temporal region – are not concrete objects, given his account of concreteness as failure of satisfying the identity of indiscernibles (I will return to this topic in the next section).

The truth of (A2) is based on another argument that Baldwin uses to show that a concrete object cannot be a necessary object. This arguments has three premises (see Baldwin 1996):

---

<sup>45</sup> I use the verb ‘to contain’ with no commitment to a specific account of possible world. As Coggins (2010) notes, in Baldwin (1996) is not clear which account of possible world is adopted and this is a big problem. I will consider this issue in chapter 4.1.

(B1) The identity of a concrete object is not determined by its intrinsic properties;

(B2) The fact of the necessary existence of an object whose existence is necessary is determined by its intrinsic properties

(B3) For any being whose existence is necessary, the intrinsic properties which determine its existence also determine its identity.

Premise (B1) is true by Baldwin's criterion of concreteness: we have seen that two objects that share all their intrinsic properties could still be different if and only if they are concrete because their spatio-time location is different. Since this property is relational and it is not intrinsic, (B1) affirms that the identity of a concrete object is not determined by its intrinsic properties. Instead premises (B2) and (B3) are quite controversial, as Coggins (2010, p. 23 ff.) notes.

Premise (A3) is a way to express the traditional idea of substance: if a concrete entity is a substance, then its existence is independent from the existence of other entities. However its truth is linked to the following consideration: if for all  $x$  is possible that  $x$  has the property  $F$ , then we can conclude that it is possible that for all  $x$ ,  $x$  has the property  $F$ . This inference schema is false because it has several counterexamples that Baldwin himself recalls (see 1996, p. 35). In general these counterexamples appeal to predicates with ordering of a domain of more than one object (e.g. '...is at least as heavy as anyone else'). Anyway he notes that the schema works in the case of a property such as '...is non-existing', that is the property (A3) needs, because it does not involve an ordering of a domain of more than one object.

### 2.1.2. The subtraction argument\* by Rodriguez-Pereyra

Rodriguez-Pereyra (2013) proposes an alternative version of the original subtraction argument, reconsidering his previous article (Rodriguez-Pereyra 1997) where for the first time he established the subtraction argument\*, whose distinction mark is given by the notion of *concreteness*\*. According to Rodriguez-Pereyra, the demand of modifying Baldwin's argument rises because the premise (A1) seems to be very controversial for two reasons. The first reason is that concrete objects are

composed by spatio-temporal parts; since spatio-temporal parts are necessarily infinite, if one considers them concrete objects, then a concrete objects is composed by an infinite number of concrete parts. Therefore (A1) is false. The second reason – that is surely weaker than the first – is based on the use of set theory. Let us assume that a set whose ur-element is a concrete object is a set that is a concrete object too. Now, let us apply an indefinite iteration on such a set: we immediately obtain an infinite number of concrete objects, started from just one concrete object! Again, (A1) seems to be false.

In order to avoid these problems, Rodriguez-Pereyra introduces the notion of concrete\* object as follows:

A concrete\* object is an object that is (a) concrete, (b) non-set-constituted, and (c) a maximal occupant of a connected spatiotemporal region.

By a *spatiotemporal region* I mean a sum of one or more spatiotemporal points; a region is connected if and only if any points in it can be joined by a path of points in it and disconnected if and only if it is not connected. An object  $x$  is a maximal occupant of a connected region if and only if  $x$  exactly occupies a connected region, and for all  $y$  all of whose parts occupy spatiotemporal regions, if  $x$  is a proper part of  $y$ , then  $y$  occupies a disconnected region.

By a *set-constituted object* I understand any object which is either a set, a proper class, or an ordered  $n$ -tuple, or which has a set, a proper class, or an ordered  $n$ -tuple as a part. A *non-set-constituted object* is one that is not a set-constituted object.

I shall not propose any definition of concrete objects, but I shall uncontroversially assume that it is a necessary condition of any object being concrete that it is spatiotemporal. (Rodriguez-Pereyra 2013, pp. 198-199).

By means of the notion of concrete\* objects we can avoid the above-mentioned problems. The first problem is avoided because any concrete\* object does not have concrete\* objects as its own parts, since we assume condition (c). The second problem is avoided because any concrete\* objects cannot be a set, since we assume condition (b). The subtraction argument\* will be very similar to Baldwin's argument, but we must use the notion of concreteness\*:

(A1\*) There might be a world with a finite domain of concrete\* objects and in which every concrete object is a part of a concrete\* object



(A2\*) These concrete\* objects are all contingent

(A3\*) The non-existence of any one of these objects does not necessarily imply the existence of any concrete\* object

The development of this alternative argument applies the subtraction process to the concrete\* objects. In this way we obtain a world with no concrete\* objects at all; since – by (A1) – every concrete object is a part of a concrete\* object, then the subtraction of *all* concrete\* objects implies the subtraction of *all concrete* object so that we obtain an empty world – a world with no concrete objects in it - and we argue for the truth of weak-(MN).

### 2.1.3. Paseau's objection on premise (A3\*)

Paseau (2002) considers the subtraction\* argument by Rodriguez-Pereyra and he rises up an objection by considering the fundamental point of premise (A3\*). According to Paseau, the third premise of the subtraction argument\* can be read in two ways that both undermine the argument. Let us use the variable *o* for *any* concrete\* objects and the variable *x* for any concrete\* objects *of the domain that occurs in (A1\*)*. We need such a distinction because the third premise quantifies on objects that are not included in the original domain. The first way reads (A3\*) as follows: for every *x* and for every *o*, there is a possible world in which *x* does not exist in it and *o* does not exist in it, i.e. there is no concrete\* object that exists in every possible world in which any of the *xs* does not exist. The second way reads (A3\*) as follows: there is a world for every *x* such that *x* does not exist in it, i.e. the nonexistence of any of the *xs* does not necessitate that there is even one of the *xs*.

If one understands (A3\*) in the first way, then one can state that “it could be true that for any two of the  $x_i$  [i.e. for any two of the objects included in the domain that occurs in (A1\*)], there is a world containing neither of them, without there being a null world [i.e. a world with no concrete object in it]” (Paseau 2002, p. 74). Indeed if we consider, for example, a domain of two concrete\* objects – say  $x_1$  and  $x_2$  -, and a concrete\* object that is not included in it – say *o*, we obtain the following list of possible worlds in order to respect the three premises of the subtraction argument\*:

$\{x_1\}, \{x_2\}, \{o\}, \{x_1, x_2\}, \{x_1, o\}, \{x_2, o\}, \{x_1, x_2, o\}$ . This list shows that we don't obtain an empty world, even if we assume the three premises of the argument: the first premise is respected because we have a finite domain of concrete\* object  $(x_1, x_2)$ ; the second premise is respected because both  $x_1$  and  $x_2$  can be nonexistent; the third premise is respected because there is a world at which no  $x$  exists. But this world is such that there is another concrete\* object –  $o$  – therefore it is not really empty and the subtraction argument\* fails.

If one understands (A3\*) in the second way, then the counterexample of a world with only  $o$  in it can be used again: “there is a world in which none of the  $x_i$  exists, namely the world containing  $o$  only, but no null world” (Paseau 2002, p. 75).

However, Paseau (2006) proposes to replace (A3\*) with a new premise in order to make the subtraction argument\* sound, although he does not consider this new premise as a permissible interpretation of (A3\*). Rodriguez-Pereyra (2013) recalls this new premise in the following way:

( $\gamma$ )  $\forall w \forall x [x \text{ exists in } w \rightarrow \{\exists w^* (\neg(x \text{ exists in } w^*)) \rightarrow \exists w^{**} (w^{**} \text{ and } w \text{ differ only in that in } w^{**} \text{ neither } x \text{ nor its parts exist})\}]$

#### 2.1.4. Efirid-Stoneham's version of the subtraction argument

Efirid-Stoneham (2005) formalize the subtraction argument in the following way:

(A1)  $\exists w \exists x \exists y ((E!xw \wedge E!yw) \wedge \forall z (E!zw \rightarrow (z = x \vee z = y)))$

(B)  $\forall w_1 \forall x (E!xw_1 \rightarrow \exists w_2 (\neg E!xw_2 \wedge \forall y (E!yw_2 \rightarrow E!yw_1)))$

Therefore

(MN)  $\exists w \forall x \neg E!xw$

Where  $E!xw$  means ‘ $x$  exists at world  $w$ ’.<sup>46</sup>

<sup>46</sup>  $x$  and  $y$  range over concrete objects and  $w_1$  and  $w_2$  range over possible worlds.

The formalized premise (A1) exactly expresses the non-formalized Baldwin's premise, supposing that the finite domain of object is composed by two objects – say  $x$  and  $y$ , since for all objects  $z$  in  $w$ , either  $z$  is identical to  $x$  or to  $y$ . Instead the premise (B) replaces both premises (A2) and (A3) by summarizing them into one premise, claiming that for any concrete object that exists in a world  $w_1$ , there exists another world  $w_2$  at which there are all and only the same concrete objects of the first, but there is not that very concrete object. The premise (B) captures both (A2) and (A3) because the first conjunct of the conjunction occurring in (B) affirms that a concrete object  $x$  (existing in  $w_1$ ) does not exist in  $w_2$ , granting the contingency of any *concretum* as well as (A2); the second conjunct affirms that every object existing in  $w_2$  is an object existing in  $w_1$ . The conclusion is the formalization of the existence of an empty world, i.e. we can get a world at which there are no concrete objects at all.

Besides Efir-Stoneham propose a different criterion of concreteness respect to Baldwin and Rodriguez-Pereyra's criterions. They assume that an object is concrete if and only if: it has a spatio-temporal location and it has some intrinsic quality and it has a natural boundary. The first condition is very similar to Baldwin's mark of concreteness, since we have seen that two objects fail to satisfy the identity of indiscernibles because of their different spatio-temporal location. The second condition is introduced by Efir-Stoneham in order to avoid that space-time points being concrete entities, i.e. in order to avoid the impossibility of premise (A1). The third condition is the most important, because it is used in order to avoid a problem that I recalled in section 2.1.2, namely the infinite number of spatio-temporal parts in a concrete objects that would undermine premise (A1).

## 2.2. Against metaphysical nihilism

### 2.2.1. The argument against strong metaphysical nihilism by Lowe

Lowe (1998) proposes an argument for showing that an absolutely empty world, i.e. a world with neither *concreta*, nor *abstracta* in it, cannot count among possible worlds:

I think that we can only understand a 'possible world' to be a maximal way *the world* could be – where by 'the world' I mean [...] the sum of all existing objects or 'things'.

Now, we certainly have to allow that ‘the world’ might have denoted a different sum of objects from the sum of objects which it actually denotes, precisely because at least some of the objects which actually exist are only contingents beings; but if we try to suppose that it might have denoted no sum of objects whatever - nothing – we run into difficulties. For to say that there is a possible world in which ‘the world’ denotes nothing is to say that there is a maximal way the world could have been which is not a way *the world* could have been, which is a blatant self-contradiction. (Lowe 1998, p. 259).

According to Lowe, a world is “the sum of all existing objects” and consequently a possible world is a maximal way the sum of all existing objects could have been, since it could have been different from the actual one, given that the latter is composed by contingent objects. Therefore the empty possible *world* as maximal way things are not (since they do not exist at all) is not a *world* because *it* is a maximal way the sum of all existing objects could have been that is not a maximal way the sum of all existing objects could have been, i.e. an empty world is a self-contradictory entity. So, strong metaphysical nihilism would be false.

However, Lowe (2013) seems to open a possibility for strong metaphysical nihilism by noting that an absolutely empty world would be impossible only if at least one version of the Ontological Argument was true. Lowe seems to leave the above-mentioned argument and he focuses on his argument against weak metaphysical nihilism that I will recall in the next section. Before that, I recall why the Ontological Argument rules out the possibility of an absolutely empty world. The reason is very simple: the Ontological Argument shows that there is a necessary concrete object, namely an object that could not have failed to exist. Since necessary existence means existence in every possible worlds, there cannot be a world without such an object, i.e. there cannot be an absolutely empty world:

To be perfectly honest [...] I suspect that the best hope for an argument against the existence of an *absolutely* empty world lies in the sort of argument that van Inwagen explicitly rejected – an argument for the existence of a necessary (concrete) being, in the shape of a version of the Ontological Argument. (Lowe 2013, p. 195).

In the contemporary debate, there are advocates of the Ontological Argument, but it still remains a controversial argument; therefore it is quite controversial to affirm that strong metaphysical nihilism is surely false.

Finally one should note that Lowe changed his theoretical point of view because Lowe (1998) affirms that some abstract objects exist necessarily (for example numbers), instead Lowe (2013) gives up this thesis. Therefore Lowe (2013) can *prima facie* admit an absolutely empty world (although he suggests that such a world may be rejected, appealing to a version of the ontological argument), whereas Lowe (1998) couldn't because if some abstract objects exist necessarily, then there are those abstract objects in every possible worlds, therefore there cannot be a world with no objects at all.

### 2.2.2. The argument against weak metaphysical nihilism by Lowe

Lowe (2013) offers an argument against the existence of a possible world with no concrete objects in it (therefore it is an argument against weak metaphysical nihilism), improving the same argument from his previous works (in particular Lowe 1998). The argument shows that assuming the existence of an empty world, namely a world with only abstract objects in it, implies an absurd situation, given certain premises. These premises are the following:

(L1) The empty set does not exist.

(L2) Any set depends ontologically on its members, i.e. its members ground its existence, i.e. its members are ontologically more basic than it.

(L3) Any universal must be instantiated, i.e. there cannot exist uninstantiated universals, i.e. non-universals ground the existence of universals, i.e. non-universals are ontologically more basic than universals.

(L4) Abstract objects are either universals or sets.

By (L2) and (L3), any set ontologically depends on non-sets, since - by (L1) - there is no empty set that could ground the existence of a set. By (L4), a world with no concrete objects in it, namely a world with only *abstracta*<sup>47</sup>, would be a world with only sets and universals. In such a world, “the only *non-universals* are *sets* and the only *non-sets* are

---

<sup>47</sup> Certainly a world with no concrete objects in it could be a world with no objects at all, neither *concreta*, nor *abstracta*. But this is not the case, since I dealt with that case in the previous section.

*universals*”. This situation implies an absurdity case at which, by (L2) universals – the only non-sets – ground sets, so that they appear ontologically more basic than sets; but at the same time, by (L3), sets – the only non-universals – ground the existence of universals, so that sets appear ontologically more basic than universals. Since the relation of ‘being ontologically more basic than’ is not a symmetrical relation (because if A grounds B, then B does not ground A), the empty world, i.e. a world with only abstract objects cannot be a maximal consistent situation and so it cannot be a *possible* world.

### 2.2.3. Van Inwagen’s arguments against metaphysical nihilism

Van Inwagen (2014) proposes two arguments against the possibility of nothing, i.e. against the existence of a world with no concrete objects in it, where the mark of concreteness is understood by Van Inwagen as being an agent or a patient. Therefore he endorses a sort of causal account of concreteness, i.e. an object is concrete if and only if it can enter in a causal chain.

Each argument has three principles as premises:

(PSR) The principle of sufficient reason. It is a necessary truth that: if beings of a certain kind exist, then there is an explanation of the existence of beings of that kind.

(PEE) The principle of the externality of explanation. It is a necessary truth that: if it is contingently true that beings of the kind *F* exist, then any explanation of the existence of beings of that kind must appeal to or involve beings that are not of the kind *F*.

(PEI) The principle of existential implication. It is a necessary truth that: for any property , if an explanation (sc. of anything) appeals to or involves being that have that property, then beings with that property exist. (Van Inwagen 2014, pp. 233 e sgg.).

We should note that (PSR) does not imply a commitment to the thesis according to which *everything* has an explanation for its existence. It just states that every *kind* of existing beings is such that there is an explanation for that beings. (PEE) affirms that contingent existence of beings of a certain kind is always justified by *other* kinds of beings. Finally, we should note that these principles are understood as necessary truths, therefore they hold in all possible worlds.

The first argument assumes that it is possible for there to be something. Given that, one can state that there is a possible world,  $w$ , at which there exist beings. Those beings can be contingent or necessary, i.e. they could have failed to exist or they could not, assumed that the distinction contingent/necessary is exhaustive and exclusive. So, the situation is the following: either in  $w$  there exist contingent beings or in  $w$  there exist no contingent beings.

At this point, Van Inwagen introduces a sub-argument: in  $w$ , either it is necessary that contingent beings exist; or it is contingent that contingent beings exist. If it is necessary that contingent beings exist in  $w$ , then it is impossible for there to be nothing in  $w$ , because at least some contingent beings *must* exist. If it is contingent that contingent beings exist in  $w$ , then by PSR, PEE and PEI there exist beings that are not contingent beings; therefore – also in this case – it is impossible for there to be nothing in  $w$ . Therefore, if we consider the first case – i.e. in  $w$  contingent beings exist -, then in  $w$  it is impossible for there to be nothing.

Now, let us consider the second case, i.e. in  $w$  no contingent beings exist. In this case the conclusion is very simple: since no contingent beings exist and since there is something (*ex hypothesis*), then those beings are necessary, therefore they could not fail to exist. So, in  $w$  it is impossible for there to be nothing. From this conclusion, we can derive the general conclusion that in every possible world is impossible for there to be no concrete beings, by S5 system of modal logic.

The second argument assumes, as the first one, that it is possible for there to be something, therefore – as before – in a possible world  $w$  there exist beings; but in this case it evaluates the situation at which either in  $w$  no necessary beings exist, or necessary beings exist.

As first, Van Inwagen also uses a sub-argument. Let us consider the case that no necessary beings exist in  $w$ . Since there is something (*ex hypothesis*), then there are contingent beings in  $w$ . Again, either it is necessary that contingent beings exist, or it is contingent that contingent beings exist. By the first disjunct, we can state that it is impossible for there to be nothing in  $w$  (as in the first argument). By the second disjunct, we can state that necessary beings exist, because of PSR, PEE and PEI. Since this statement contradicts the premise of this sub-argument (i.e. there is no necessary being in  $w$ ), then we have obtained a contradiction from the second disjunct. Therefore the claim ‘it is contingent that contingent beings exist’ is necessarily false, i.e. it is

necessarily true that contingent beings exist. So – also in this case – it is impossible for there to be nothing in  $w$ .

Let us consider, now, the case that necessary beings exist in  $w$ . It is clear that in  $w$  it is impossible for there to be nothing. Therefore, by S5, it is impossible for there to be nothing.

Van Inwagen (1996) proposes an argument – say the probabilistic argument – that would show that the probability of the proposition <there are no beings> is zero. The argument has the following premises:

- (1) There are some beings
  - (2) If there is more than one possible world, there are infinitely many
  - (3) There is at most one possible world in which there are no beings
  - (4) For any two possible worlds the probability of their being actual is equal
- (Van Inwagen 1996, p. 99).

At this point, we have two cases: either there is just one possible world, or there is more than one possible world. If there is only our world, then – by (1) – there are some beings in it; since there are not other possible worlds (say – broadly speaking - other maximal consistent situations), one cannot state that those beings could have failed to exist because there are no other maximal consistent situations at which those beings (all of them or some of them) do not exist. In other words, “it is a necessary truth that there are some beings” (Van Inwagen 1996, p. 100). In this case the probability of the existence of an empty possible world is certainly zero. But we can also state that an empty world is impossible, as well as when we affirm with no doubt that the existence of absolute nothingness is impossible at this world, since the claim <there is something> is true at this world.

If there is more than one possible world, then – by (2) – there are infinitely possible worlds. Since any two worlds are equiprobable by (4), given an infinite number of possible worlds the probability of any world is zero. Since the proposition <there are no beings> is true in at most one possible world – say  $w_n$  - (by (3)), then the probability



of that proposition is zero, because the probability of  $w_n$  is zero, as well as the probability of every possible world.

#### 2.2.4. Heil and McDaniel against the empty possible world

According to Heil, an empty world is neither possible, nor impossible: *it is not a world at all*:

[...] an empty world is not a world with nothing in it. It is nothing at all. The ‘empty’ world is not a world that would cease to be empty were something *added* to it. The empty world is not a shell, a container with nothing inside it. The empty world is not an *it*. [...]. Nothingness, conceived of as the ‘empty’ world, is not one option, one world among others; it is not an option at all. The only possibilities are something (Heil 2013, p. 173).

So Heil’s criticism about the existence of an empty world could be spelled out by means of the following argument:

(H1) Nothingness is the absence of everything

(H2) Any possible world is – broadly speaking – a thing

Therefore

(H3) If she identified nothingness with the empty world, then she would identify the absolute absence of everything with something, i.e. she would contradict herself.

So nothingness is not an empty possible world.

McDaniel (2013) offers an argument that could be spelled out in the following way:

(MD1) The phrase ‘nothing’ can be used as a phrase that refers to the absence of everything

(MD2) The absence of  $F$ s exists if and only if there are no  $F$ s

Therefore

(MD3) An empty world is a world that represents nothing, i.e. the absence of everything, i.e. something.

So

(MD4) An empty world cannot be unrestrictedly empty.

Certainly, this argument does not rule out the possibility of weak metaphysical nihilism, but it just undermines the strong version of nihilism. Indeed, it is more reasonable to think that the global absence of everything is not a concrete object:

I am certain that absences, even putative global absences, are not fully real beings and that the notions of ‘something’, ‘there is’, and the like are all doing very poorly on the naturalness scale. But nonetheless there are absences (McDaniel 2013, p. 278).

There are absences in a different way respect to tables or trees; but their “being” is enough for blocking *a priori* any attempt to admit an absolutely empty possible world in our ontology. McDaniel’s strategy is somehow similar to Priest (2014)’s strategy, according to which an empty world contains **nothing** (see chapter 1 for its meaning), therefore it would impossible for an empty world to contain absolutely no entities:

Philosophers often wonder why there is something rather than nothing. However, even if there were nothing – even if everything would be entirely absent – there would be something, namely **nothing** (Priest 2014, 7)<sup>48</sup>

The objection by McDaniel can be improved by means of an account of the absences, as it appears in Barker-Jago (2011). According to the authors, the absences

---

<sup>48</sup> Priest does not explicitly refers to the empty world, but I think we can use its account of nothingness in order to devise an anti-nihilism argument. The reader should note that – from Priest’s point of view – the empty world would exist, since a world containing **nothing** in fact would be an empty world, since **nothing** is the absence of all objects. But for Priest it is also an object. So – from a non-dialetheist point of view – an absolutely empty world that is not absolutely empty cannot be counted among possible worlds. (If Priest counted the empty world among impossible worlds, then he would not speaking about metaphysical nihilism, since the latter deals just with the *possibility* of nothing(ness))

should be treated as negative facts and a good account of negative facts should satisfy two *desiderata*:

(i) it must show how an absence can exist

(ii) it must appeal to the same notion of existence that we use for any other entities

Barker and Jago recall Armstrong's theory of fact, according to which a fact is a state of affairs composed by an individual particular and its property and relation, but this whole is not a mereological fusion. Rather, the state of affair is something more than its constituents. What Barker and Jago add to Armstrong's theory is the existence of negative state of affairs: if we consider for example the state of affair *the lake's being frozen*, we can get a positive state of affair, namely the fact that the individual particular instantiates the property of being frozen; and a negative state of affair, where the property is not instantiated. The most important feature of Barker-Jago's account is that it can provide a spatiotemporal location for negative facts or absences. Assumed that any fact is located where their concrete constituents are located, we can affirm that the spatio-temporal location of a negative fact is given by the spatio-temporal location of its concrete individual particulars, although the spatio-temporal region we must consider is the discontinuous region occupied by each *concretum* of the state of affair. So, " 'the absence of a hippo in the lake' denotes the negative fact *that there is no hippo in the lake*" (Barker-Jago 2011, p. 121) and the spatio-temporal location of this absence is given by the location of any hippo and the location of the lake. Therefore the absence exists in the sense that it exists in space-time (as the first *desideratum* calls for) and the notion of existence we appeal to is the same for any other concrete entity (as the second *desideratum* calls for). The absences exists and that is not a contradiction:

When we say that there is an absence of a hippo in the lake, it is *lake-dwelling hippos* that do not exist. The *fact* that there is no hippo in the lake exists. The fact is not a lake-dwelling hippo and so we are not claiming that something both exists and does not exist. (2011, p. 121).

*Prima facie*, one could state that this theory of absence undermines the existence of an empty world, since the content of an empty world is the global absence, namely

the fact that there is no objects at all, that is a negative fact. So the empty world would be non-empty, just being empty!

I will return to these topics in my remarks (section 2.2.8).

#### 2.2.5. Fuhrmann against the subtraction argument and Nef's argument against the empty world

Fuhrmann (1998) focuses on the second premise (A2) in order to criticize the subtraction argument. We can consider two options:

- i) the demonstrative 'these' that occurs in A2 ranges just over the objects of the domain of the finite world introduced in A1;
- ii) the above mentioned demonstrative 'these' unrestrictedly ranges over all concrete objects of all possible worlds.

In the (i) case, A2 allows us to admit legitimately that we get a possible world by subtracting an object from the world that occurs in A1. Since that world is not necessarily a world with just one object, we should iterate our subtraction operation in order to achieve the empty world, as Baldwin proposes; but – since A2 ranges just over the objects of the world that occurs in A1, we cannot iterate the subtraction in another world, or – at least – we can iterate the subtraction operation in another world *without claiming that such an operation originates another possible world*. Therefore Baldwin's argument would fail.

In the (ii) case, A2 allows us to iterate the subtraction operation after the first step, claiming that we get another possible world; but in this way the subtraction is not "proper" (i.e. it is not restrictly applied to the domain of a world) and so A3 turns out to be false.

Nef (...) based his argument against the absolutely empty world (with neither *abstracta*, nor *concreta* in it) on the property of self-identity. We can spell out his argument as follows. Since  $x = x$  is true at every possible world, there must be at least one truthmaker for it in any possible world (certainly it is not necessary the same object as truthmaker in every world). If we assume that worlds are sets, then an empty world is an empty set. Since the elements of the empty set are non-self-identical (by definition), the empty world "contains" non-self-identical objects. Therefore at that world represent

a necessary sentence as  $x=x$  could not be true and so that world cannot be counted among possible worlds.

#### 2.2.6. Goldschmidt on the subtraction argument

Goldschmidt (2012) introduces the following criterion of concreteness: “an entity is concrete if and only if it either is spatially or temporally located or has parts that are or has causal powers” (2012, p. 809-810). According to this criterion, space-time regions and points are both concrete objects and Goldschmidt does not explicitly assume those devices that Rodriguez-Pereyra and Efrid-Stoneham introduce in order to consider space-time regions and points as non-concrete (see sections 2.1.2 and 2.1.4); therefore Goldschmidt cannot state that there is a world with a *finite* domain of concrete objects: even if we exactly postulated a world with a finite number of concrete objects, there would be an infinite number of spatio-temporal regions and points, namely an infinite number of *concreta*. Anyway, Goldschmidt affirms that it is possible to propose a revised subtraction argument, following a strategy similar to Rodriguez-Pereyra’s subtraction of concrete\* objects: given – say – a world of ten concrete spheres, one can subtract all of them one by one, until one gets a world with just one sphere. Certainly, one gets a world with an infinite number of *concreta*, namely the space-time region and points of that sphere. But we assume that this kind of beings – the spheres – are all contingent, i.e. they could fail to exist. So one can also subtract the last sphere and the empty world seems to be granted. However, this conclusion is not really acceptable:

The problem with the argument about the spheres is that the conclusion that there is a world containing no *concretum* does not follow from the premise that there is a world containing no occupants of space-time, regions or points. For our criterion allows for spaceless and timeless *concreta*, so long as they have causal powers, and the argument does not show that there is a world without such entities. (Goldschmidt 2012, p. 810-811).

Besides we could not try to “imagine” the subtraction of spaceless and timeless entities with causal powers, i.e. the subtraction of these kinds of *concreta*, since we cannot imagine a generation/corruption/destruction of entities beyond space-time, namely we cannot legitimately suppose their contingency.

According to Goldschmidt, the existence of a possible world with no spatio-temporal objects in it (as granted by his version of the subtraction argument) immediately implies the question: why is there something – namely spatio-temporal entities – rather than nothing? The answer can be given just by introducing a transcendent entity, i.e. an entity *with causal powers*, but *beyond space-time*. Such a transcendent entity could be necessary or contingent, but it is more reasonable to think that it is necessary, since “the existence of a contingent transcendence being would call for explanation in turn” (Goldschmidt 2012, p. 817). Therefore, the subtraction arguments is a sort of support for a cosmological argument that affirms the existence of a necessary entity. Since a necessary entity exists in every possible world and since such an entity is concrete (having causal powers), an empty world is not a possible world (of course, we need to assume a causal account of concreteness).

#### 2.2.7. Cameron against Efid-Stoneham’s subtraction argument

Cameron (2007) affirms that the two premises of Efid-Stoneham’s subtraction argument cannot be held together without losing the conclusion of the argument. He shows that the notion of concreteness that makes (A1) is a notion that at the same time makes (B) false.

Cameron returns to a typical problem of the subtraction argument that I recalled before: (A1) is threatened by the fact that any concrete object is composed by an infinite number of parts, making that premise false. We have seen that Rodriguez-Pereyra proposes to consider (for the subtraction) any concrete object and all its parts – broadly speaking. But according to Cameron this device is not captured by (B), that should be modified as follows:

$$(B^*) \quad \forall w_1 \forall x (E!xw_1 \rightarrow \exists w_2 (\forall y (P_{yxw_1} \rightarrow \neg E!yw_2) \wedge \forall y (E!yw_2 \rightarrow E!yw_1)))$$

“where ‘ $P_{abw}$ ’ is to be read as ‘ $a$  is a (proper or non-proper) part of  $b$  at  $w$ ’” (Cameron 2007, p. 275). In this way we assume that for any concrete object of a possible world, there exists another possible world at which all the parts of that concrete objects do not exist and where there are all and only the others objects of the first world. However the author notes that this formalization “is too close to the conclusion” (p. 275) because this

premise makes the operation of subtraction unworthy for getting an empty world: “the premise that one can remove a concrete object and all its parts is unacceptable if it gets us to the world devoid of concrete beings so easily” (p. 275).

Cameron also criticizes Efrid-Stoneham’s concrete of concreteness, in particular the condition of natural boundaries (see section 2.1.4). He modifies their account in order to allow infinitely extended object – i.e. objects with no boundaries - as concrete: a mark of concreteness is – among the others – the presence of no unnatural boundaries. Therefore an infinitely extended object is concrete because it is vacuously true that it has no unnatural boundaries, since it has no boundaries at all.

Finally, Cameron criticizes the modal intuition which (B) is based on, according to Efrid-Stonheam, that is:

(ES) Necessarily, if there are some concrete objects, there could have been fewer of those concrete objects (and no other concrete objects)

This intuition “captures” in particular the idea expressed by premise (A3) of the original subtraction argument, namely that the non-existence of any *concretum* does not necessarily imply the existence of something other *concretum*. This is a reasonable intuition. Anyway, according to Cameron it does not consider an important counterexample, namely the situation at which the nonexistence of a *concretum* necessarily implies the existence of a new *concretum* “by necessitating that something is *newly concrete*, i.e. concrete in the new world but non-concrete in the world we started from” (Cameron 2007, p. 278). Therefore, in order to make (B) true, we must rule out that the concreteness of any object is contingent, namely we must rule out that *being concrete* is an extrinsic property. Rather we need to consider it an intrinsic and essential property. However, premise (A1) uses a notion of concreteness that implies the contingency of concreteness, since an object that at  $w_1$  is abstract, having no natural boundaries, could easily have natural boundaries at  $w_2$ , turning out to be concrete. So

Premise (B) and (A1) can both be secured, then, only if the quantifiers in (B) range over all and only the things which are concrete in the intrinsic and essential sense, and the quantifiers in (A1) range over all and only the things that are concrete in the extrinsic and accidental sense. [...] Since the quantifiers do not have the same domain, [the step to the conclusion] is invalid (Cameron 2007, p. 279).

### 2.2.8. Remarks

We have seen that weak metaphysical nihilism is based only on one argument – the subtraction argument, although it can be spelled out in several different ways. However the modal intuitions that ground it are common to all its versions and they are broadly speaking:

(i) the possibility of a finite domain of spatio-temporal objects

(ii) the contingency of all those objects.

If one did not admit the existence of abstract objects, the subtraction argument would be fit both for weak and strong metaphysical nihilism simply because the latter would be the same thesis of the former, being abstract objects in no possible worlds. But we will see (chapter 4) that ruling out abstract entities could heavily undermine metaphysical nihilism because we should admit that possible worlds are concrete entities, namely some account like Lewisian modal realism. Since a world with no objects in it would not be compatible with the notion of empty world, metaphysical nihilism would be *a priori* false<sup>49</sup>. Therefore, in order to give more chances to metaphysical nihilism, it seems more plausible to admit *abstracta* in our ontology; yet in this way we need to distinguish strong and weak metaphysical nihilism and to admit that any version of subtraction argument is not able to prove the truth of strong nihilism. (At this end I will propose two arguments for strong metaphysical nihilism in chapter 3).

The anti-nihilistic arguments by Heil, McDaniel and Nef seem to be argument against just strong metaphysical nihilism because they work just in case we consider the proposition <There might be absolutely nothing>, since the sentence <There might be nothing concrete>, read as <There might be only abstract objects><sup>50</sup> would not be (necessarily) undermined by their arguments. I think Heil's argument is (also) based on

---

<sup>49</sup> Although it could be “rescued” by what I call “elenctic argument” (see section 3.2).

<sup>50</sup> Certainly if one admits the existence of abstracta



(H1) Nothingness is the absence of everything

where ‘everything’ should be read unrestrictedly, considering both *abstracta* and *concreta*. Heil (2013) seems to have some doubts about the existence of *abstracta* (p. 174), so that his argument would also undermine weak metaphysical nihilism, by ruling out abstract objects. But if we accept their existence, his argument works just for strong nihilism.

McDaniel’s argument is based on the idea that absences are – broadly speaking – things, so that the global absence is something. It is quite reasonable to state that this something is an abstract entity rather than concrete; therefore McDaniel’s argument does not *prima facie* rule out the existence of a world with only *abstracta* in it. Anyway I note that absences are considered by McDaniel (2013) as having causal powers (“causation by absence must be admitted”, p. 277). So, if we assumed a casual criterion of concreteness (say for example: an object is concrete if and only if it occurs in a causal chain), the global absence would be a concrete object. Therefore, from this point of view, McDaniel’s argument would be an argument against both strong and weak metaphysical nihilism. But I think that considering the global absence a concrete object is very controversial. At this end Barker-Jago’s (2012) account of absence can give us other sparks. In section 2.2.4 I recalled that absences can be considered negative facts, spatio-temporally located state of affairs, where their locations are the locations of their individual *concrete* particular and they exist exactly because they exist in space-time. Now, let us consider the global absence, i.e. the state of affair according to which there are no objects at all. Since there are no concrete objects, this state of affair does not concretely exist, because it cannot have a spatio-temporal location, being no spatio-temporally located entities. Therefore I think that the global absence cannot be a concrete object. Besides it cannot be intended as a concrete object by stating that absences could have causal powers. Indeed, spatio-temporal account of concreteness and causal account of concreteness seem to overlap, as Coggins (2010) underlines:

There is one thing that all entities involved in causation will have in common: they will all exist in time. They will probably all exist in both space and time but it is enough to say that they will all exist in time. Whatever theory of causation we hold and whatever account of space and time we hold, we can be certain that causation only happens within a temporal framework. Similarly, it seems as though all objects that exist in time could

possibly engage in causal interaction. [...]. This means that any account that says that concrete objects are all and only *those objects that can be causally efficacious*, will be saying nothing different from someone who claims that concreta are all and only *those entities which exist in time*. That is, the causal account collapses into a version of the spatio-temporal criterion of concreteness. (Coggins 2010, pp. 64-65).

So a world with only the global absence in it is a world with only one abstract entity, rather than a world with a *concretum*. Therefore McDaniel's argument is not able to rule out weak metaphysical nihilism.

Finally, Nef's argument only undermines weak metaphysical nihilism because in the weak version of the empty world there could be just abstract objects, but that is sufficient in order to make true a sentence like  $x=x$ , where  $x$  ranges just over *abstracta*.

However, I think that these arguments are not so persuasive if we adopt the account of nothingness that I defended in chapter 1. McDaniel explicitly appeal to a global absence for speaking about nothingness. We have seen that it is very hard to consider the global absence to be a concrete object, neither in Barker-Jago's account of absences as spatio-temporally located entities. It seems more reasonable to claim that the *global* absence is exactly the *maximal* (consistent) situation according to which there are no objects at all and that it is represented by an absolutely empty world. Therefore, ruling out the existence of an absolutely empty possible world, affirming that it would imply the existence of a global absence in it, seems to be very controversial, since the existence of that global absence exactly implies an absolutely empty possible world. I will return to this argument in chapter 3.2.

The intuition that lays under Heil's argument against the absolutely empty world can be read in the following way: if we paraphrased 'nothingness' by means of 'the empty world', then the empty world would be absolutely nothingness; so it could not be a world! Anyway, given the account of nothingness that I proposed in chapter 1.4, the notion of the absolute absence of every thing – namely absolute nothingness - cannot be *separated* from the notion of the empty world (although it can be *distinguished*). Therefore, Heil's rejection of the empty world by appealing to absolute nothingness (if the empty world is absolute nothingness, then it is neither a world, nor an "it") is just an illusory rejection (or a rejection *in actu signato*), since Heil is implicitly – *in actu exercito* - affirming it just appealing to the notion of the global absence of everything.

Finally, Nef's argument could be ineffective if we assumed that the empty world is not the same thing as an empty set. I will consider this option in chapter 4.1.

The probabilistic argument by Van Inwagen (1996) would show that the probability of the proposition <There are no beings> is zero; that is different from the thesis that the proposition <There are no beings> is impossible, i.e. it is false in every possible world, as Van Inwagen himself admits: “[...] I will argue that if there being nothing is not impossible, it is at any rate *improbable* – as improbable as anything can be” (1996, p. 99). However, that argument has a controversial premise, i.e.

- (3) There is at most one possible world in which there are no beings

Since Van Inwagen uses ‘empty world’ for referring to a world containing only abstract entities (because ‘being’ means ‘concrete entity’), it is implausible to hold that there is at most one empty world. As Sorensen (2006) recalls, two empty worlds  $w\text{-}nihil_1$  and  $w\text{-}nihil_2$  can be different because of their descriptive laws, such that for example if there were *concreta* in  $w\text{-}nihil_1$ , they would have moved in a way because of a set of laws  $L1$ ; and if there were *concreta* in  $w\text{-}nihil_2$ , then they would have moved in *another* way because of a set of laws  $L2$ : “The Aristotelian empty world differs from the Newtonian empty world because different counterfactual statements are true of it” (2006, p. 352)<sup>51</sup>. Furthermore, as Lowe (1998) notes, premise (3) works only if we assume that *all* abstract objects are necessary entities; otherwise it could be pointless to claim that there is just one world with only *abstracta* in it. Indeed this assumption is very controversial, since – for example – a singleton (namely an abstract entity) of a *contingent* concrete object exists if the *concretum* exists, therefore it is *contingent* too.

The arguments by Van Inwagen (2014) are very convincing, but they are based on a very controversial premise, namely a sort of revival of the principle of sufficient reason. In chapter 3 I will propose two arguments for the truth of strong metaphysical nihilism that appeal to some premises that are maybe less controversial than Van Inwagen's premises. Since the truth of strong nihilism (<There might be absolutely nothing>) implies the truth of (a version of) weak nihilism (<There might be nothing concrete>), my arguments would show that it is possible a world with no concrete being, *contra* Van Inwagen.

---

<sup>51</sup> Beside, according to Sorensen, “if we can discriminate between empty worlds on the basis of which descriptive laws govern them, we can also discriminate between them on the basis of which normative laws govern them” (2006, p. 352).

Lowe's (1998) argument against strong nihilism – the so-called “final argument” – will be confronted with my “elenctic argument” (see chapter 3). Besides Lowe's argument against weak nihilism presents a very weak point, namely the basic intuition that *abstracta* existentially depend on *concreta*, in particular that universals always depend on concrete objects. Certainly we can assume this premise and we can find good arguments for it. But if we compare the aim of Lowe's argument – i.e. the thesis that there cannot be abstract entities without concrete entities in a world -, we note that it is too close to his basic premise (in particular to premise L3). One could object that Lowe's aim is not *explicitly* to show that there cannot be *abstracta* without *concreta*, but just that there must be concrete objects in every world. But I would reply that surely his *implicit* aim is that and it is very similar to the premise of the argument (in particular when Lowe claims that any universal must be instantiated).

We have seen that one of the most common objections to the subtraction argument by Baldwin is against the premise (A1): since space is infinitely divisible and since a concrete object has a part in every spatial location it occupies, then a concrete object has an infinite number of parts, namely there is an infinite number of concrete entities for any concrete object that we consider. Therefore we cannot admit a finite domain of *concreta*. According to Coggins (2010) this objection doesn't work because it confuses *spatial* divisibility and *material* divisibility: the first concerns the divisibility of space-time, whereas the second concerns the divisibility of concrete objects. Similarly, we should distinguish “spatial parts from substantial parts” (p. 79), so that the inference from the existence of an infinite number of spatial parts to the existence of an infinite number of substantial parts would be unwarranted.

Goldschmidt (2012) admits that there can be concrete entities that are spaceless and timeless, given an account of concreteness such that having causal powers is enough in order to be concrete. Anyway, this assumption is too close to the conclusion of his argument, namely the existence of a concrete transcendent entity that grounds all spatio-temporal *concreta* (and then too close to the anti-nihilistic conclusion). Furthermore we have seen that spatio-temporal and causal accounts of concreteness are reasonably coincident. So it seems quite implausible admitting causally efficacious concrete objects beyond space-time.

We have a good argument for weak metaphysical nihilism, namely the subtraction argument. Several objections against it are not so convincing as they want to

be. In particular, the typical anti-nihilist objection, i.e. Lowe's objection, seems to be question begging. Yet the subtraction argument is not uncontroversial, neither in its original version, nor in its next or improved versions. Furthermore, according to Coggins (2010) there is a prove that "subtraction arguments can *never* actually convince us of the truth of metaphysical nihilism" (p. 125). She proposes to spelled out any premises of the subtraction argument in the following way:

(D11) There is a possible world,  $w_n$ , with a finite number of concrete objects.

(D12) That world,  $w_n$ , is a subtractable world.

(D13) For any world,  $w$ , if  $w$  is subtractable then it has a predecessor,  $w_{-1}$ , which is also subtractable.

(Coggins 2010, p. 127)

where the property of subtractibility is defined as follows: "a world,  $w$ , is subtractable iff there is a world,  $w'$ , which lacks one of the concrete objects in  $w$  but has all the other concrete objects in  $w$  and no other concrete objects that are not in  $w$ " (p. 127). Arguing similarly to Baldwin's argument, we can get a world with only one *concretum*; if this world is subtractable, then we get the empty world. The empty world vacuously satisfies the definition of subtractibility. Therefore, by (D13), there is a predecessor of the empty world...but surely it will be again the empty world itself: "there's a certain lack of intuitive appeal about the idea of a world being its own predecessor". What Coggins finds out as the weak point of the subtraction argument is the use of subtraction operation in the special case of a world with just one *concretum*: the fact that we can think about worlds with more than one *concretum* to be subtractable does not imply that we can easily affirm that the special case works as well as the others: "a plausible argument would work to the other way around, proving the controversial cases [namely the case of a world with only one concrete object] and generalising to the uncontroversial ones [namely the worlds with more than one *concretum*]" (Coggins 2010, p. 135).

Certainly this argument does not definitely defeat the subtraction argument, although it contributes to show its problems. Since it is the only argument for weak

metaphysical nihilism and since it cannot prove the truth of strong metaphysical nihilism, I will propose two new arguments for metaphysical nihilism in the next chapter. Finally one should note that the very *fundamental* question is the possibility of *absolute* nothing(ness), rather than the possibility of nothing concrete. My arguments will prove the truth of strong nihilism, whereas in contemporary analytic metaphysics there are no such arguments.

## Chapter 3

### TWO ARGUMENTS FOR METAPHYSICAL NIHILISM

Given the results of the first chapter, this chapter presents two arguments for the truth of strong metaphysical nihilism. The first – say “meontological argument”<sup>52</sup> – is based on the notion of *absolute everything*, i.e. an all-inclusive “domain” of discourse, and it is based on the use of absolutely unrestricted quantification. It is also based on the use of [EW] as the most apt account of nothingness (see chapter 1.4). The second – say “elenctic argument” – is based on the notion of the empty world itself and on the use of [EW] too.

Keywords: metaphysical nihilism; everything; absolutely unrestricted quantification; *nihil negativum*; *nihil absolutum*; contradictory object.

#### 3.1. The meontological argument for metaphysical nihilism

##### 3.1.1 Premises and development

The argument has the following premises which I will discuss in the next sections<sup>53</sup>:

(M1) ‘Nothingness’ is a noun phrase that refers to an empty world<sup>54</sup>, i.e. to an entity that represents the absence of all objects and that absence cannot be separated from the empty world itself, but it can be distinguished from it.

(MA) Our discourse is sometimes *absolutely general*<sup>55</sup>

(MA) must be understood as the conjunction of sentences (M2) and (M3):

(M2) There is an all-inclusive domain of discourse – say *D*

(M3) It is possible to quantify over absolutely everything

---

<sup>52</sup> ‘*to mē eon*’ means ‘what is not’ in Greek (see in particular Parmenide’s philosophy).

<sup>53</sup> The premise (M1) was already discussed in chapter 1; therefore I will not deal again with it in this chapter.

<sup>54</sup> I use (ABSOLUTE EMPTINESS)- account of the empty world (see section 1.3.).

<sup>55</sup> For an overview, see Rayo-Uzquiano 2006, p.2 ff.

By (M3), consider the following sentence:

(E) I am quantifying over  $D$

Since I am really quantifying over  $D$  IFF I am quantifying over *all* objects, then (E) becomes

(E\*) I am quantifying over  $D$  IFF I am quantifying over a domain beyond which there are no objects at all

Therefore

(E\*\*) I am quantifying over  $D$  IFF I am quantifying over a domain of discourse beyond which there is the absence of all objects.

By (M1), the absence of all objects cannot be separated from the empty world; therefore (E\*\*) should be paraphrased as:

(E\*\*\*) If I am quantifying over  $D$ , then I am quantifying over a domain of discourse beyond which there are no objects at all and this absence of all objects is represented by an absolutely empty possible world, included in the domain itself.

Therefore, if one uses absolutely unrestricted quantification, then one must admit an empty possible world in her own ontology.

Similarly, by (M2), we can state that there is an all-inclusive domain of discourse  $D$  if and only if there is a domain beyond which there is the absence of all objects. Therefore, if there is an all-inclusive domain of discourse  $D$ , then there is an empty possible world included in the domain itself.

One should note that my strategy also works without passing through (E\*\*); since (E\*) states that I am quantifying over  $D$  if and only if I am quantifying over a domain beyond which there are no objects at all, (E\*) is exactly appealing to the maximal consistent situation according to which there are no objects at all, i.e. (E\*) is exactly appealing to the situation represented by an absolutely empty world. Therefore one can directly paraphrase (E\*) as (E\*\*\*).



Premise (M1) was sufficiently discussed in chapter 1. Let us consider the legitimacy of (M2) and (M3) in the next section, where I will also clarify the meaning of the phrase ‘all-inclusive domain of discourse’.

### 3.1.2. Absolutely unrestricted quantification and the all-inclusive domain of discourse.

The first question that we should consider is the notion of domain that occurs in the meontological argument and in its premises: is the all-inclusive domain of discourse  $D$  an object or set-like object? This is a fundamental question for the validity of (M2) since if  $D$  was an object or a set-like object with all objects as members, then (M2) would be invalidated by Russell’s paradox. Indeed, Russell’s paradox traditionally shows that there is no object or set-like object with *all* objects as members, i.e. standard set theory shows that there is no universal set; whereas (M2) needs to consider  $D$  as the domain of *all* objects. The assumption that a domain is an object or a set-like object is based on what Cartwright (1994) calls the “All-in-one principle”:

[...] to quantify over certain objects is to presuppose that those objects constitute a “collection”, or a “completed collection”, - some one thing of which those objects are the members (p. 7).

For the purpose of meontological argument I will not endorse the All-in-one principle; therefore I don’t assume that the objects in a domain constitutes an object or set-like object; rather I just assume that *there are the objects we are speaking about*. As Florio (2014) recalls, an alternative to the All-in-one-principle is the following:

[...] rather than describing a domain as an object whose members constitute the range of quantification, one may describe it as *some objects* without assuming that there must be a single set-like object to which they all belong as members (2014)

Therefore the reference to an all-inclusive domain of discourse  $D$ , as it occurs in (M2), does not entail that  $D$  is a set or set-like object that contains everything, but it just entail that there are all the objects which we quantify over. In this way a domain would be a sort of plurality and the all-inclusive domain would be a sort of universal

plurality, so that our talking on it could be regimented in plural quantification<sup>56</sup>. One should pay attention to the following point: a plurality should not be considered a further entity added to the objects of the plurality itself. Rather, plural quantification should be taken as ontologically innocent:

Proponents of plural quantification [...] claim that these theories are ontologically innocent in the sense that they introduce no new ontological commitments to sets or any other “set-like” entities over and above the individual objects that compose the pluralities in question (Linnebo 2012).

Another alternative to the All-in-one principle is the conception according to which a domain is a property that is understood as a higher-order entity, since it is assumed a type-theoretic framework where properties are higher order entities respect to objects. In this way, by means of a second-order logic and an universal property as – for example – *being self-identical*, one can obtain the domain of all objects, with no restriction at all, since *absolutely everything* is self-identical.

Before considering the arguments against the truth of (MA) and the arguments for it in the next section, I point out that it seems necessary to split (MA) into (M2) and (M3) since there are some philosophers according to which the unrestricted quantification can be used without assuming the existence of an all-inclusive domain of discourse. For example Hellman (2006) argues that we can use our quantifiers without any restriction but at the same time we don't need to say that we are quantifying over *absolutely everything*, i.e. we can hold the so-called “generality relativism”<sup>57</sup>. Let us consider a sentence where ‘everything’ is explicitly used with no restriction at all, as for example:

(1) Everything is self-identical

Hellman (2006) proposes to consider it from the following point of view:

While there is no sense in speaking of ‘absolutely all objects’, or even ‘absolutely all the objects in this room’, we still allow, ‘Whatever may be recognized as an object (in this

<sup>56</sup> For an overview on plural quantification, see Linnebo (2012).

<sup>57</sup> I use the terminology that appears for example in Williamson (2003) and Florio (2014): *generality absolutism* is the view according to which it is possible to quantify over absolutely everything; instead *generality relativism* is the denial of such a possibility.

room or otherwise) will count as self-identical'. In this way relativity and unrestrictedness actually go hand in hand (p. 106)

Therefore no commitment to the existence of an all-inclusive domain of discourse is necessary by means of the paraphrase above.

Probably the meontological argument would work also replacing (MA) with a premise such as

(MA\*) Our quantifiers are sometimes unrestricted

Anyway, I would point out that there would be no significant difference between (MA) and (MA\*) if one considered domains as pluralities in the sense I recalled before. Indeed, in that case the all-inclusive domain of discourse would be just the objects which we quantify over and the only commitment would be just for them, as well as holding a unrestricted quantification. In such a conception of domain I don't see a real difference between <whatever may be recognized as an object will count as self-identical> and <absolutely everything is self-identical>.

### 3.1.3 Objections to generality absolutism

Premise (MA), i.e. generality absolutism, seems to be *prima facie* extremely reasonable, above all if one considers some typical sentences of metaphysics, where the quantification is surely absolutely unrestricted and the aim is exactly to obtain some results that hold for absolutely everything (for example when a metaphysician states that everything is concrete). However there are several objections against generality absolutism that I am going to recall by means of a brief overview. In the next section I will recall some possible replies and arguments for the truth of (MA).

#### *Objection from paradox*

I have already recalled that Russell's paradox offers us an objection to generality absolutism. Indeed, since the paradox shows that there cannot be a universal set, if one considered the all-inclusive domain a set, then one could not posit the existence of an all-inclusive domain without contradicting the standard set theory itself. Besides, if one

adopted the principle of separation in order to avoid Russell’s paradox, then one would immediately reject the notion of absolute everything, since one could speak about *all* objects just by *restricting* one’s domain of discourse (so one would not really speak of *all* objects).

The objection from paradox can be summarized in the following way:

Given a class  $C$ , let be  $R$  the class of all members of  $C$  that are not members of themselves. The assumption that  $R$  is in  $C$  yields the familiar contradiction:  $R$  is in itself if and only if  $R$  is not in itself. Thus  $R$  is not in  $C$  and we have shown that for every class  $C$  there is a class  $R$  not in it – there is no  $C$  that can serve as everything. (Lavine 2006, p.100).

It is possible to propose a similar objection – say semantic objection from paradox - without appealing directly to the notion of set or class, as Parsons (2006, p. 209) recalls in the following way. Let us assume that to one-place predicates are assigned objects  $(Ox)Fx$  and let us introduce the expression  $\eta$  such that ‘ $Fa$ ’ is equivalent to ‘ $a \eta OxFx$ ’ where  $\eta$  can be read as ‘has’, since  $OxFx$  could be the property of being an  $F$ . The paradox appears if we include the predicate  $\eta$  in the domain of the interpretation so that we can assign to the predicate  $\neg(x \eta x)$  an object  $Ox \neg(x \eta x)$ ; let us call  $t$  the term that has such a property. Therefore:

$$(2) t \eta (Ox \neg(x \eta x)) \text{ iff } \neg(t \eta t), \text{ i.e. } t \eta t \text{ iff } \neg(t \eta t)$$

Since we should state that  $Ox \neg(x \eta x)$  does not belong to the domain of the interpretation in order to avoid the paradox, then we should restrict our quantifiers.

*Objection from multiplicity of ontologies and from sortal restriction*

This objection is based on the argument according to which there are different ontologies and so there are different replies to the question “what there is?”, since an ontology depends on the conceptual framework one adopts and we certainly have available different frameworks. For example, an ontology could admit mathematical objects, whereas another one could not. Therefore we could not derive an *absolute*

conception of everything, because the description of what absolutely there is cannot be *absolutely* one. We should note that this objection does not imply that unrestricted quantification is impossible; rather it implies that *absolutely* unrestricted quantification is impossible: the objection – at least *prima facie* – allows us to use our quantifiers with no restriction at all, but *within* a framework among others.

Besides we could not posit something as the framework of all frameworks because at least it would imply contradictions on what there is: in the all-inclusive domain, for example, there would be mathematical objects (according to a framework f1) and there would not be (according to a framework f2):

Multiple universes of discourse are equally ‘correct’; taking their ‘union’ is ill defined (what are ‘all frameworks’ over which the union is to be taken?), unwieldy (‘satisfying no one’), and arbitrary. Conclusion: ‘absolutely everything’ must be relativised to a parsing [of experience]; it cannot really be ‘absolute’  
(Hellman 2006, p.84)

Another objection comes from Dummett’s (1981) thesis according to which domains of quantification are extensions of some substantival terms, where a substantival term is a term that provides a well-defined criterion of identity. Since absolutely unrestricted quantification needs to appeal to all-inclusive terms as ‘thing’ (in *everything*) or ‘object’ (*every object*) that cannot be considered substantival terms, then absolutely unrestricted quantification is impossible. Indeed, term as ‘thing’ must be

tacitly restrict[ed] [...] to a contextually appropriate sort, perhaps a very wide one, but nevertheless specific enough to provide some non-trivial principle of individuation, and therefore too specific to support an absolutely universal generalization, since it is held that an absolutely universal principle of individuation would be trivial  
(Williamson 2003)

*Objection from semantic indeterminacy*

This kind of objection does not necessarily deny the existence of an all-inclusive domain; rather it rejects the possibility to access to it and consequently the possibility to learn it and to communicate it. This limit is not simply based on the epistemological impossibility of knowing absolutely every *thing* there are in our world(s); rather it is the impossibility of establishing if an interpretation has really an all-inclusive domain or a less-than-all-inclusive domain, since “any use of a first-order quantification compatible with an all-inclusive (uncountable) domain is also compatible with a less-than-all-inclusive domain” (Rayo-Uzquiano 2006, p. 10).

The most important objection of this kind is due to an application of Löwenheim-Skolem Theorem, according to which “for every structure for a formal language [...] with an infinite domain, there is a small (countable) infinite substructure in which exactly the same sentences are true” (Lavine 2006, p. 105). If we apply this theorem to our language, as Putnam (1980) does, we obtain that the sentences that are true of the all-inclusive domain of discourse are likewise true of a less-than-all-inclusive domain. Therefore we cannot decide if we are really quantifying over absolutely everything or over a restricted domain.

#### 3.1.4. Replies to objections

The main reply to the objections against generality absolutism is based on Lewis (1991) and Williamson (2003) where it is argued that the generality relativist, i.e. who rejects the possibility of quantifying over absolutely everything, is not able to express her own negation of generality absolutism without being self-defeating. The relevant statement of a generality relativist is the following:

(3) It is impossible to quantify over absolutely everything

Therefore, as Lewis (1991) points out, the relativist needs to appeal to the notion of absolutely everything in order to reject it: in this way one needs to quantify over absolutely everything if one really wants to reject the quantification over *absolutely* everything; otherwise what one rejects would not be a real absolute generality's view:

Maybe the singularist replies that some mystical censor stops us from quantifying over absolutely everything without restriction. Lo, he violates his own structure in the very act of proclaiming it! (Lewis 1991, p. 68)

The relativist *in actu signato* states the impossibility of using absolutely unrestricted quantification, but she *in actu exercito* considers it possible. This argument is a sort of *elenctic* refutation as well as the refutation of the Opponent of the Law of non-contradiction that appears in *Metaph. IV*. Who intends to deny the Law of non-contradiction must assume it as true just for denying it, otherwise her statement would not be a real negation of the Law itself (because it would be either a nonsense, or a pseudo-negation). But in this way the Opponent cannot really deny the Law of non-contradiction, since she must confirm it. As Severino (1958) points out, the condition for rejecting the Law-of-non-contradiction is the Law itself, therefore it cannot be negated (see also section 3.2.2).

Anyway, Hellman (2006) suggests a very simple device in order to avoid – at least *prima facie* - the inconsistency that I have recalled by means of Lewis' quotation. Hellman proposes to distinguish between *use* and *mention* of phrases such as 'absolutely everything'. In this way the generality relativist can *mention* these phrases without incurring in self-contradiction and at the same time she can state that one cannot sensibly *use* these phrases.

However there is more problems for a generality relativist, since it seems that she must accept the possibility of quantifying over absolutely everything just for ruling out it, as Williamson (2003) efficaciously shows as follows. If the generality relativist wants to reject *really* the possibility of absolutely unrestricted quantification, she needs to state that no domains at all is absolutely unrestricted. Therefore (3) should be understood as the following:

(4) For every domain, there is something that it is not in that domain

Let us consider the domain of quantification of (4). If we did not count it as one of the domains over which (4) ranges, then there would be at least one domain – the domain of (4), say *d4* – that could deny (4) itself because there could be an all-inclusive domain of discourse (*contra* (4)). In other words, the phrase 'every domain' that occurs

in (4) must include  $d4$  if it is really a negation of generality absolutism. Given that, (4) implies (5)

(5) There is something that is not in  $d4$

Who states (5) is quantifying over  $d4$  (“*there is something...*”) and at the same time she is quantifying over something that is not in  $d4$  (“*there is something that is not in  $d4$* ”). Therefore the generality relativist is constrained to state that there is something in  $d4$  that is not in  $d4$ , contradicting herself.

The problems that rise from paradoxes can be faced fundamentally in two ways, in order to hold the possibility of absolute generality:

i) rejecting the All-in-one principle so that there isn't an object or set-like object over which one is quantifying. I recalled this strategy in section 3.2.1, where I also pointed out two alternatives to the All-in-one principle. The first strategy is the conception of domains as pluralities, without no ontological commitment to pluralities as objects (i.e. any plurality is *just* the objects on which one quantifies).

ii) rejecting the All-in-one principle as I said before, but considering domains as properties that are higher-order entities respect to objects, within a hierarchy of entities.

I suppose that the best strategy for the meontological argument's aim is (i).

The objections from framework and from sortal restriction seem to be ineffective. As Priest (2007) notes, “we employ universal quantification in places which are trans-(conceptual scheme) and trans-sortal. [...] ‘Anything’ can mean anything of any sort, and of any conceptual scheme”<sup>58</sup>. The weakness of this kind of objection lies on the fact that it does not undermine the *existence* of an all-inclusive domain; rather it shows that we can use our quantifiers in equivocal ways, but this is a linguistic limit, rather than a metaphysical one.

---

<sup>58</sup> However I will recall soon the difference between ‘anything’ and ‘everything’.



A reply to the general objection from semantic indeterminacy can be found in Rayo (2003). This reply is based on the notion of uninformativeness as a feature that *only* the all-inclusive domain has. Indeed, if one states, for example, that everything is self-identical, then one is not giving us any information at the level of linguistic meaning:

The all-inclusive domain has a feature that distinguishes it from any other, namely, the fact that any attempt to specify it as one's intended domain of quantification must be utterly uninformative, at the level of linguistic meaning. No other domain has this feature (Rayo 2003, p.104)

Given that, we can determinate among interpretations which is the interpretation with an all-inclusive domain, assumed that the speaker is fully cooperative in order to express a sentence with an absolutely unrestricted domain.

Dieveney (2013) proposes an account called “genuinely unrestricted quantification”, starting from the debate between McGee (2000) and Lavine (2006). The latter proposes to read a sentence like

(1) Everything is self-identical

as a full schema  $S = S$  such that the variable ‘S’ accepts *any* expression in which the variable occurs and we can also accept as substitution instances for ‘S’ those which result from any expansion of our language. In this way Lavine endorses a distinction between the use of ‘every’ and ‘any’, following – as Florio (2014) notes – Russel’s *typical ambiguity*, according to which we can for example accept that  $p$  is true or false, for *any* proposition  $p$ , but we cannot accept that *all* propositions are true or false. Therefore, in Lavine’s account (1) should be read as

(1L) Anything is self-identical

Besides, note that in Lavine’s account the substitution instances for the full schema are not objects in an all-inclusive domain, but they are names in our language or expansions of it. However, Dieveney recalls that this approach to metaphysical sentence as (1) is

very controversial, since we cannot state that a schema is true or false, but just that it is a good or bad “recipe” in order to “prepare” true statements. Since metaphysics wants to commit itself to true/false assertions, the paraphrase of (1) by means of a full schema seems to betray original metaphysics’ aim: “When a metaphysician makes an assertion like <Everything is located in space-time>, she is making a claim about the world. It has a truth value. [...] While the logician might well be satisfied with Lavine’s account, we want an account that equally satisfies the metaphysician” (Dieveney 2013, p. 6).

McGee (2000) bases his argument for unrestricted quantification on the following premises:

(G1) Our formal rules of inference determine the meaning of the quantifiers in deductive contexts

(G2) These rules are open with respect to quantification

(G3) Anything that exists is nameable

(G4) Quantifiers can range over anything that can be named

Therefore

(G5) Quantifiers can range over everything that exists.

(see Dieveney 2013, p. 7)

The characteristic premise of this account is (G2). It means that if we have a rule of inference we can apply it with no limits, namely we can apply it to any well-formed formula and constant in our language, so much as when we expand our language.

Anyway Lavine (2006) shows that McGee’s argument begs the question because it *de facto* presumes that there is an all-inclusive domain of absolutely everything. At this end Dieveney recalls the following case: two people – Harry and Sally – both accept (G1)-(G4) set of premises. Let us pick an object named “P” from the range of Harry’s quantifiers. If Sally is really quantifying over absolutely everything, then “P” should be in the domain of Sally’s quantifiers. Sally can accept to add any name to her language if it denotes an object within the domain of her own quantifiers. But we cannot

decide whether “P” denotes an object within the domain of her quantifiers because such an object comes from the domain of Harry’s quantifiers. Certainly, we could admit it in the domain of Sally’s quantifiers if we assume that Sally is quantifying over absolutely everything; but that is what McGee’s argument should prove.

For making up his own account, Dieveney proposes to start from McGee’s account of the quantifiers, by assuming (G1) and (G2)<sup>59</sup>. Then he reads (G2) by means of Lavine’s full schema: a rule is open in the sense that it is a full schema, so:

(G2\*) These rules are full schemas with respect to quantification

In order to bypass the “Harry and Sally’s problem”, namely the impossibility of determining if they are quantifying over the same all-inclusive domain – i.e. the impossibility of determining if the domain over which each of them quantifies is really the *absolutely* all-inclusive domain -, Dieveney notes that we need to appeal to criterias for deciding when the expansion of our language is acceptable, i.e. when we can add a new name in our language such that the object designed by that name turns out to be within the domain of our quantifiers: “such criterias are not a part of the rules of natural deduction. They must come from outside our understanding of the quantifiers” (2013, p. 13). For example, for the language of a scientific theory that wants to describe our actual world we need some implicit or explicit criteria such that we don’t allow the add of a name as ‘Pegasus’. Therefore, if one wants to allow *any* expansion of a language, then it is sufficient to supply no restrictions at all. Since by (G1) and (G2\*) our quantifiers are defined by *open* rules (namely full schema), “the resulting quantifiers are genuinely unrestricted” (p. 13).

### 3.1.5. The “idealistic” strategy

In this section I will propose an alternative strategy for showing that the use of absolutely unrestricted quantification implies the acceptance of the absolutely empty world. At this end, I introduce the following principle:

(ODN) Every entity is determinate only in virtue of a difference with other entities (every determination is negation, *omnis determinatio est negatio*)

---

<sup>59</sup>And also G3, G4.

I would call this strategy: “idealistic way”, since (ODN) is a typical principle that occurs in Fichte and Hegel’s metaphysics, as I will recall in the next section.

I will show that from the set of three premises as (M1), (MA) and (ODN) one can *prima facie* derive a contradiction; then I will appeal to the existence of an absolutely empty possible world in order to make consistent the above-mentioned set.

By (ODN) let us derive the following:

(ODN\*) Entities that fall under the same concept all differ from same common entities, i.e. for each domain of  $x$ , for all  $x$  there is a  $y$  such that  $y \neq x$

It is already clear that we will obtain a contradiction, since (ODN\*) is not consistent with (MA), for holding (ODN\*) is equivalent to say that every quantification is restricted. Anyway, I will show how the introduction of an empty possible world allows us to avoid the contradiction. Let us consider again the domain  $D$ , i.e. the all-inclusive domain of discourse, in the sense I established in section 3.1.2.

By (MA) and (ODN\*) we obtain:

(I1) Each object of  $D$  is different from something – say  $k$

Since  $k$  is a thing or entity, it belongs to  $D$ . Therefore, by (I1):

(I2)  $k$  is not  $k$

(because  $k$ , being an entity of  $D$ , is different from  $k$ , since *every* entity of  $D$  is different from  $k$ )

By the identity principle:

(I3)  $k$  is  $k$

Therefore, from conjunction of (I2) and (I3), we obtain the following contradiction

(C)  $k$  is not  $k$  and  $k$  is  $k$

(Certainly, also (I2) is a contradiction).

I think this puzzle can be solved by allowing the existence of an absolutely empty world. As I said before, such a world is an entity that represents the absence of every objects. Let us replace (I1) with (I1\*) in order to avoid the rise of the contradictions (I2) and (C):

(I1\*) Each object of  $D$  is different from the absence of everything and this absence is represented by an entity, i.e. an absolutely empty possible world

Therefore each object is different from what the absolutely empty possible world represents. In this way, one can state that each entity of  $D$  is different from the absolute absence, but one does not need to quantify over this absence, since one just needs to quantify over the empty possible world that – in turn – represents the absolute absence.

Since the existence of an empty possible world allows us to make consistent a set of three very reasonable premises, it is more reasonable to admit it rather than to reject it.

### 3.1.6. *Omnis determinatio est negatio*

The utterance “*omnis determinatio est negatio*” can be found in Spinoza, as Melamed (2013) recalls:

With regard to the statement that figure is a negation and not anything positive, it is obvious that matter in its totality, considered without limitation, can have no figure, and that figure applies only to finite and determinate bodies. For he who says that he apprehends a figure, thereby means to indicate simply this, that he apprehends a determinate thing and the manner of its determination. This determination therefore does not pertain to the thing in regards to its being [*esse*]; on the contrary, it is its non-being [*non-esse*]. So since figure is nothing but determination, and *determination is negation* [*quia ergo figura non aliud, quam determinatio, et determinatio negatio est*], figure can be nothing other than negation, as has been said. (Spinoza, quoted in Melamed 2013, pp. 175-176).

The principle is endorsed and developed by Hegel in his dialectic, as it is known. Anyway we should not forget the importance given by Fichte to this principle. As Inwood (1992, p. 78) notes<sup>60</sup>, in Fichte's metaphysics Spinoza's principle becomes the so-called "Law of reflective opposition" (*das Reflexionsgesetz des Entgegensezens*): "it is only through opposition that it is possible to obtain a specific and clear consciousness of anything whatsoever" (Fichte, *Foundations of Transcendental Philosophy nova metodo*, quoted in Melamed 2013, p. 180). Frank (2005) affirms that *omnis determinatio est negatio* should be read as "everything is what it is in virtue of its contrast with and relation to other things" (p. 348)<sup>61</sup>. Anyway, (ODN) principle could be considered the direct consequence of Aristotle's term logic

Such a method invoking "determinate negation" is often described as deriving from Spinoza's claim that "all determination is negation", but it can be just as readily seen as a consequence of Hegel's use of Aristotle's term logic. In term logics, negation is understood as a relation existing primarily between *terms* of the same type: a colour concept such as "red," for example, will be understood as meaningful in as much as it stands in opposition to an array of contrary colour terms such as "blue" "green", and so on. In contrast, in logics which take the *proposition* as the fundamental semantic unit (such as the classical predicate calculus deriving from Frege and accepted by most analytic philosophers), negation is typically regarded as applying primarily to whole propositions rather than to sub-sentential units. [Redding (2010)]

For my aims, we need to read the principle by intending negation as "a relation existing primarily between terms" that refer to objects. Is (ODN) a defensible principle? According to Severino (19xx, 19xx) (ODN) is somehow based on the Law of non contradiction. Reading Aristotle's *Metaph. IV*, Severino distinguishes between *contrary* terms and *contradictory* terms in a way that can be spelled out as follows:

(CR)  $x$  is the contrary of  $y$  iff  $x$  is non- $y$

where ' $y$ ' ranges only over the objects of the same genus of ' $x$ '.

(CD)  $x$  is the contradictory of  $y$  iff  $x$  is non- $y$

where ' $y$ ' ranges unrestrictedly over every objects.

---

<sup>60</sup> I take this information from Melamed (2013).

<sup>61</sup> I take this information from Melamed 2013

Given an object  $o$ , let us call the array of non- $o$  in the (CD)-sense: ‘the absolutely other of  $o$ ’. For example, given the object denoted by the term ‘chair’, the absolutely other of ‘chair’ is given by absolutely everything that is not a chair, namely: this table, the tree in the gardens, the number 7, the property of being red, and so on. According to Severino, the self-identity of  $o$  is logically equivalent to the negation of the absolutely other of  $o$ , so that we can conceive the identity of anything if and only if we conceive it as different from its absolutely other, namely from its own contradictory<sup>62</sup>. This co-implication is very close to (ODN). Therefore Severino’s strategy for showing the truth of it can be a strategy for the truth of (ODN).

It is relevant to note that the “idealistic” strategy of the meontological argument would not work if we understood the ‘negation’ occurring in (ODN) as negation of propositions. At this end, let us consider Berto’s (2004) formalization of (ODN):

$$(DN) \quad \forall x(Det(x) \leftrightarrow \exists X \neg X(x)) \quad (2004, p.114)$$

i.e.: anything is determined in virtue of the determinate properties that it has not got. Certainly, that principle is compatible with the thesis that anything is determinate by the properties that it has; but (DN) adds the lacking of certain properties as condition for integrating the identity of a thing:

la cosa è determinata, in quanto non solo gode di proprietà, ma *non* gode di qualche proprietà *determinata*. Ossia, esiste un’autentica proprietà (diversa dal contraddittorio generico di una proprietà di cui la cosa gode, o dal mero complemento dell’estensione di un concetto sotto cui cade), di cui la cosa *non* gode. (2004, p. 114).

Given (DN), (ODN\*) becomes:

(DN\*) Entities that fall under the same concept all lack the same common properties, i.e. for each domain of  $x$ , for all  $x$  there is a  $X$  such that  $\neg X(x)$

---

<sup>62</sup> Severino espresse this thesis in several way. One of the most used is the following: “ <L’essere è essere> o, *che è il medesimo*. <L’essere non è non essere>” (1958, p. 175).

Let us call  $K^*$  the property that *every* entity of  $D$  lacks, e.g. the property *being different from itself*. Since a property is an entity, the property  $K^*$  is included in  $D$ ; therefore we should state that

(I2\*)  $K^*$  lacks the property  $K^*$

It is clear that (I2\*) is not a contradiction and it does not generate any other contradiction, whereas (I2) – based on a different formalization of “*omnis determinatio est negatio*” – does. Indeed it is perfectly consistent that the property *being different from itself* lacks the property of being different from itself as well as any other entity (because that property is identical to itself, i.e. it is *not* different from itself).

Maybe we could use (DN) in the following way. Let us assume that there aren't uninstantiated properties. Therefore by (DN) we can state that:

(DN2)  $\forall x(Det(x) \leftrightarrow \exists X \neg X(x) \wedge \exists y X(y))$

Since the object  $x$  is different from the object  $y$  for the principle of indiscernibles (because there is at least a property that  $y$  has and  $x$  does not), then we can state (DN) and (DN2) just in case the following holds:

(DIFFERENCE)  $\forall x \exists y (x \neq y)$

that is equivalent to (ODN\*). Therefore we obtain again the contradiction (I1) and consequently we can appeal to the existence of the empty world in order to avoid it:

(I1\*) Each object of  $D$  is different from the absence of everything and this absence is represented by an entity, i.e. an absolutely empty possible world.

Anyway this strategy – namely the “idealistic” meontological argument *based on (DN)* – turns out to be again very controversial. Indeed by (I1\*) we should state that the empty world is different from the absence of everything, but the absence of everything is not an entity (although it is *represented* by the empty world itself) and it



has no properties at all (since we assumed – in the latter strategy - that properties existentially depends on objects).

Therefore it seems more favourable to base the “idealistic” strategy on (ODN) itself rather than on its possible formalization (DN).

### 3.1.7. Objections against meontological argument

Let us consider first the meontological argument of section 3.1.1. The main objection one could express is the following: the fact that we need the notion of an absolutely empty possible world in order to quantify unrestrictedly over everything does not necessarily imply the metaphysical/ontological consequence about the *existence* of such a world. (Similarly, the fact that we use the empty set in mathematics does not necessarily imply that there exists an object that is the empty set). To this objection I would reply in the following way. Consider the premise (M2):

(M2) There is an all-inclusive domain of discourse – say  $D$

In section 3.1.2 I assumed that the existential quantifier occurring in (M2) does not imply an ontological commitment to a set or set-like object (namely, I didn't assume the so-called “All-in-one principle”). I just assumed that there are the objects which we quantify over and I assumed that we can speak about this plurality of objects by means of plural quantification. Anyway *there are* those objects which we quantify over. Now consider the step from (E\*\*) to (E\*\*\*):

(E\*\*) I am quantifying over  $D$  IFF I am quantifying over a domain of discourse beyond which there is the absence of all objects.

(E\*\*\*) If I am quantifying over  $D$ , then I am quantifying over a domain of discourse beyond which there are no objects at all and this absence of all objects is represented by an absolutely empty possible world, included in the domain itself.

The objection that I am dealing with can be spelled out as follows: the existential quantifier occurring in (E\*\*) – “...*there is* the absence of all objects” - does not imply an ontological commitment to the existence of the empty world. However this objection

would work if we didn't assume premise (M1). According to it, the absence of everything – namely the absence occurring in (E\*\*) – cannot be separated from the empty world that represents it. Therefore a sentence like “There is the absence of everything” implies a sentence like “There is an empty world that represents the absence of everything”.

But the objection could be “reanimated”, stating that (M1) exactly assumes what the meontological argument should prove! To this further objection I would reply in the following way: the existence of the empty world cannot be inferred by (M1) itself because that premise simply states how to account for the phrase ‘nothingness’ and it affirms that the absence of everything cannot be *separated* from the empty world. So (M1) does not state that the empty world exists; certainly, if the absence of everything exists, then – by (M1) – the empty world exists. But the existence of the absence of everything is not assumed by means of (M1); rather it is gained by the development of the argument; in particular it is gained by the paraphrase of (E). In other words, it is the “synergy” of absolutely unrestricted quantification and the account of nothingness that allows us to infer the existence of the empty world. In order to better understand the difference between premise (M1) and the conclusion of the meontological argument (namely that the empty world exists among the possible worlds), I recall D’Agostini (2010), according to which

Intuitively, there are three main questions concerning the concept of nothing: does the object whose name is ‘Nothing’ exist? [...] Do we really have the concept of nothing? What is nothing like? (What is the content of the concept of nothing?) (p. 133)

Now, (M1) and in general the first chapter is a reply to the second and to the third question, whereas the meontological argument (and also the next argument I will present in this chapter) is a reply to the first question.

Another objection is given by the fact that the meontological argument shows the existence of an empty world, but it does not show the existence of an empty *possible* world: an empty world could be counted among *impossible* worlds. If it was the case, then the meontological argument would be unimportant in order to support metaphysical nihilism, since its thesis affirms that there is a *possible* world. I would reply that the main accounts of impossible world could not be *a priori* fulfilled by an

*absolutely* empty world. If we assume that an impossible world is a world at which certain laws of logic fail; or at which the laws of *classical* logic fails; or at which explicit logical contradictions are realized<sup>63</sup>; then it seems very controversial to count the empty world among the impossible worlds, since there are no truth-makers in it for making true explicit logical contradictions or other “treason” against any logical law<sup>64</sup>.

One could object that the step from (E) to (E\*) is not guaranteed: there is no reason according to which quantifying over the domain of all objects entails quantifying over a domain beyond which there are no objects at all. Indeed one could simply posit the domain of all objects. Full stop. In order to reply to this objection, I recall to an argument by Jacquette (2010) that is very useful for showing the soundness of the above-mentioned entailment<sup>65</sup>, although it is employed in another topic (namely, the question about truth-makers and false-makers). Let us consider, following Jacquette’s example, the proposition:

<The watch is on the table>

Let us assume that it is false, being no watch on the table and being only a teacup and a paperweight on it. Let us consider what makes <The watch is on the table> false and therefore what makes <The watch is not on the table> true. *Prima facie* a solution could be the following: “the complete description of the watch-less table” (p. 155), since it would rule out the presence of the watch. However, according to Jacquette, that solution works if it is spelled out as follows:

(J1) the teacup is on the table

(J2) The paperweight is on the table

(J3) The teacup and the paperweight are the only things on the table

Therefore

(J4) It is false that the watch is on the table

(2010, p.156)

---

<sup>63</sup> See Berto (2013a).

<sup>64</sup> See section 4.2. about the question of truthmaker for metaphysical nihilism.

<sup>65</sup> However, I devised the meontological argument before knowing Jacquette (2010).

Now – and this is the point I underline in order to reply to the objection – proposition (J3) “is logically equivalent to the explicitly negative existential: <There is nothing on the table other than the teacup and the paperweight>” (p. 156). So the basic intuition of Jacquette’s strategy is the idea that a totality (in his case the totality of all objects of the table) is (also) defined *via negationis*, by ruling out that there are other objects other than the objects of that totality. Let us return to the meontological argument. The step from (E) to (E\*) is guaranteed because – by means of Jacquette’s strategy - a proposition like <All and only the objects are in the all-inclusive domain> turns out to be logically equivalent to <There is nothing in the all-inclusive domain other than the objects that there are>, namely: <There are no objects at all beyond the all-inclusive domain>. Therefore quantifying over the all-inclusive domain is logically equivalent to quantifying over a domain beyond which there are no objects at all. Yet one could criticize the use of (M1), i.e. the use of the empty world-account of nothingness in order to get the conclusion: the empty world-account of nothingness should be used when ‘nothing’ is not a quantifier phrase, whereas in a proposition like (E\*) it is, as well as in propositions like <There is nothing in the all-inclusive domain>, <There is nothing on the table other than the teacup and the paperweight>, and so on. I would reply that in the case of (E\*) we need to go on with our paraphrase: since the all-inclusive domain “contains” absolutely every object, then what remains other than such a domain is the absence of every object, whereas in the case of – for example - <There is nothing on the table other than the teacup and the paperweight> there could be other objects, although not on that table. Then we need to employ an account of ‘nothingness’ as non-quantificational phrase, i.e. an account of the absence of all objects (see chapter 1).

Let us consider now the “idealistic” strategy for the meontological argument. A very strong objection is based on an instance of (I1\*)

(I1\*) Each object of  $D$  is different from the absence of everything and this absence is represented by an entity, i.e. an absolutely empty possible world

namely the case according to which the object is the empty world itself. Indeed we should affirm that the empty world is different from the absence of everything and so the empty world would be different from itself, given that the absence of everything cannot be separated by the empty world. Therefore the existence of an absolutely empty

world would not solve the puzzle expressed by (I2). This objection fails because what (I1\*) implies is that the empty world *as world* is different from the absence of everything, namely from its “content”. Although the latter is always represented by the former, we are not forced to affirm that the empty world *as world* is different from itself; rather we need to claim that the empty world *as world* is different from the structure whose it is a *moment*. I use ‘moment’ in a Hegelian fashion, namely “das Moment”, i.e. an aspect of a structure that cannot be separated from the other aspects of the same structure and from the structure itself, but according to which it can be distinguished from the other aspects and from the structure itself<sup>66</sup>.

Another objection against the “idealistic” strategy is based on a criticism against (ODN) that would show its failure by means of a counterexample. If one adopted a sort of “existential monism”, according to which there is exactly one concrete object – say *e* – (ODN) would not be true in that case because the only existing thing would not be different from anything, being just *e*. Anyway, in that case one should admit that a sentence like

(SZ) There is only one entity *e*

should be understood as

(SZ\*) There is only one entity *e* IFF there are no entities at all besides *e*.

Similarly to the step from (E\*) to (E\*\*\*), we get:

(SZ\*\*) There is only one entity *e* IFF there is the absence of everything besides *e*

Therefore, by (M1) (a premise we also assumed for the “idealistic” strategy)

(SZ\*\*\*) If there is only one entity *e*, then it is different from the “content” of the empty world, i.e. from what such a world represents (the absence of every entity)

---

<sup>66</sup> Using a two-moment structure in order to approach the question of nothingness is a debt that I owe to Severino (1958). At this end, see section 5.2. About the link to Hegelian moment, see section 5.1.

So (ODN) would not fail because in the “Spinozist” case  $e$  would be different from the absence of every thing that is represented by an empty world. Maybe one could object that the existence of an empty world would be inconsistent with a sort of existential monism, if such a world did not coincide with  $e$ . I would reply that this is a problem for the existential monism, rather than a problem for (ODN): how could the existential monist affirm the existence of exactly one entity, without referring to the absence of every thing besides such an entity? If the existential monist refers to the absence of every thing – as she should do – then she needs to allow the existence of the empty world (if we assume – by (M1) - that the best paraphrase for ‘nothingness’ is given by the use of the empty world-account). From this point of view, the existential monism is maybe an inconsistent thesis; but – again – that seems to be a problem for existential monism, rather than for (ODN).

### **3.2. The elenctic argument for metaphysical nihilism**

#### 3.2.1. Premises and development

The argument has the following premises which I will discuss in the next sections<sup>67</sup>:

(M1) ‘Nothingness’ is a noun phrase that refers to an empty world<sup>68</sup>, i.e. to an entity that represents the absence of all objects and that absence cannot be separated from the empty world itself, but it can be distinguished from it.

(EL1) Any object is not contradictory

The elenctic argument runs as follows. Let us assume that the empty world does not exist because it is a contradictory object (therefore, by EL1, it does not exist or subsist at all). Since the empty world is a contradictory object and since – by (EL1) – there are no contradictory objects, the empty world is *de facto* the absence of everything. By (M1), the absence of everything cannot be separated from the empty world that

---

<sup>67</sup> The premise (M1) was already discussed in chapter 1; therefore I will not deal again with it in this chapter.

<sup>68</sup> As I pointed out, I use (ABSOLUTE EMPTINESS)- account of the empty world.

represents that absence (see chapter 1.4). Therefore, the rejection of the empty world from our ontology implies the acceptance of the empty world itself.

Indeed, if one claims that the sentence “There is an empty possible world” is false because one assumes that any absolutely empty world is a contradictory entity, then one admits that the sentence “The empty possible world is the absence of everything” is true, given that a contradictory object is *de facto* identical to the absence of everything (by EL1). Therefore, by (M1), we get the empty world *just because we reject it* (for this reason I call it “elenctic” argument).

Before considering the soundness of the premises in the next section, we should note that the argument works if: i) the empty world is a contradictory object; ii) a contradictory object is *de facto* the absence of everything.

Let us consider the main objection against an absolutely empty world, in order to show that all of them can be – more or less explicitly – spelled out as sentences that posit the empty world as a contradictory entity. Indeed the elenctic argument works by assuming the truth of anti-nihilism for showing that – by just an elenctic process – we are forced to admit the truth of metaphysical nihilism.

In section 2.2.1 I recalled Lowe’s (1998) objection against an absolutely empty world so that it turns out to be a claim that such a world is a contradictory entity: the empty possible *world* as maximal way things are not (since they do not exist at all) is not a *world* because *it* is a maximal way the sum of all existing objects could have been that is not a maximal way the sum of all existing objects could have been.

In section 2.2.4 I recalled Heil’s (2013) objection according to which an absolutely empty world cannot be a world at all without being a contradictory entity, since it would be at the same time something (a possible world) and absolutely nothing. In the same section I presented McDaniel’s (2013) argument against the empty world: since an absence is – broadly speaking “something” -, a world that represents the absence of everything would be a world that represents something. Therefore we can claim that an empty world is a contradictory entity because it represents something and it does not represent something.

According to Lewis (1986) an empty world is not compatible with his own ontology since world is the mereological sum of spatiotemporally interrelated things; therefore an empty world would be a sum of things (being a world) that is not a sum of things (being no things at all). So also in this case an empty world would be a contradictory entity.

There are certainly other possible objections against the empty world (see chapter 2) and it is not granted that they all can be spelled out as sentences that posit the empty world as a contradictory entity. Anyway, in order to assure condition (i), I propose a general strategy for showing *a priori* why the empty world could be considered a contradictory entity. It is not a uncontroversial strategy and I am not sure it necessarily works, but it can be a sort of implicit assumption for putting the elenctic argument in operation. We have seen that the absolutely empty world is something (being a world) that represents the absolute absence of everything. If the latter ‘everything’ is used without restriction, then the absence of everything is also the absence of the empty world itself. Therefore *there is an entity or a determination*, i.e. the world itself, according to which *there are no determinations*, neither the world itself. The “content” of the empty world contradicts the existence of that world. Similarly, the existence of the empty world as world contradicts the absence of everything because the latter is represented by something, negating the absence of everything itself. As Coggins notes:

[...] there could *exist* in this world an abstract object, according to which no abstract or concrete objects exist [namely an absolutely empty world; *author-entry*]. This could be a world such that if that world *obtained* there would be no abstract or concrete objects, *including the world itself*. Absolute nihilism *may not even be coherent* when we work it out [...]<sup>69</sup>

Absolute nihilism (what I call strong metaphysical nihilism) would not be coherent just because the empty world *as world* contradicts its own “content”, namely the absence of unrestrictedly *everything*. One should note that the case I am considering is different from the contradictory object **nothing** introduced by Priest (2014) (see chapter 1). Indeed in Priest’s account the absence of all object is *itself* an object, turning out to be a *contradictory* object. Instead in my account the empty world is contradictory because the world as such negates the absence of everything and *viceversa*.<sup>70</sup> Besides the absence of everything does not overlap with the empty world as world, as I pointed out in the previous sections. Therefore by means of my account one cannot state that the empty world is contradictory because it is and it is not the absence of everything; rather

---

<sup>69</sup> Coggins (2010), p. 59.

<sup>70</sup> I will return to this point in section 5.2.



one should state that the empty world is contradictory because it *represents* the absence of everything.

Consider now condition (ii): a contradictory object is *de facto* the absence of everything. In other words, *nihil negativum* and *nihil absolutum convertuntur*.

However, if this convergence worked, then a proposition like (PK) <I have a round-square coin<sup>71</sup> in my pocket> would become (PK\*) <I have no coins in my pocket> (or <I have the absence of every coin in my pocket>). That seems to be very controversial because (PK) does not rule out that I have other (non-contradictory) coins in my pocket; therefore the paraphrase by means of (PK\*) would work only if we added a condition, namely that there is *only* a round-square coin in my pocket. But certainly this addition is not granted. Anyway the objection begs the question, since we assume – by (EL1) – that any object is non-contradictory. Indeed ‘round-square coin’, being a contradictory object, does not denote anything at all and we can use the paraphrase of zilch that I proposed in section 1.4<sup>72</sup>, where I show how ‘zilch’ denotes the absence of everything. We can understand (PK) by means of (PK\*) because (PK) simply states: (PK’) <I have zilch in my pocket>. We don’t need to add the condition that in my pocket there is *only* zilch in order to read (PK’) as (PK\*): the fact that there is zilch in my pocket is enough to state that there is no objects at all in my pocket, as (PK\*) affirms.

### 3.2.2. Any object is not contradictory

In this section I recall two arguments for the truth of (EL1).

Lewis (1986) proposes an argument for showing that he cannot admit impossible world without violating the classical logic background, in particular the Law of non contradiction, *at the actual world*. This argument turns out to be a good argument for (EL1), as I am going to recall. Lewis considers the expression ‘at world *w*’ a “restricting modifier”, namely as something that just restricts the domain of our quantifiers to certain parts of *w*, with no effect on the truth-functional connectives:

For comparison, suppose travellers told of a place in this world – a marvellous mountain, far away in the bush – where contradictions are true. Allegedly we have truths of the form

---

<sup>71</sup> Or if you prefer, <I have a round-non-round coin in my pocket>

<sup>72</sup> One could object that I cannot appeal to zilch in the case of a contradictory object, since ‘zilch’ denotes anything at all, neither possible, nor impossible object. However, I think I can use zilch-strategy, since I assume that there are no contradictory objects. If I didn’t assume that premise, then I could not use zilch-strategy, because a round-square coin would be an (impossible) self-identical object, i.e. something.

‘On the mountain both P and not P’. But if ‘on the mountain’ is a restricting modifier, which works by limiting domains of implicit and explicit quantification to a certain part of all that there is, then it has no effect on the truth-functional connectives. Then the order of modifier and connectives makes no difference. So ‘On the mountain both P and Q’ is equivalent to ‘On the mountain P, and on the mountain Q’; likewise ‘On the mountain not P’ is equivalent to ‘Not: on the mountain P’; putting these together, the alleged truth ‘On the mountain both P and not P’ is equivalent to the overt contradiction ‘On the mountain P, and not: on the mountain P’. That is, there is no difference between a contradiction within the scope of the modifier and a plain contradiction that as the modifier within it. So to tell the alleged truth about the marvellously contradictory things that happen on the mountain is no different from contradicting yourself. (Lewis 1986, p. 7 note 3).

Suppose now that there are contradictory objects in a world  $w$  – say for example: <at  $w$  the coin  $c$  is round and the coin  $c$  is not round>. By Lewis’ argument, we should state *in the actual world* that <at  $w$  the coin  $c$  is round and not: at  $w$  the coin  $c$  is round>. Since the introduction of a contradictory object implies that we should state a contradiction in the actual world – where we suppose the Law of non contradictions holds -, it seems more reasonable to rule out contradictory objects by affirming (EL1).

The second argument for (EL1) I am going to recap is based on Aristotle’s defense of the Law of non contradiction (LNC) and it was proposed by Severino (1982). Indeed I think there is a kind of formulation of LNC that is hardly debatable, so that the choice of respecting LNC appears strongly reasonable. Let us consider the *metaphysical* or *ontological* kind of formulation of LNC, for instance see Berto (2006, p. 27):

$$(LNCm) \quad \forall x \forall P \neg (P(x) \wedge \neg P(x))$$

that is a logical formalisation of one of the Aristotelian formulations. As it is known, although (LNCm) cannot be subject to demonstration, Aristotle offers an argument to prove it undeniable, i.e. the *elenctic refutation*<sup>73</sup>: if someone tried to deny (LNCm), he must at least accept that the negation of (LNCm) is itself and it is not (LNCm), otherwise he could not really deny (LNCm): either he says the same of (LNCm), or he keeps silence, or he says a nonsense. In any case he cannot *truly* deny (LNCm). Emanuele Severino shows how to delve into this argument and find the authentic

<sup>73</sup> In this dissertation I will not consider dialetheism, that could undermine LNC. Anyway I think at least the metaphysical or ontological formulation of the LNC cannot be undermined by dialetheism. See Berto (2006), p. 221.

strength of (LNCm)<sup>74</sup>. Let us consider a metaphysical formulation of contradiction (Berto 2006, p. 23) such as

$$(Cm) \exists x \exists P (P(x) \wedge \neg P(x))$$

Severino (19xx) notes that in order to affirm a genuine contradiction we need to assume that  $P(x)$  and  $\neg P(x)$  are *ab origine* different: the case that a coin is round is *different* from the case that the same coin is not round. If we assume that difference, then we can really affirm a metaphysical contradiction like (Cm), by stating that *at the same time* it is the case that  $P(x)$  and it is not the case that  $\neg P(x)$ . But assuming the difference exactly means assuming (LNCm). In Severino's words:

Quando infatti, affermando che <rosso è verde> ci si trovasse in una situazione, in cui effettivamente non è saputa, non è presente, non è intesa alcuna differenza tra rosso e verde, allora la legge dell'opposizione sarebbe negata se si dicesse che rosso non è verde, e non dicendo che rosso è verde. Se rosso è presente come avente lo stesso significato di verde, si deve certamente dire che rosso è verde. Perché l'opposizione resti effettivamente negata, si richiede che la differenza, l'opposizione di rosso e verde, sia saputa, affermata, sì che rosso, saputo come opposto a verde, sia negato come opposto a verde. [...] L'affermazione è il fondamento della negazione dell'opposizione, sì che la negazione nega ciò senza di cui non sarebbe negazione, e cioè nega se stessa. (Severino 1982, p. 47)

According to Severino, a contradiction is lastly the identification of different entities. In order to affirm a *genuine* contradiction, one should identify two entities *that are different*; indeed if the two entities that one identifies were the same, then one would not affirm a genuine contradiction. Therefore any contradiction is based on its own negation: when one identifies two different entities by assuming – implicitly or explicitly – that they are different, one is negating that identification. Any contradiction is based on the negation of itself; therefore any contradiction is impossible.

### 3.2.3. Objections against the elenctic argument and replies

---

<sup>74</sup> Severino (1982)

In order to present an objection against the elenctic argument, I first recall a reading of Fredegisus' *De nihilo et tenebris* by Franca D'Agostini; indeed she offers a very interesting interpretation about the question of nothingness, that can be applied to the notion of the empty world and to the elenctic argument. D'Agostini distinguishes between two kinds of contradictions: the first is  $P \wedge \neg P$  that can be associated to a claim that states  $x$  and *not-x*; the second is  $P = \neg P$  that can be associated to a claim that states  $x$  but intending *not-x*. Since the general meaning of '=' allows us to replace the left-side with the right-side and *viceversa*, we can affirm that:

$$p = \neg(\neg p)$$

$$p = \neg(\neg(\neg p))$$

Etc.

(see D'Agostini 1998, p. 123).

Indeed, if one applies this strategy to the classical notion of nothingness, then one derives that if nothingness did not exist, then it would exist as nothingness; but if it existed, then it would not exist, since it would not be really nothingness, being an entity; but since this entity is nothingness, then it does not exist, etc.

Let us replace 'nothingness' with 'absolutely empty world'. By the elenctic argument, if the empty world did not exist (because it is a contradictory object), then it would exist (because it would be the absence of all objects and therefore that absence would imply the empty world itself). But if it existed, then – by (EL1) - it would not exist (because it would be a contradictory object). *Et sic in infinitum*. So the elenctic argument would not grant the existence of the empty world because it is not clear why one should endorse its existence rather than the fact that it does not exist at all, being a contradictory object. I showed that the rejection of the empty world as contradictory object implies the existence of the empty world; yet by condition (i), the empty world is a contradictory object and so, by (EL1), it does not exist at all. Why one should not endorse the nonexistence of the empty world, rather than its existence? We need to proceed to infinity, as well as in D'Agostini's schema. Therefore the issue on the existence of the empty world seems to be inconclusive if we appeal to the elenctic argument, unless we

arbitrarily decide to stop the *progressus* (or *regressus*) *in indefinitum* as Fredegisus does:

L'uso *elenctico* che Fredegiso fa di questa alternanza è particolarmente significativo. L'antifrasi [i.e. stating  $x$  but intending *not- $x$* ; *author-entry*] non istituisce per lui una difficoltà, una “confusio alternitatis” ma dimostra irrefutabilmente l'innegabilità del nulla, ossia vale come evidenza innegabile, come fondamento argomentativo. [...] Fredegiso decide di assegnare l'esistenza al nulla, ossia in qualche modo *ferma* l'andirivieni dall'essere al non essere a vantaggio dell'essere [...] (D'Agostini 1998, p. 124).

Fredegisus' strategy seems to be quite improper, since it is mainly based on a mere “decision”. Anyway I think there is a “way of escape”. Let us try to apply the schema  $P = \neg P$  to the case of the empty world. If it could be correctly applied, then we should accept that – given (EL1) and the condition (i) - positing the existence of the empty possible world is the same as negating its existence, as well as positing the existence of a round-square coin is the same as negating its existence, given that there are no contradictory objects (by EL1)<sup>75</sup>. However the case of the empty world is slightly different from the case of Fredegisus' nothingness. Indeed in Fredegisus positing nothingness is equal to positing *prim facie* something, i.e. positing not-nothingness; whereas positing the empty world is not *prima facie* positing the negation of its existence: in the case of nothingness the contradiction is between the fact that nothingness is and the fact that nothingness is not at all; instead in the case of the empty world the contradiction is between the fact that the empty world is something and the fact that its content is the absence of unrestrictedly everything. I mean: it is not a contradiction between the empty world and itself; rather it is a contradiction between the two (Hegelian) moments of the empty world (the world as such and what it represents)<sup>76</sup>. Therefore I don't think we should apply D'Agostini's schema to my account of nothingness, although it is fit for Fredegisus' account of nothingness.

There are certainly other two objections against the elenctic argument one can raise up; but they are exactly objection against conditions (i) and (ii) that occurs in

---

<sup>75</sup> (EL1) affirms that there are no contradictory objects *at all*, neither merely possible, nor impossible, nor non-existent, nor merely subsistent, nor fictional, etc.

<sup>76</sup> See also section 5.2.

section 3.2.1 and I tried to defend them in that very section. Finally, one could not accept (EL1); at this end I proposed two arguments for it in section 3.2.2.

## Chapter 4

### EMPTY WORLD, METAPHYSICAL NIHILISM AND...

In this chapter I will deal with some fundamental topics related to the metaphysics of empty world, like: the compatibility between the empty world and the main conceptions of possible world; the truth-maker theory (in particular the accounts of negative truths) and the thesis of metaphysical nihilism; the creation out of nothing (as appendix).

Keywords: empty world; possible world; truth-makers; negative truth; metaphysical nihilism; creation out of nothing.

#### 4.1. ...the accounts of possible worlds

In section 1.3 I summarized the main conceptions of possible world: concretism, abstractionism and combinatorialism. In this section I will present the debate on the compatibility between metaphysical nihilism (weak and strong version) and these conceptions of possible world. First I will mainly follow Coggins (2003, 2010); then I will analyze which conception is compatible with an absolutely empty world.

According to Coggins, metaphysical nihilism is compatible neither with concretism, nor with combinatorialism; she gather together these conceptions in a high-order category that she calls “compositionalism”: “I call the view that worlds are composed of concrete objects the compositional view or compositionalism. There are two forms of compositionalism: Lewisian and Armstrongian” (2010, p. 28). Indeed, both Lewis (1986) and Armstrong (1989) rejects the existence of the empty world, although – as I will recall in section 4.2 – more recently Armstrong somehow admits it.

The reason why Lewis’ modal realism rules out the empty world is very simple. If a world is a maximal mereological sum of spatiotemporally interrelated objects; and if there cannot be a null-sum (i.e. the mereological sum of no parts does not exist); then there cannot be an empty world:

A world is not like a bottle that might hold no beer. The world *is* the totality of things it contains, so even if there’s no beer, there’s still the bottle. And if there isn’t even the

bottle, there's nothing there at all. And nothing isn't a very minimal something. Minimal worlds there can indeed be. There can be nothing much: just some homogeneous unoccupied spacetime, or maybe only one single point of it. But nothing much is still something, and there isn't any world where there's nothing at all. (Lewis 1986, p. 73)

Therefore, according to Lewis' modal realism, metaphysical nihilism is false.

Efird-Stoneham (2005) and Rodriguez-Pereyra (2004) have tried to make Lewis' modal realism compatible with metaphysical nihilism. At this end Efird and Stoneham appeals to the existence of a "null individual, which is the result of taking an object away from itself, and is, correlatively, a part of every object" (p. 30). Since they count the null individual among abstract objects, a world with only null individual would be a world with no concrete objects in it. Given that the null individual is a part of every mereological sum, they affirm that null individual is a part of every world. Therefore, "we can apply the principle of recombination 'according to which patching together parts of possible worlds yields another possible world' (Lewis 1986, p. 87)" to show that there is a possible world consisting of the null individual alone" (2005, p. 30), i.e. a world with no *concreta*, so that weak metaphysical nihilism is true; whereas strong metaphysical nihilism would be false, since there would be at least one abstract object, namely the null individual, in a putative absolutely empty world.

According to Coggins (2010) Efird-Sonteham's strategy is very controversial, since it is based on the assumption of a very odd entity, the null individual: "What is the null individual? What do you get when you take an object away from itself? Nothing. Nothing should not be construed as an object, it is the absence of an object" (p. 30). Besides, the null individual is an abstract entity; but it is part of concrete objects and that seems very controversial too. We could not even conceive null individual as a concrete entity, otherwise the empty world would "contain" a concrete object, *contra* metaphysical nihilism.

Rodriguez-Pereyra (2004) tries to make the empty world compatible with a modified modal realism by exactly modifying the definition itself of possible world as maximal mereological sum of spatiotemporally interrelated things, without losing the essential features of genuine modal realism, namely:

(i) there is some kind *K* such that all and only possible worlds are of kind *K*



- (ii) Spatiotemporally related objects are concrete objects
  
- (iii) A sentence like ‘it is possible that  $p$ ’ is true just in case there is a possible world where  $p$
  
- (iv) All possible world exist
  
- (v) There exist non-actual possible entities which are real as well as actual entities
  
- (vi) Actuality is indexical
  
- (vii) Worlds are causally and spatiotemporally isolated
  
- (viii) individuals are world-bound
  
- (ix) individuals have counterparts in other worlds

At this end he appeals to two notions: sum\* and set theoretical expansion:

S is a sum\* if and only if (a) S is a sum of memberless entities and (b) if S consists of at least two entities, then everything in S is spatiotemporally related to every other thing in S (2004, p. 12)

The set-theoretical expansion of a sum S consists of (a) the sets formed from the (proper or improper) parts of S; (b) the subsets of the sets in (a); (c) the sets formed from the sets in (b); and (d) the sets formed from any combination of parts of S, sets in (a), sets in (b), sets in (c), and any sums thereof (p. 11)

Given that, Rodriguez-Pereyra defines possible worlds as “a collection of a maximal sum\* and its set-theoretical expansion” (p. 12). In order to make metaphysical nihilism compatible with this new version of modal realism, he appeals to a notion of empty world as a world that “contains” only pure sets, called  $W_{\text{pure}}$ . Since pure sets are abstract objects, at  $W_{\text{pure}}$  there is nothing concrete, so that weak metaphysical nihilism is true. Is  $W_{\text{pure}}$  a collection of a maximal sum\* and its set-theoretical expansion, namely a

possible world whose kind is the same of all other possible worlds of this new version of modal realism? According to Rodriguez-Pereyra, it is; indeed pure sets are empty sets, therefore both condition (a) and (b) in the definition of sum\* are satisfied: the empty set is memberless; and the empty set satisfies *vacuously* condition (b) because – in the case of the sum of the empty set – the antecedent is false. A world with concrete objects – so a non-empty world – would satisfy the condition (b) non vacuously.  $W_{\text{pure}}$  and the other (non-empty) possible worlds are all of the same kind (collections of sum\* and set-theoretical expansion), in particular because they are both sum of memberless entities.

However Coggins (2010) raises objections against Rodriguez-Pereyra's use of the notion of memberlessness. Indeed in his modified modal realism, Rodriguez-Pereyra can state that  $W_{\text{pure}}$  and the other worlds are of the same kind because both the empty set and any sum of concrete objects are sum of memberless entities, since both the empty set and any concrete object are memberless. Instead Coggins notes that the empty set *could essentially have members* since it is a *set*, although it actually has no members; whereas any concrete object *could not essentially have members*:

Perhaps we need two notions of memberlessness in order to clarify this distinction. The null set is memberless<sub>1</sub> as it is the sort of thing, which could have members (a set) but happens to not have any. My pen is memberless<sub>2</sub> as it is not the sort of thing that could have members. (2010, p. 48)

I think both Efrid-Stoneham and Rodriguez-Pereyra attempts are quite controversial, given Coggins' criticism. Besides these attempts do not make the *absolutely* empty world compatible with modal realism, since both Efrid-Stoneham's empty world and Rodriguez-Pereyra's  $W_{\text{pure}}$  "contain" abstract objects. I will propose in which sense the absolutely empty world could be compatible with Lewis' realism by assuming the soundness of the elenctic argument. But first I briefly recall Armstrong's (1989) position on the empty world.

According to Armstrong (1989), "possibilities are states of affair which are constituted by individuals and universals" (Coggins 2010, p. 28). So Armstrong replaces a mereological relation among *parts* with a non-mereological relation among *constituents*. Assuming that there are no abstract objects, i.e. everything is spatiotemporally located, he concludes that his combinatorialism cannot admit an empty

world, since in that case there would not be constituents as individuals, properties and relations: “the smallest possible world will be a state of affairs of the form  $Fa$ , with  $F$  and  $a$  simple” (Armstrong 1989, p. 64).

We have seen that neither concretism, nor combinatorialism are compatible with the empty world. Anyway I think my elenctic argument could offer an attempt to make compatible concretism and combinatorialism with the existence of an absolutely empty world. I recall it:

(M1) ‘Nothingness’ is a noun phrase that refers to an empty world, i.e. to an entity that represents the absence of all objects and that absence cannot be separated from the empty world itself, but it can be distinguished from it.

(EL1) Any object is not contradictory

If the following conditions are granted, namely

(i) the empty world is a contradictory object

(ii) a contradictory object is in fact the absence of everything, given (EL1)

we can conclude that the empty world exists (see section 3.2.).

In Lewis’ modal realism the empty world can be spelled out as a contradictory entity, since it is a sum that is not a sum (as I noted in section 3.2.1). Similarly, in Armstrong’s account of possible world, the empty world would be a state of affair that is not a state of affair, being no constituents, that is a contradictory entity. Therefore, if the elenctic argument is sound and its premises are true, then the empty world is compatible with “compositionalism”. But that is not enough. Assuming premise (M1) seems to contrast with concretism or combinatorialism conceptions of possible world because of the way according to which in section 1.4 I spelled out the account of nothingness by means of empty possible world. Indeed the fundamental feature of [EW]

account is that nothingness – i.e. the absence of everything<sup>77</sup> – is the maximal consistent situation according to which there are no objects at all; since I assumed (W)

(W) An entity  $w$  is a world if and only if  $w$  represents a maximal consistent situation according to which things could be

I concluded that nothingness as absence of everything is represented by an absolutely empty possible world (see section 1.4 for further details). Now, (W) seems to be too close to an abstractionist conception of possible world, rather than a compositionalist one. Therefore the use of (M1) in a background where we have assumed a compositionalist account of possible world seems to be incoherent.

Maybe this objection hits the mark and probably the best candidate for the empty world is an abstractionist account, as we will see. Anyway I would invite the reader to consider that maybe (W) is – as to say – a pre-theoretical or pre-metaphysical notion of world, or – broadly speaking – a neutral notion of world, such that it is compatible with compositionalist too. Very broadly speaking, Lewis' worlds and Armstrong's worlds are “representations” of maximal consistent situations according to which things could be. [EW] account needs just that worlds are conceived in this way, with no commitment to metaphysical thesis such as the structure of this “situations” and so on, or the kind of representation we need to employ (it is just required that what represents and what is represented are different, but not separated).

The best candidate for metaphysical nihilism seems to be an abstractionist account of possible world, given that compositionism fails to account for an empty world, unless one adopts the elenctic argument (and also in this case it would not be very clear how that world could exist in a “concrete” way). But there are several conditions we should consider. I will focus on the absolutely empty world and so on the strong metaphysical nihilism, since the reader can find a good overview on the possible compatibility between weak metaphysical nihilism and abstractionism in Coggins (2010). She does not deal very much with strong nihilism (that she calls “absolute nihilism”) because the contemporary debate on metaphysical nihilism is almost

---

<sup>77</sup> The reader should note that ‘nothingness’ refers to the absence of every thing because it refers to the empty world that represents the maximal consistent situation according to which there are no objects at all. So, one should not be surprised that nothingness is both the empty world and the absence of everything. See section 1.4.

restricted to weak nihilism, whereas my dissertation gives more attention to the strong version. Anyway Coggins also suggests that abstractionism should be the best chance for the absolutely empty world (2010, p. 58).

I recalled the salient features of abstractionism in section 1.3 *Prima facie* it is not puzzling to conceive an abstract entity – namely the absolutely empty world – according to which there are no objects at all. Yet a problem almost immediately raises up: how do we manage the existence of putative necessary abstract objects? If there are necessary abstract objects, then there exist *abstracta* in all possible world, included the absolutely empty one that would turn out to be non-empty (or at most a world with no *concreta*). In order to make compatible abstractionism (as well as compositionism) with the empty world, a primary condition is to reject the thesis that there are necessary abstract objects. Let us consider the case of mathematical objects as numbers. Let us assume - as Lowe (1998) does - that mathematical truths are necessary truths; let us assume a truth-maker theory such that those truths depend for their truth on the existence of abstract objects as numbers. We are forced to conclude that numbers exist in all possible worlds. Anyway that line of reasoning is not so fair as it seems at first sight. Indeed

Recently however, the necessitarianism yielded by this style of argument as it applies in the philosophy of maths has been disputed. Dissenters from the orthodoxy argue that a descendent of the Quinean picture of ontological commitment ought lead us to think that mathematical objects exist contingently. The general idea is that Quine was right to think we should be committed to the existence of all and only the objects quantified over by our best scientific theory. But rather than supposing that the best theories should be regimented into first order logic as Quine proposed, recent neo-Quineans hold that we should focus on the posits of our best theory that are *indispensable* to that theory [...] Our best scientific theories quantify over mathematical objects. If our best theories do so in an indispensable manner, then we have reason to think that mathematical objects actually exist. [...]. If, in addition, we have reason to think that there are worlds in which best theory quantifies over mathematical objects but only in a dispensable manner, then we have reason to think there are worlds in which mathematical objects fail to exist (at least on the assumption that we should be committed to all *and only* the objects quantified over in an indispensable manner) (Miller 2010)

We can generalize this strategy, by appealing – as Miller (2010) proposes – to the “best metaphysical theories”, so that the outstanding case of mathematical truths and numbers

would not be the only one and a similar strategy could be also used for other putative “necessary” truths that – through this treatment – would turn out to be contingently truth. Indeed they could appeal to a theory that is the best theory in some *but not all* possible worlds.

Another important aspect we need to deal with is the relation of representation. Let us consider the empty world-account of nothingness I spelled out in 1.4. It is based on

(W) An entity  $x$  is a world iff  $x$  represents a maximal consistent situation according to which things could be

The relation of representation is fundamental in order to hold that nothingness is an entity and it is not an entity at the same time, but *in different respects*, as well as in order to discern the empty world *as world* from what such a world exactly *represents*. Indeed underlining the difference from the world and what it represents has been my strategy for solving the puzzle of nothingness (see chapter 1). In particular the *leit-motiv* has been that the empty world as world and its “content”, namely what is represented by that world (i.e. the maximal consistent situation according to which there are no objects at all, i.e. the global absence) cannot be separated, although they can be discerned (see section 1.4). Now it is opportune to point out which abstractionist account of possible world could be the best candidate for providing a more detailed conception of (W)<sup>78</sup>. I suppose that the best candidate is an account within what Divers (2002) calls “book realism” (BR) (p. 178 e sgg.):

The *possible worlds* are all and only the maximal consistent sets of sentences. A set of sentences,  $S$ , is *maximal* iff for every atomic sentence,  $p$ ,  $S$  has a member either  $p$  or its negation; a set of sentences,  $S$ , *entails* a sentence  $p$  iff the conjunction of the members of  $S \cup \{\neg p\}$  is inconsistent (not consistent). For any possible worlds,  $w, v$ :  $w$ , is *actualized (simpliciter)* iff all and only the true sentences are entailed by  $w$ ; at  $w$ , any possible world  $v$  is actualized iff  $w$  is equivalent to  $v$  (i.e.  $w$  entails  $v$  and  $v$  entails  $w$ ): at  $w$ , there exists an individual  $a$  iff  $w$  entails that  $\exists y [y = a]$  (p. 179)

---

<sup>78</sup> Of course, in this way we will lose the (putative) neutral-agnostic idea of possible world, by appealing to a certain theoretical idea of possible world.

In section 1.3 I recalled the distinction between *existing* possible world and *obtaining* possible world, by referring to Plantingan realism, since in that account possible worlds are maximal consistent states of affairs and they can be divided into existing states of affair and obtaining states of affairs. In section 1.4 I used such a distinction in order to reply to an objection against the empty world-account for nothingness: the empty world exists as possible world, but if it obtained, then it would not exist. The difference between *existing* and *obtaining* for possible worlds can be spelled out, in other words, as difference between actual possible worlds and actualized possible worlds (see 1.3.): “each possible world actually exists (i.e. for each possible world, there actually exists some entity to which that world is identical)” (Divers 2002, p. 169), but “among the many possible worlds that actually exist, one possible world is distinguished from others by being (absolutely) actualized” (p. 169). We can note that “book realism” allows us to discern between actualized world and actual existing worlds (see the quotation above). Therefore a “book realist” account seems to be fit for our purposes. Indeed Plantingan realism could undermine the notion of the absolutely empty world and its use for accounting for nothingness for the following reasons. First, in Plantingan realism, every state of affairs (including every possible world) and every property are necessary existents. Therefore they exist at every possible worlds, undermining the absolute emptiness of the empty world. Secondly, in Plantingan realism worlds are states of affairs. Therefore possible worlds are identical to maximal consistent situations according to which things could be, whereas I use the notion of representation: possible worlds *represent* maximal consistent situations (for example by being maximal consistent sets of sentences). Indeed, if we assumed Plantingan conception of worlds, the empty world would be identical to the maximal consistent state of affair according to which there are no entities at all. Since such a state of affair would be an entity, we would deal with a contradictory entity that is similar to Priest’s **nothing** and so my strategy for avoiding contradictory entities by means of possible worlds-approach would be flawed. As I pointed out before, what my strategy needs is the difference between a – say – “representative entity” and a “represented content” and book realism seems to provide that.<sup>79</sup>

---

<sup>79</sup> At this end, one could object that the *actualized* empty world is such that its “content” (the absence of everything) is separated from the world as such, since the latter does not exist at all when itself is actualized. Instead – the objection would go on – the [EW] account of nothingness explicitly claims that the empty world as world cannot be separated from its “content” and *viceversa*. I would reply to the objection by pointing out that the actualized empty world does not exist as world just because the empty world as world is *not* separated from its “content”: since what the empty world represents is the absence

I conclude the present section with a comparison between the empty set and the empty world. Given there are accounts of possible worlds where these are conceived as sets, we can simply state that the empty world is an empty set. Moreover, given the axiom of the null-set in Zermelo-Fraenkel Set Theory, according to which there exists the empty set, it is also granted the existence of the empty world.

The last conclusion is not so fair, since it requires a passage from a mathematical assumption to a metaphysical one. But I think there is a more fundamental problem. In section 1.2. I recalled the classical puzzles of the empty set and I showed that Dubois (2013) and Priest (2014)'s strategies could avoid them. Yet I also pointed out that those strategies has an high price, namely the admission of an object in the empty set (respectively, Lambda and **nothing**) such that the empty turns out to be somehow non-empty (see section 1.2.4).

Let us assume Dubois' conception of the empty set. If we also assume [EW]-account of nothingness, then Dubois' conception of the empty set needs to be reconsidered, since [EW] account captures the pre-theoretical notion of nothingness which Dubois' account is based on (see section 1.4). We have seen that according to Dubois the empty set is the set that contains only  $\Lambda$  ("the Nothing"). Since by [EW]-account nothingness cannot be separated by the empty world,  $\Lambda$  should be spelled out as the empty world (that represents the absence of everything, or "the void" and so on) we should state that the empty set is the set that only contains the empty world. The puzzle of the empty set is not avoided by means of that strategy: as in Dubois and in Priest, the empty set is empty if and only if it is not empty, containing – broadly speaking – "something" (in Dubois the pre-element  $\Lambda$ , in Priest the contradictory object **nothing**, in my account an entity, i.e. the empty world). Note that – as in Dubois and Priest – the presence of – broadly speaking – "something" is necessary in order to provide an account of the absence of everything that should be what the empty set "contains" in order to be really empty.

That being so, let us consider the thesis according to which possible worlds are sets (for example maximal consistent sets of sentences). In this case the empty world would be simply the empty set. But if that were the case, then the empty set would "contain" itself, being the empty world and that would be a violation of Russell's theory of logical types. Therefore the empty world cannot be conceived as the empty set if we

---

of unrestrictedly everything, then the empty world as world would not exist at all, if it was actualized. Therefore the objection would work only by appealing to the non-separation of the empty world as world from its content. So the objection is self-refuting.



assume that a set is empty if and only if it only contains the empty world, otherwise we should hold a unacceptable conclusion. Note that the unacceptable conclusion cannot be spelled out as the singleton of the empty set, although it could seem so. Indeed *it is the empty set that contains itself*, being identical to the empty world (since we assume that worlds are sets). Yet, in the previous paragraph I proposed to consider possible worlds as sets of sentences. So, we have two options: either rejecting book realism and holding that the empty set is the set that contains only the empty world; or rejecting my definition of the empty set and holding book realism. In the first case, I am worry about which account of possible world we could assume in order to keep the *desiderata* my strategy needs, since Plantingan realism seems to rule out the empty world as well as compositionism. In the second case, I would be forced to restrict my own strategy for accounting for the absence of everything in the following way: the absence of everything must be accounted by means of the empty world, but in the case of the absence of everything contained by the empty set, we need to account for it by means of another way. Such a restriction would be very unpleasant. If the empty world-account is a good account of the absence of everything, i.e. for the naïve or pre-theoretical notion of nothingness, then it should be able to work in *any* case, included the empty set. However, I think that the trouble I am considering is based on a misunderstanding. If possible worlds are maximal consistent sets of sentences that represent how things could be or could have been, then the maximal consistent set of sentences that represent the absence of everything – namely the empty world – is not an empty set. Rather it is a set that contains negative existential sentences – like <Marco does not exist> or <The table does not exist>. Or at least it contains a universal negative existential sentence like <Everything unrestrictedly does not exist at all>. Given that, one could object that the empty world is not really absolutely empty, since it contains at least one proposition. Yet that is another misunderstanding: one should not confuse the world *as such* – namely the “representative entity” – from the content of the world – namely the “represented entity”. Now, the sentences that represent the absence of everything are entities; they contribute to constitute the world as such, by being the elements of the set that is that possible world. A possible world is a set of sentences; so the set and its sentences are together the world *as such*. The objects represented by those sentences are the content of the world. The set and its sentences, representing the global absence and contained by that set, are entities, but they do not undermine the notion of the global absence, since the sentences in fact *represent* it. So those sentences are not entities *in*

the empty world; rather their collection *is* the empty world. Therefore it is not odd or contradictory that the empty world does not overlap with the empty set in the case of book realism. Given that, we can hold together that the empty world can be accounted by book realism and that the empty set is the set containing only the empty world.

## 4.2. ... and truthmakers

### 4.2.1. The puzzle of negative truths

*Prima facie* metaphysical nihilism is a puzzle if we search for a truth-maker for the proposition that there is nothing, i.e. for the proposition that spells out its fundamental thesis<sup>80</sup>. Indeed, if we assume that what is true is true in virtue of how things are, then <there is nothing> turns out to be false; or maybe it turns out to be neither true, nor false; or maybe it turns out to be a truth with no truth-maker:

[...] suppose that there might have been nothing; if there were nothing, then it would be true that there is nothing; but there would be nothing to make that true: so there would be a truth which was not made true by how things are (Efrid-Stoneham 2009, p.211)

Before presenting the possible solutions to that puzzle, it is opportune to present the background of the problem, namely the question of negative truths.

The first assumption in order to display the question is truth-maker *maximalism*, i.e. the thesis according to which

(TMM) For every truth, then there must be something in the world that makes it true, i.e. every truth has a truth-maker<sup>81</sup>

A negative truth has mainly one of the following forms:

< *a* is not *F* >

< There are no *F*s >

< There are no *F*s in *r* >

---

<sup>80</sup> I will consider later two cases: the truth-maker for <there is nothing>, where ‘nothing’ refers to the absence of *concreta*; and the case where ‘nothing’ refers to the absence of *concreta* and *abstracta*.

<sup>81</sup> See MacBride (2013, section 2.1) and Armstrong (2004, p. 5).

Anyway, as MacBride (2013) notes,

Statements of the form “*a* is *F*” aren’t invariably positive (“so-and-so is dead”), nor are statements of the form “*a* isn’t *F*” (“so-and-so isn’t blind”) always negative. But it doesn’t follow from the fact that a syntactic test cannot be given that there is nothing to the contrast between positive and negative. Molnar suggests that the contrast can be put on a sound scientific footing. For Molnar, natural kinds are paradigm instances of the positive, to be identified on *a posteriori* grounds (2000: 73). To say that a thing belongs to a natural kind identified in this way is to state a positive fact. To state a negative fact is to negate a statement of a positive fact (2013).

Since a negative truth is about how things are not and given (TMM), we need to find *something* as truth-maker for negative truths (by TMM), but that seems to be impossible because negative truths do not concern how things *are*. The puzzle is clearer if we assume that truth somehow *supervenes* on being. The puzzle could be also spelled out as Molnar (2000, p. 72) does:

- (i) The world is everything that exists
- (ii) Everything that exists is positive
- (iii) Some negative claims about the world are true
- (iv) Every true claim about the world is made true by something that exists

Therefore

- (v) Negative truths are made true by positive existing entities

As Pagés notes, the puzzle is the following: if we hold (i)-(iv), then we must find *positive* truth-makers for *negative* truths. If we don’t consider that research reasonable, then we must reject one of (i)-(iv). But they seem to be all reasonable premises too.

#### 4.2.2. The puzzle of negative truth for metaphysical nihilism

It is opportune to distinguish two negative truths for metaphysical nihilism, according to which version of nihilism we are considering:

(NT1) <There are no concrete objects>

(NT2) <There are no objects at all>

namely the truths of respectively weak-metaphysical nihilism and strong metaphysical nihilism

As I recalled in section 1.3, those two versions can overlap if we rule out abstract objects from our ontology. In the contemporary debate, they usually understand (NT1) as <There are only abstract objects> and in this chapter I will intend it as well. The puzzles are the following: in the first case, if it is true that there are no concrete objects (i.e. there are only *abstracta*), then we could not find a truth-maker for (NT1) – at least *prima facie*. This case is a typical case of negative truths, such as <There are no penguins in my room>. The second case is more extreme and can be spelled out as Mumford (2007) does:

(Ass) There is nothing  
Therefore, there are no facts  
Therefore, there are no truth-makers  
Therefore, there are no truths  
Therefore, <there is nothing> is not a truth  
(2007, p. 21)

Indeed, given (TMM), (NT2) raises up the strongest puzzle for truth-making maximalism, because the proposition that there is absolutely nothing cannot be made true by something, otherwise there would be exactly something, rather than absolutely nothing.

Efird-Stoneham (2009) proposes a solution to that puzzling negative truth. According to Efird-Stoneham (pp. 211 ff), metaphysical nihilism can be expressed as:

(MN)  $\exists w \forall x (\neg E!xw)$

Where ‘E!’ is the existence at a world predicate. Truth-making theory can be expressed as follows:

(TM)  $\forall w (< p > \text{ is true at } w \rightarrow \exists x (E!xw \wedge \forall v (E!xv \rightarrow < p > \text{ is true at } v)))$

i.e., for every world  $w$ , if the proposition that  $p$  is true at  $w$ , then there is something  $x$  such that exists at  $w$  and for every world  $v$ , if there exists  $x$  at  $v$  then the proposition that  $p$  is true at  $v$ . If we substitute  $p$  with (MN) in (TM), then we get the following entailment: if  $<\text{there is nothing}>$  is true at  $w$ , then there is something at  $w$  that makes  $<\text{there is nothing}>$  true. Therefore we get a contradiction. Efrid-Stoneham (2009) concludes by holding that there are two main acceptable ways to avoid that contradiction if we want to hold (MN): either rejecting the truthmaking principle; or restricting the quantifier in (MN) so that metaphysical nihilist would state that there might have been nothing of a certain type, rather than absolutely nothing. The second option is what metaphysical nihilists usually do, by stating – as I recalled before – that the quantifier in (MN) ranges over concrete objects. Although the extremely puzzling situation is avoided, (NT1) is yet a problematic truth as well as all negative truths, at least *prima facie*. Since (NT1) is equivalent to  $<\text{Everything is abstract}>$ , Efrid and Stoneham propose the following strategy, based on Armstrong’s notion of totality state of affair. First we need to introduce the notion of *totalling relation*, such as “a multigrade relation which holds between  $n$  states of affair just in case those are all the states of affairs which exist” (p. 217). Given that, the totality state of affair is the state of affair of those  $n$  being all the states of affairs:

states of affairs of totality have to be of a different type to other states of affair, specifically they have to be such that they are not included in the totalling relation [...], so Armstrong makes a distinction of order: ordinary states of affair are first-order whereas states of affair of totality are second-order (p. 217)

Therefore, the truthmaker for  $<\text{There are no concrete objects}>$  is the totality state of affairs that everything is abstract, because the latter is the state of affairs according to which  $n$  states of affairs about the existence of abstract objects are *all* the states of affair

(and so there are no *concreta*). Since they assume a concreteness/abstractness distinction such that the totality state of affairs is not concrete<sup>82</sup>, that truthmaker does not contradict the absence of *concreta*.

Efird-Stoneham's solution seems to me quite controversial, since the totality state of affairs that everything is abstract is very close to the maximal consistent situation according to which there are only abstract objects. If we assumed a conception of possible worlds as maximal consistent situations, then the truthmaker for <There are no concrete objects> would be the empty world itself ('empty' in a restricted sense of 'devoid of *concreta*'). That is not acceptable<sup>83</sup>. Furthermore, Efird-Stoneham approach does not solve the problem with (NT2).

Mumford (2007) presents a strategy that allows us to eliminate any negative truth, included (NT2). The first step consists in replacing the following equivalences

(Equiv. 1)  $t\langle p \rangle \equiv f\langle \neg p \rangle$  (where t/f <p> means: it is true/false that p)

(Equiv. 2)  $f\langle p \rangle \equiv t\langle \neg p \rangle$

respectively with the following:

(Equiv. 3)  $t\langle p \rangle \equiv \neg f\langle p \rangle$

(Equiv. 4)  $f\langle p \rangle \equiv \neg t\langle p \rangle$

(2007, p. 6)

in order to reject negative truths (and consequently negative falsehood).

Let us consider now truthmaking maximalism. According to Mumford, we should integrate the usual theory of truth with a theory for falsehood. Since we assume that

(Df.1) The proposition that p is true IFF the proposition that p has a worldly truthmaker

<sup>82</sup> See Efird-Sonteham (2009), p.223 ff.

<sup>83</sup> If it was acceptable that the empty world itself would be the truthmaker for <there is nothing (concrete)>, then there would not be any negative truth's puzzle, since the empty world *as world* is something positive.

Then we can also state that:

(Df.2) The proposition that  $p$  is false IFF there is no truthmaker for that proposition (2007, p.5).

Let us consider now a negative truth as <It is not raining>. According to Mumford it can be paraphrased as: it is false that it is raining ( $f$ <it is raining>). So – by (Df.2) - <It is raining> has no truthmaker: “we do not, therefore, have to look for something in reality that correspond to or entails it. The putative negative truth [...] has been eliminated” (2007, p.7). Similarly, that the proposition (NT2) is true becomes:

$f$ <there is something>

Since in the empty world there are no truthmakers for <there is something>, then – by (Df.2) the proposition that <there is something> is false at the empty world (and so – in a no paraphrased language - it is true that there is nothing at the empty world).

Another approach to negative truths is the so-called incompatibility view, recently defended, for example, by Veber (2008) and based on Demos (1917). The incompatibility position recognizes behind any negative truth another proposition – say  $p'$  - that is *incompatible* with the proposition one is considering. Therefore what makes true the negative truth is in fact something positive that makes true  $p'$ . For example, the proposition that my pen is not red is made true by the fact that my pen is blue, since its being blue is incompatible with its being red. Anyway I think it is clear that the incompatibility view cannot provide a solution for the puzzle associated to (NT2). Indeed that view requires the presence of something positive in order to exclude – broadly speaking - something other:

An example like [ There are no arctic penguins ] can be handled [...]. To see how, consider a 12-in. diameter circle whose center is the North Pole. [...] facts about the distribution of air, snow, ice, etc. within this circle will entail that no penguin resides there. We can keep expanding the size of the circle and keep getting the same result until the entire arctic is covered. Facts of the same sort that entailed there being no penguins

within a 6-in. radius of the North Pole will entail the truth of [There are no arctic penguins] (Veber 2008, p. 87).

In the absolutely empty world there is nothing at all. Therefore a similar strategy cannot be employed for finding out a truthmaker for (NT2). Maybe it could be employed for the case of (NT1), if we admitted that there are abstract objects at the empty world so that the existence of those *abstracta* would be incompatible with the existence of any concrete object. But I am not sure it would work. How should be – say – “distributed” those *abstracta* in order to rule out any concrete object? The problem is that *abstracta* are not spatio-temporally located.

Armstrong (2004) explicitly proposes a solution for providing a truthmaker for metaphysical nihilism. His strategy is based on the notion of contingent and on the so-called entailment principle, according to which if  $T$  is a truthmaker for  $p$  and  $p$  entails  $q$ , then  $T$  is a truthmaker for  $q$  (see 2004, p. 10). Now, consider a contingent truth: “it is of the essence of contingency that the contradictory of a contingent truth be a possibility” (2004, p. 84). Therefore, if we have a truthmaker  $T$  for a contingent truth, then  $T$  turns out to be “also a truthmaker for the truth that the contradictory of that truth is possible” (p. 84)<sup>84</sup>. Let us assume, following Armstrong, that the world is a world of contingent beings. The proposition that something exists, i.e. <at least one contingent being exists> (since we assumed that everything is contingent), is a true contingent proposition. It is true because in a world of contingent beings there are surely truthmakers for it. It is contingent because in a world of contingent beings, each of them could fail to exist, therefore it is not necessary that there is at least one contingent being (that is – clearly – an appeal to a sort of subtraction argument and someone could object that we cannot accept a world with no objects at all – see chapter 2. Armstrong is aware about it, but this strategy is useful for the topic of truthmaking for metaphysical nihilism, at least for a truthmaking that *prima facie* works). So we can apply the above-mentioned argument for contingent truths, so that what makes true <at least one contingent being exists> is also a truthmaker for <it is possible that there might not have been any contingent beings>. Anyway, this strategy shows that we can find out a truthmaker for the

<sup>84</sup> The formal argument is the following:

- (1)  $(T \rightarrow p)$  (assumed)
  - (2) < $p$  is contingent> (assumed)
  - (3)  $p$  entails <it is possible that not- $p$ > (from 2 and the nature of the contingency of proposition)
  - (4)  $\therefore T \rightarrow$  <it is possible that not- $p$ > (by 1,3, and the Entailment principle)
- (Armstrong 2004, p. 84).



existence of the empty world, rather than directly a truthmaker for the proposition that there is nothing at all. Indeed, <it is possible that there might not have been any contingent beings> should be read as <it is possible that there is an empty world>, whereas we are looking for a truthmaker for <There are no objects>.

Maybe we could appeal to Barker-Jago account of absence that I recalled in chapter 2. So the truthmaker for (NT2) would be a negative fact, namely the global absence itself. But we have seen that the global absence cannot be accounted by Barker-Jago's negative facts' account, as Jago himself notes<sup>85</sup>: "absences of *F*s are negative existential facts, that there are no *F*s. So the absence of everything would be a fact, that there is nothing. But that fact would be something that exists, contradicting itself. So, necessarily, there can't be absolutely nothing". I will return to this topic later.

Priest's account of nothingness seems to be very promising for solving the puzzle of the truthmaker for (NT2). Indeed, since the global absence is a contradictory object (see chapter 1), <there are no objects at all> has surely a truthmaker, namely **nothing**. However such a strategy needs to admit contradictory objects and it undermines the notion of the absolutely empty world itself, since it admits an object in the empty world. Broadly speaking, the reasons for which I rejected Priest's account in chapter 1 are the same reasons for which I reject the above-mentioned strategy.

Maybe the meontological argument together with the Entailment Principle could provide a solution. Consider premise (M2) of the meontological argument, namely that there is an All-inclusive domain of discourse (see section 3.1.1.). Since 'domain' should be understood with no ontological commitment to a set or set-like object, because it just refers to an "ontological innocent" plurality of objects (see 3.1.2.), the truthmaker for <There is an All-inclusive domain of discourse> is simply the plurality of all objects (unrestrictedly). If we assume the meontological argument, then <there is an All-inclusive domain of discourse> entails <There is an empty world>. Therefore, by the Entailment Principle, the above-mentioned plurality of objects is also a truthmaker for <There is an empty world>. Since by (M1) (see 3.1) the empty world cannot be separated from the absence of everything that it represents (and the global absence cannot be separated from the empty world itself), <There is an empty world> entails <There are no objects at all>. Therefore, by iterating the Entailment Principle, we get

---

<sup>85</sup> In a personal communication by e-mail.

that the plurality of all objects (unrestrictedly) is the truthmaker for <There are no objects at all>.

I recall that the Entailment Principle needs some precautions in order to use it. As Veber (2008) recalls, following Armstrong worries:

On the classical view of entailment, P entails Q whenever the conjunction of P and Not-Q is metaphysically impossible. Thus, necessary truths are entailed by any proposition whatever. If this is how we understand the entailment relation, then we have the result that the truthmaker for ‘I am now wearing socks’ also serves as a truthmaker for every truth of logic, mathematics, and even (if the conventional wisdom is correct) ‘Water is H<sub>2</sub>O’. According to Armstrong, “this robs truthmaking theory of all interest for necessary truths” (2004, p.11). [...] There are at least three avenues of solution to this problem. First, one could reject the classical understanding of entailment in favour of some nonclassical sort such as relevance-entailment. Second, one could maintain the classical account and restrict the Entailment Principle to contingent truths. And third, one could simply accept the consequence that truthmakers for necessary truths are omnipresent (2008, pp. 81-82)

So, my argument runs as follows:

(i) the plurality of all objects is a truthmaker for <There is an All-inclusive domain of discourse> [Assumed]

(ii) <There is an All-inclusive domain of discourse> entails <There is an empty world> [by the meontological argument]

(iii) the plurality of all objects is a truthmaker for <There is an empty world> [by (i), (ii) and the Entailment Principle]

(iv) <There is an empty world> entails <There are no objects at all> [by (M1), see section 3.1.1.]

(v) the plurality of all objects is a truthmaker for <There are no objects at all> [by (iii), (iv) and the Entailment Principle]

So, Armstrong solution employs the Entailment Principle and the possibility principle for contingent truths (see 2004, p. 83-84) (and also – somehow – the modal intuitions which the subtraction argument is based on), whereas my solution employs the Entailment Principle and the meontological argument. Note that my use of meontological argument – i.e. an argument for the existence of the empty world - in order to find out a truthmaker for (NT2) does not beg the question: we should distinguish between the question whether there is an empty possible world and the question whether there is a truthmaker for (NT2), as for example Mumford (2007) does. However there is surely a “tension” between metaphysical nihilism and truthmaker theorists, since the putative absence of a truthmaker for (NT2) (or NT1) would undermine truthmaker maximalism. Therefore, either we find out a truthmaker or we reject maximalism. A third option would be Efrid-Stoneham’s strategy of restricting metaphysical nihilism to its weak version, as almost all do. I chose the first option because – as it is already clear – my aim is to focus mainly on strong metaphysical nihilism. Besides the option of rejecting maximalism would be unwanted, although – as Armstrong (2004, p. 10) notes – it is not so easy to find out a direct argument for maximalism. Veber (2008) suggests that “truthmakers maximalism also helps us understand how knowledge is possible [...] If there is nothing in the world that makes it true that Not-P, in virtue of what could I possibly know it?” (p. 80). Anyway, although we don’t have a very strong argument for maximalism, at least I hope to have shown that maximalism can be compatible with strong metaphysical nihilism.

#### **4.3. Appendix: from creation out of nothing to original nothingness**

In the previous chapters the meaning of the phrase ‘nothingness’ that I endorsed, following (although partially) Priest’s reading, is ‘the absolute absence of everything’, namely ‘absolute nothing’: *nihil absolutum*. Besides in section 3.2. I proposed to consider another meaning of ‘nothingness’ – say *negative nothing (nihil negativum)* – as in fact identical to *nihil absolutum*: since negative nothing is any contradictory object and since I assume that any object is not-contradictory, then negative nothing and absolute nothing are the same (see section 3.2.). Therefore, the empty world is an account both of absolute nothing and of negative nothing.

However, there is another important meaning of the phrase ‘nothingness’, namely original nothing: *nihil originarium*. We can find it – broadly speaking – in those

theologies that identify God or the Principle of everything with nothingness. Or we can find it in those Eastern philosophies that affirm the thesis according to which any entity comes from nothingness (see for example the Kyoto School). Since it would be necessary a good proficiency in those issues that I do not have and it would be necessary another dissertation in order to deal with those issues, I just point out some strategies in order to show that the empty world maybe is a good account also of *nihil originarium*. At this end, let us begin with creation out of nothingness by traditional Abrahamic God.

Traditionally, God is considered a necessary being and creator out of nothing (*nihil absolutum*). If we spell out His necessary existence by means of possible worlds, we get:

(G1) God is a necessary being IFF God exists at every possible worlds

Besides, if we spell out His creation out of nothing by means of the empty world-account of nothing, we get:

(G2) God creates out of nothing IFF God creates out of the absence of all objects that is represented by an empty possible world (see section 1.4)

As I pointed out in section 1.4, God does not create out of an entity – namely the empty world; before His creation, the empty world was actualized (or it obtained), therefore there were no entities at all, neither the empty world itself. Yet a puzzle emerges, as I am going to show:

(1) Creation out of nothing implies that there is an (absolutely) empty possible world, i.e. an entity that represents a maximal consistent situation according to which there are no objects at all;

(2) A necessary entity is an entity that exists in every possible world

Then, the argument runs as follows. By (2):

(3) If there is a necessary entity, then there cannot be an empty possible world

Since the consequent of (3) is the negation of the consequent of the conditional in (1), we can claim that:

(4) If there is not an empty possible world, then creation out of nothing is impossible

Therefore:

(5) If God is a necessary entity, then He cannot create out of nothing

Indeed, if one cannot count the possibility that there is nothing at all, i.e. the existence of an empty world, among the possibilities, then the creation out of nothing is impossible.

Besides, one should note that (3) is a well-known anti-nihilism argument against the existence of an empty world, as I recalled in section 1.3: if there is a necessary being, i.e. an entity that cannot fail to exist, there is not a possible empty world, since in each world there is at least that necessary being.

So, the set {‘...is a necessary entity’; ‘...is creator out of nothing’} seems to be an inconsistent set of properties.

Maybe the notion of *nihil originarium* could help us. If we consider God identical to the absolute absence of everything, then we could state that the absolute absence of everything is represented by the empty world. Let us assume that an empty world is a contradictory entity (see section 3.2). I think that this account can offer an interesting way for reading the so-called theologies of nothing<sup>86</sup> and the notion of “contraction of God”<sup>87</sup> that could be linked to it. Let us consider the thesis according to which God creates everything by contraction or retraction. Such a “movement” can be intended as the self-negation of the empty world: since it is a self-contradictory entity, it implies just non-empty worlds, i.e. worlds with *something* in it. That is a sort of creation out of nothing, where nothing(ness) is exactly the empty world (God) that, by means of its own logical ‘sacrifice’ (since it is a self-contradictory entity) allows possibility for all

<sup>86</sup> I use the phrase ‘theology of nothingness’ simply for referring to those theologies that – broadly speaking – identify God with nothingness.

<sup>87</sup> See for example the Jewish phrase ‘*Tzimtzum*’, i.e. ‘contraction’, a process by means of which God created the Universe out of its nothing, according to the Kabbalah. For the aim of this brief appendix, I will not commit myself to a particular notion of creation by means of “contraction” or “retraction” of God. I just assume in a very broad way that a creation by means of contraction/retraction of God is a creation through the self-negation of God itself.

entities, i.e. it allows the existence for non-empty worlds (worlds that represent *something*)<sup>88</sup>. In this way we obtain an account of *nihil originarium* by means of the empty world-account.

---

<sup>88</sup> I will propose a similar strategy in my reading of the opening of Hegel's *Logic* (see section 5.1.).

## Chapter 5

### IS THE EMPTY WORLD USEFUL FOR METAPHYSICAL ANTI-NIHLIST? TWO RELEVANT CASES ACROSS ANALYTIC AND CONTINENTAL METAPHYSICS

In this chapter I propose two relevant cases where the notion of nothingness occurs in a – say – “continental” fashion, respectively from Hegel’s metaphysics and from contemporary Italian metaphysics. At this end, I use the account of nothingness as absolutely empty world that I have developed in the previous chapters, in order to show its usefulness for analyzing fundamental metaphysical issues. In this chapter I consider what could happen if metaphysical anti-nihilism was true, in order to show that also in this case the notion of the empty world is very useful as account of nothing(ness)<sup>89</sup>. Finally, this chapter is also a sort of “bridge” across analytic and continental metaphysics.<sup>90</sup>

Keywords: empty world; Hegel; being; nothing; becoming; Emanuele Severino; contradiction.

#### **5.1. The opening of Hegel’s Logic and the empty world: from being to nothing without becoming**

##### 5.1.1. Being, nothing, becoming and determinate being in Hegel’s Science of Logic

In the following sections I will propose an approach to the opening of Hegel’s Logic by means of possible worlds. In particular I will show that:

(i) we can consider Hegel’s categories of being (*Sein*) and nothing (*Nichts*)<sup>91</sup> by means of the notion of the empty world;

---

<sup>89</sup> As I pointed out in section 3.1, we should distinguish between the question about how to account for nothingness and the question about its existence.

<sup>90</sup> In chapter 3.1 I also proposed a version of the meontological argument for the truth of metaphysical nihilism based on a so-called “idealistic” strategy, i.e. based on a principle – omnis *determinatio est negatio* – that Hegel endorses too. In this chapter I consider Hegel an anti-nihilist. That is not an incoherence. Indeed in the above-mentioned “idealistic” strategy I just assumed that principle from “idealism” and no other “idealistic” or “Hegelian” devices.

<sup>91</sup> In order to use Houlgate (2006)’s translation of Hegel’s Logic, I use ‘nothing’ with no particular commitment to a quantifier phrase or to a non-quantificational phrase.

(ii) that operation allows us to derive the Hegelian notion of determinate being (*Dasein*) without appealing to the controversial notion of becoming (*Werden*) as passage from being to nothing, yet keeping a strategy very close to Hegel's dialectic.

In order to get this result, I assume that an empty world is a (self-)contradictory entity<sup>92</sup>, for the reason that I pointed out in section 3.2.

I mainly adopt Houlgate's (2006) interpretation of Hegel's Logic because it is very appropriate for my possible worlds-approach to Hegel and because it is one of the most important available readings. Anyway in section 5.1.3 I will underline the most important difference of my approach respect to Houlgate's one. There are surely other good readings of Hegel's Logic, but I think it is sufficient for this dissertation to show the possibility of a link between Lewis and Hegel on the basis of at least one influential interpretation of Hegel, such as Houlgate's interpretation.

As it is known, Hegel's Logic has a sort of double beginning: pure being and the determinate being. The first is the abstract beginning, which we need to start with in order to respect the requirement of *starting without presuppositions*:

thought that sets aside all its assumptions about *what* it is, is left with nothing to think but the simple thought *that* it is. Hegel's presuppositionless science of logic begins, therefore, with the thought of thought itself as simply *being* - not being anything in particular but simple *be-ing* as such.

(Houlgate, (2006), p.31. I am going to recall the opening of Hegel's Logic mainly referring to Houlgate's work of the same name)

The second beginning – the real one – is the determinate being that I will consider later. Let us return to pure being. Houlgate's phrase 'not being anything in particular' can be paraphrased as 'the absence of any determination' or 'the negation of any determination': pure being is the genuine starting point of anyone who wants to begin with no premises at all because one needs to rule out every determination, every particular entities, everything. Therefore pure being is the negation of everything or the

---

<sup>92</sup> I suppose that we should leave aside both the meontological argument and the elenctic argument, in order to develop my possible worlds-approach to Hegel. That is not a trouble, since I am dealing with the usefulness of the notion of the empty world from an anti-nihilist point of view. Note that – for the sake of my argument – I will consider the empty world selfcontradictory, therefore I will take one of the conditions of the elenctic argument (section 3.2.), but not the whole argument.



absolute indeterminate: it has no content and nothing can be thought about it. So it is the same as nothing (*Nichts*), given that the latter is exactly the absence of all determination or the negation of everything:

(I) Being (*Sein*) = NOT-(*a, b, c, ..., n*) = Nothing (*Nichts*)<sup>93</sup>

Since being reveals itself as nothing and *vice versa*, Hegel can state that the first «does not pass over but has passed over into nothing, and nothing into being» (SL in Houlgate 2006, p. 195 [Henceforward I consider the translation of Hegel's Logic that appears in Houlgate's text and I mark it as: SL in Houlgate (2006)]: there are not two things – being and nothing – that are separated and that become respectively the opposite, because the fact that being is the same as nothing does not appear at a certain instant of time and one cannot think about 'being' without thinking about it as immediately identical to 'nothing'.

However, Hegel also notes that being and nothing are distinct. In fact – I think - *Sein* is not *a, b, c, ..., n* for a different reason than *Nichts* (or *Sein* and *Nichts* negate any determination for different reasons), although the result of this negation is the same, i.e. the indeterminate. The true difference between being and nothing can be thought if one considers them *moments* of becoming (*Werden*), i.e. a «movement in which both are distinguished, but by a difference which has equally immediately resolved itself» (SL in Houlgate (2006), p.195). The Hegelian notion of moment (*das Moment*) allows us to better understand this point. Hegelian moment (that I am considering) is not an instant of time, but it is an aspect of a structure that *cannot be separated* from the structure itself or from the other aspects of it; yet such an aspect *can be distinguished* from the structure or from the other aspects of it. Therefore being and nothing cannot be separated from their structure, i.e. becoming, but they can be distinguished in the following way. The passage from nothing to being (the fact that nothing reveals itself as being) can be distinguished from the passage from being to nothing (the fact that being reveals itself as nothing): the first is *coming-to-be* and the latter is *ceasing-to-be*. So, when we consider being and nothing as moments, we find their original truth, i.e. 'ceasing-to-be' and 'coming-to-be': «both [being and nothing] are the same, *becoming*, and although they differ so in direction they interpenetrate and paralyse each other» (SL in Houlgate 2006, p. 199). Yet becoming is not the *real* beginning. Becoming is

---

<sup>93</sup> *a, b, c, ..., n* are all actual or possible determinations (things, objects, events, sets, universals, etc.).

intrinsically self-contradictory because each moment is opposed to the other: being vanishes into nothing and *vice versa*. So «their vanishing is the vanishing of becoming or the vanishing of the vanishing itself» (SL in Houlgate 2006, p. 199). But this “self-destruction” of becoming does not imply pure nothing as result: since becoming is always *becoming of something*, being and nothing – as moments, i.e. ceasing-to-be and coming-to-be – unify themselves into a determination (*Dasein*, determinate being) that exactly *came to be* and that *will cease to be*.

This development from *Sein* to *Dasein* is a good example for showing how Hegel proceeds in his Logic, although the transition from pure being to determinate being does not necessarily reflect an Hegelian putative “method” (neither a dialectical one), since the starting point is a presuppositionless thought (therefore a thought without *any* assumption)<sup>94</sup>. However, I think it is useful for the sake of my interpretation to point out a sort of Hegelian “dialectical method”, that can be described as Forster (1993) does:

[...] category A proves to contain a contrary category, B, and conversely [...] category B proves to contain category A, thus showing both category to be self-contradictory. He [i.e. Hegel] then seeks to show that this negative result has a positive outcome, a new category C. [...] This new category unites [...] the preceding categories A and B.  
(Forster 1993, p. 132. See also section 7 in this paper).

Let us consider the beginning of the *Science of Logic* by means of Hegel’s dialectical approach. We can state that:

A is ‘being’ (*Sein*)

B is ‘nothing’ (*Nichts*)

C is ‘determinate being’ (*Dasein*)

Besides I think it is very useful adding the following:

---

<sup>94</sup> About this question, see Houlgate (2006), chapter 2: *Does Hegel have a method?*

A\* is ‘being’ *as moment* (of ‘becoming’), i.e. ‘ceasing-to-be’ (because it is the movement or the passage from being to nothing)

B\* is ‘nothing’ *as moment* (of ‘becoming’), i.e. ‘coming-to-be’ (because it is the movement or the passage from nothing to being)

C\* is ‘becoming’ (*Werden*), i.e. the self-contradictory unit structure of being and nothing

### 5.1.2. The empty world at work: approaching Hegel by means of possible worlds

Let us consider the identity (I) between being and nothing absolute indeterminate, i.e. the absence of any determination(s) such that – again –

A is ‘being’

B is ‘nothing’

and they are the same since they can both be reduced to NOT-(*a,b,c,...n*). Let us try to show whether one can derive determinate being (*Dasein*) – the category C – by means of Lewisian modal realism.

Let us assume that the empty world is a contradictory object for the reason that I proposed in section 3.2. Note that I am not assuming the elenctic argument’s strategy (since I am considering a “unrepentant” anti-nihilist point of view), but just one of its condition, namely the condition according to which the empty world is not an entity at all, since it is self-contradictory. If one holds that thesis (namely that the empty world is a contradictory entity), then one is anti-nihilist because the empty world cannot exist (assumed – of course – that all entities are not contradictory entities).

What could A\*, B\* and C\* be from such an anti-nihilist point of view? I am going to argue that C\* is an empty world and A\*, B\* are the “moments” (in the Hegelian meaning of *das Moment*) of such a world.

What are we really thinking about when we think about the absolute indeterminate as being or nothing? One could “translate” these notions as empty world (as – *de facto* – analytic metaphysicians have done by conceiving nothing as empty

world). When one thinks about the negation of any determination, then one is representing the maximal consistent “situation” – broadly speaking – according to which there are no objects, no determinations, and that situation is exactly represented by an empty world (see section 1.4). Instead of being ‘ceasing-to-be’ and ‘coming-to-be’, A\* and B\* are respectively:

A\* is the world as such;

B\* is the “content” of the world, i.e. what such a world represents, i.e. the absence of any determinations.

These moments are in contradiction, as in Hegelian account, at least in virtue of the reason I proposed in section 3.2.1. Consider for example Lewisian worlds. The empty world is a determination that represents the absence of any determinations, but – since by Lewis’ modal realism a world is a mereological sum of things – no objects implies no world, so an empty world (and A\* is the empty world *as world*) is a sum (as world) that is not a sum, because there are no parts as addends. Therefore the world-moment (A\*) is in contradiction to the other moment, i.e. the absence of all things. In turn, the moment B\*, *as absence of all things*, is in contradiction with the world-moment, because B\* is the absence of all things but there is at least a thing that is the empty world. So, like the category of ‘becoming’ in Hegel, the empty world (C\*) is self-contradictory and it is the “vanishing” of itself: this is a way to understand Lewisian rejection of the empty world and to show his affinity to Hegel (at least in such a fundamental metaphysical question). Finally, in Hegel the self-negation of becoming does not imply *nihil absolutum* as result, but the existence of determinate being (*Dasein*), as well as in Lewis the rejection of the empty world implies that each world is not-empty, i.e. there is at least a determinate being in every possible world (not necessarily the same in every world).

My interpretation of the opening of Hegel’s logic by means of possible worlds could be also useful for eluding one of the fundamental objections of Schelling (and other philosophers) to Hegel. According to Schelling, «the thought of pure being with which Hegel claims to begin the *Logic* is in fact one in which “nothing is thought” – indeed, it is an “un-thought” – and Hegel’s assertion that “pure being is nothing” is just an empty tautology stating that “nothing is nothing”» (Houlgate 2006, pp. 103-104). If

the identity between pure being and nothing is not the identification of contrary categories, as Schelling seems to claim, then there is no contradiction and so there is not a development or passage from pure being to nothing. If we assumed that this objection works, then there would be just the category of nothing and there would not be the vanishing of a category (pure being) into its contrary (nothing). However, I think that just this category of nothing could imply the passage to determinate being (*Dasein*), if we considered it – as I said before - by the means of possible worlds, since nothing as absolute absence of all determinations can be thought as an empty world. Therefore, the tautology that Schelling points out – “nothing is nothing” – would be in fact “the empty world is the empty world”. But I have assumed an anti-nihilist point of view such that an empty world can be conceived as a two-moments self-contradictory structure that negates itself, so that there are only non-empty worlds, i.e. in every world there is at least one determinate being (*Dasein*).

One could object that the theory of possible world (for example Lewisian modal realism) is somehow a premise that one must assume as true in order to “translate” the opening of Hegel’s *Logic* by means of possible worlds, while in contrast Hegel’s aim – as I said before – is a presuppositionless thought:

The beginning must be an *absolute* [...] and so it *may not presuppose anything*, must not be mediated by anything nor have a ground; rather it is to be itself the ground of the entire science

(SL in Houlgate 2006, p. 29)

However such an idea of presuppositionless beginning commits Hegel to the notion of indeterminate or pure being. Certainly, the notion of pure being vanishes (into nothing, and *vice versa*), yet «Hegel is not asserting that both [i.e. being and nothing] vanish *before* they can even be thought» (Houlgate 2006, p. 272). So Hegel claims that pure being (and nothing) can be thought and grasped and «logically what they are thought to be, and what they *are*, is nothing but their *vanishing*. The fact that they vanish the moment they are thought does not demonstrate that their immediacy somehow eludes our grasp» (Houlgate 2006, p. 272). I sum up: the notion of presuppositionlessness (*Voraussetzungslosigkeit*) commits Hegel to the notion of indeterminate being; and such a notion, by vanishing into nothing (and *vice versa*), reveals itself as vanishing itself,

where this vanishing is the category of becoming - according to Hegel. Could my possible worlds-approach to Hegel betray the above mentioned notion of presuppositionlessness? I would reply that my approach merely uses the notion of possible world just considering it a way according to which things could be (or could have been). Let us call this notion of possible world “neutral” or “agnostic”, since it does not specify what exactly (metaphysically) possible worlds are (my previous appealing to Lewis’ modal realism was just an example)<sup>95</sup>. At this point of my understanding of the opening of Hegel’s logic by means of possible worlds (where the point is the passage from pure being/pure nothing to the empty possible world) I just need to follow the notion of presuppositionlessness as well as Hegel does. Indeed, if presuppositionlessness implies the notion of absolute indeterminate, i.e. being and then nothing and then their vanishing, similarly in my approach the notion of presuppositionlessness implies the notion of absolute indeterminate, i.e. pure being and then nothing and *then the empty world*. Indeed, what does one think about when one thinks about the notion of absolute indeterminate? One represents a maximal consistent situation – broadly speaking – at which there are no entities; but a maximal consistent situation things could be is represented by a possible world, without any further commitment – for the moment - to some other aspects of a particular account of possible world. Anyway, we can show ; and a maximal consistent situation according to which there are no entities at all is exactly represented by an empty possible world. After appealing to the empty possible world, one must evaluate it: if it is a self-contradictory entity, then Hegelian development from *Sein* to *Dasein* works from a possible worlds’ metaphysical point of view, as I showed before; instead, if it is not self-contradictory, then one could accept (at least *prima facie*) an empty possible world in its own ontology and Hegelian development would not be confirmed by means of possible worlds-approach.

As we can note, considering the absolute indeterminate (*Sein/Nichts*) an empty world does not seem a very strong presupposition, since such a consideration does not

---

<sup>95</sup> Also the statement: “There are possible worlds” is an assumption. But it is not so strong as assumption if one does not specify *what* possible worlds are. If one assumes the above-mentioned statement in a very general and pre-ontological way, one simply assumes that things might have been different. Certainly, one could object that my approach appeals to the notion of representation and so it is committed to an account or at least to a set of alternative accounts of possible worlds among others. Therefore my approach would not be presuppositionless. However, if one also considered these assumptions too controversial, I would reply that the Hegelian assumption according to which the becoming is a passage from being to nothingness and *vice versa* seems to be more controversial, as I will note later. So the advantage of my approach is given by the fact that I appeal to assumptions (as a representative notion of possible worlds) that are not so ontologically heavy as Hegel’s theory of becoming.

assume the truth of a particular account of possible world (i.e. it is a sort of temporary agnosticism about what possible worlds are). Instead the selection of an account of possible world (i.e. a statement like: ‘the account x of possible world is true’) rather than another seems to be a strong presupposition that undermines notion of presuppositionless development, by betraying Hegel’s original aim. Yet I think it is not a premise or presumption which my approach to Hegel rigidly depends on, for the following reason. We have seen that a “concretist” account of possible world (for example Lewisian’s one) gets a self-contradictory notion of empty world; a similar situation would occur in a “combinatorialist” account: since an absolutely empty world does not rearrange any metaphysical simple, it is a self-contradictory object, a recombination of simples that is not a recombination of simples. Finally, if we conceived possible worlds as maximal consistent states of affairs – as in Plantingan realism -, we should not admit an empty world too: the latter would be a state of affairs according to which there are no entities at all, but there would be (at least) the states of affair itself, *self-contradicting*. And in a “book realist” account or – generally – in any “representationalist” account of possible worlds, an empty world would be an entity that represents the absence of unrestrictedly everything, included itself, by contradicting itself.

Besides, I recall and underline that in Hegel being and nothing are thought *before their vanishing as vanishing themselves*; similarly in my possible worlds-approach, being and nothing are thought before their vanishing as empty world: the absolute indeterminate is the empty world and one can think about it, one can grasp it, before its “vanishing”, where its “vanishing” is the exclusion of it from our ontology because it is a self-contradictory entity (like in Hegel, where vanishing as becoming – *Werden* – vanishes because it is self-contradictory).

The objection against my approach to Hegel’s Logic, referring to the lack of presuppositionlessness, can be reintroduced at this point. Suppose that one admits a world with only abstract objects in it, i.e. – broadly speaking – objects that do not exist in space or in space-time, e.g. numbers, sets, properties, etc<sup>96</sup>. Since an abstract object is not in time, it cannot be considered a becoming entity and a genuine *Dasein*; therefore – the objection claims - in my approach to Hegel’s opening of Logic, a world with only

---

<sup>96</sup> Of course, there is a big debate about how abstract/concrete distinction should be drawn, but I cannot deal with it in this paper because of space. Therefore I assume that the distinction between abstract and concrete objects is based on the notion of space-time.

*abstracta* in it would be a world that fails to represent a genuine *Dasein* and the development from *Sein* to *Dasein* would not work necessarily, because there would be non-empty worlds (worlds with only abstract entities in it), but without genuine determinate beings. So such an objection affirms that considering C\* an empty world instead of the category of becoming requires a big presumption, i.e. the choice for accounts of possible worlds (or the choice of metaphysical assumptions) that do not allow the possibility of worlds with only abstract objects in it; or it requires the presumption that abstract objects does not exist and there are only concrete objects. Of course, there are good arguments for these premises. But it is a problem just assuming premises since Hegel's Logic wants to be presuppositionless, as I showed before. Therefore one can again object that my approach to Hegel's Logic requires the truth of certain discussed premises, betraying Hegel's aim.

I think I can propose a reply to this objection. The main point at issue is whether the notions of determinate being, becoming entity and (spatio)temporal entity *convertuntur*. Well, I think an entity can be determined regardless it is something that becomes or it is not. What is minimally required for being determinate is just being different from another entity (*omnis determinatio est negatio*). Therefore, both a concrete object (that becomes or does not become) and an abstract object (that cannot become) are similarly determinate, although the latter is not in time. Since in my possible worlds-approach to Hegel's Logic the notion of becoming is replaced by the notion of the empty world, I am not committed to the notion of time or passage in time; so a world with only non (spatio)-temporal objects is anyway a world with a determinate being, although it is not in time. Therefore the objection fails. Certainly, the objector could state – at this point – that there is nothing beyond time, i.e. there are no abstract objects. But, if it is so, then a world with only abstract objects is simply an absolutely empty world (since *abstracta* do not exist) and so the objection cannot be made up. So Hegel or an Hegelian have two options: i) ruling out abstract objects (i.e. non (spatio)-temporal objects) for holding the thesis according to which any *Dasein* becomes, therefore it is in (space)-time (i.e. it is a concrete object); ii) admitting abstract objects, but stating that determinate being (*Dasein*) is not necessarily an entity that becomes (since an abstract object is not in time). But the case (ii) is something more consistent with my own approach to Hegel's development from *Sein* to *Dasein*, since I do not use the notion of becoming. (One could object that the notion of time does not



belong to Science of Logic, since it is considered in the Philosophy of Nature. I will return to that topic later).

One should note that my above-mentioned approach has less premises than Hegel's one. In fact, for holding that an entity is determinate if and only if it becomes – as he seems to claim - Hegel seems to be forced to assume that there are no abstract objects (therefore everything becomes, i.e. everything is in time), i.e. a premise that could undermine his presuppositionless thought/project. Instead, in my approach, the development from the category C\* (empty world) to determinate being (C) works regardless of the truth of the premise according to which there are no abstract objects. So my possible worlds-approach doesn't need to assume such a premise.

In the matter of presuppositionlessness and in relation to the previous considerations, I would also underline that the presence of a category as 'becoming', considered as passage from being to nothing and *vice versa*, is quite controversial from a contemporary metaphysical point of view. So, the Hegelian passage from *Sein* to *Dasein* is "overloaded" with controversial notion of becoming as passage from being to nothing and from nothing to being, whereas my Lewisian approach with possible worlds do not need the controversial notion of becoming<sup>97</sup>.

### 5.1.3. General objections

According to Forster (1993), although Hegel has a sort of method (that I briefly recalled), the opening of Hegel's Logic does not seem to respect it, since there is a controversial passage from becoming to determinate being:

The problem here lies not so much in Hegel's idea that, having discovered two contrary categories to be mutually implying and therefore self-contradictory, one might find some new category that eliminated the self-contradiction by unifying them in a manner that in a sense preserved while in a sense abolishing them [...]. The problems lies rather in the suggestion that the transition to this new category might be a *necessary* one (Forster 1993, p. 145)

---

<sup>97</sup> The notion of becoming is controversial in Hegel for two reasons. The first one is that – as I have said - he thinks it as a passage from being to nothing and *vice versa* and I think that such a definition is quite controversial from the point of view of the contemporary metaphysics and physics. The second one is that the question of becoming «have been debated for more than two millennia, with no resolution in sight» (Savitt, Steven, "Being and Becoming in Modern Physics", *The Stanford Encyclopedia of Philosophy* (Fall 2013 Edition), Edward N. Zalta (ed.), URL = <<http://plato.stanford.edu/archives/fall2013/entries/spacetime-bebecome/>>.

Forster notes that there are no explicit justifications for the necessity of the transition from being/nothing to determinate being through becoming and he considers the question about which sense of necessity one should adopt in such a transition.

I think the possible worlds-approach to Hegelian transition from *Sein* to *Dasein* can spell out the reason of the necessity, since one doesn't need to pass through the category of becoming, but just through the notion of the empty world. An empty world is self-contradictory because what it represents negates the existence of the world itself, and – symmetrically – the existence of the world itself negates what is represented. Indeed, as I pointed out before, a thing (a world) according to which there are *absolutely* no things is something that negates its own presence; and the absence of all things that is represented by a thing (the world) is self-refuted since it is represented by a thing that is not absent. Therefore, the impossibility of the existence of an empty world (that is in general the impossibility of the existence of a contradictory entity) implies that the worlds are *necessarily* non-empty, i.e. in each world there is at least one determinate being (*Dasein*) - although it is not the same entity in each world.

One could object that I give a temporal interpretation to the Hegelian notion of becoming and – consequently – to the Hegelian notion of determinate being, by using wrongly the category of time although it does not belong to the opening of Hegel's Logic, but rather to the Philosophy of Nature. Surely this objection is “philologically” good, if we are interested just in what Hegel meant; however I would reply to such an objection by noting that Hegelian notion of becoming as passage from being to nothing and *vice versa* is a structure of two moments – ceasing to be and coming to be – that would be *meaningless* without the notion of time. Even though Hegel does not appeal to the notion of time for presenting the passage from being to nothing, it is clear that, without appealing to a temporal process, the moments of becoming would be hardly conceivable. Therefore also the Hegelian notion of determinate being will be inevitably committed to a temporal aspect, since it derives from the notion of becoming.

Another fundamental objection against my strategy could be the following. As Redding (2010) notes,

Regardless of how we interpret this however, it is important to grasp that for Hegel logic is not simply a science of the *form* of our thoughts but is also a science of actual “content” as well, and as such is a type of *ontology*. Thus it is not just about the concepts “being,” “nothing,” “becoming” and so on, but about *being, nothing, becoming* and so on, *themselves*. This in turn is linked to Hegel's radically non-representationalist (and in some sense “direct realist” ) understanding of thought. The world is not “represented” in thought by a type of “proxy” standing for it, but rather is presented, exhibited, or made manifest for the mind in thought (2010).

whereas I have mainly proposed a *representationalist* understanding of *being* and *nothing* as the maximal consistent situation exactly *represented* by an empty world. Anyway, I think that we risk ending up in a blind alley, if we let *being* and *nothing* exhibit themselves. Indeed, they are the negation of any determination: no determination will exhibit itself. Of course, Hegel provides a solution by appealing to the category of becoming (*Werden*) and then by appealing to what becomes (*Dasein*), the latter being the *real* beginning. But – as I pointed out before – the category of becoming is exactly one of the main trouble within Hegel's strategy. Therefore I suppose to be less controversial appealing to a representational account of possible world in order to conceive *being* and *nothing*.

Finally I am going to clarify and summarize which core ideas of Hegel<sup>98</sup> can be kept in my proposal and which claims should be ignored or modified, in order to make possible worlds-approach to Hegel more justifiable.

The most important Hegel's point that I endorse in this paper is the notion of presuppositionlessness (*Voraussetzungslosigkeit*), as I have presented since the first section. From this notion, Hegel's Logic shows the passage from *Sein* to *Dasein* as well as it is shown in my interpretation, although through a different strategy. The second fundamental idea that I acquire from Hegel's Logic is the notion of being as absolutely indeterminate; such a notion is strictly linked to the notion of presuppositionlessness, as I recalled in the first section. However, to this end, I propose to follow an alternative path, composed of two main steps that I will recall below, in order to account for the category of being and – consequently – for the category of nothing.

---

<sup>98</sup> I mean – at least – Houlgate's interpretation of the opening of Hegel's Logic.

The first step is alternative to Houlgate's interpretation of Hegel and it is useful for the second step, i.e. for the possible worlds-approach to the opening of Hegel's Logic. The first step consists in understanding the category of being, i.e. the absolute indeterminate, as the negation of every determination. Indeed, the absence of any presupposition, that is "the thought of thought itself as simply *being* - not being anything in particular but simple *be-ing* as such" (Houlgate 2006, p. 31), could be understood as the negation of any determination.

The second step is just an attempt to give an account of the phrases 'the absence of everything' or 'the negation of everything'. At this end, I considered possible worlds' device as a profitable way for my aim. Certainly the introduction of possible worlds' conceptual equipment seems to contradict the notion of presuppositionlessness, being a huge presupposition. However, as I pointed out, the notion of presuppositionlessness itself commits Hegel to the notion of absolute indeterminate, i.e. – according to the first step above – to the notion of the absence of everything. Therefore, appealing to a set of premises (for example Lewis' modal realism fundamental premises) is strongly useful for understanding what Hegel is really thinking about when he thinks about *being*. Besides one should note that these premises are not so binding if we assume a "neutral" or "agnostic" account of possible world, instead of Lewis' one, and they seem to be less problematic than some Hegel's premises, in particular respect to Hegel's notion of becoming (*Werden*) as passage from being to nothing.

Finally, another fundamental Hegel's point that I keep in my proposal is the claim according to which the notion of *Dasein* necessarily derives from the notion of pure being (*Sein*), and so it necessarily derives from the notion of presuppositionlessness. One should note that *I don't mean* that the notion of being as absolute indeterminate implies the notion of determinate being because the absolute indeterminate is the determinate absence of any determination. Rather my proposal is the following: since the absolute indeterminate is the absence of any determination (without assuming necessarily or *prima facie* that this absence is a determination); since we can understand this phrase – 'absence of any determination' – by means of possible worlds approach (in order to make this phrase less "mystical" or "mysterious" as possible); and since we assume the notion of the empty possible world to be self-contradictory, then there are just non-empty possible worlds, i.e. worlds with determinate beings. In other words, the appeal to an empty possible world for giving an account of the absence of any determination *is not* a sort of "overlap" between a

determination (the empty possible world) and the absence of any determination. As in any possible world, one should distinguish between the world itself and what such a world *represents*. In the case of an empty world, the world itself is a determination, but what it represents is the absence of any determination. Therefore the introduction of an empty world is such that one can distinguish, but one cannot separate the empty world itself from the absence of any determination (see section 1.4), as well as in Hegel the two *moments* of becoming can be *distinguished*, but they cannot be *separated*. The two moments of the empty world (the determinate world and the absence of any determination) are in contradiction, but they are not simply the same, as well as in Hegel being and nothing are distinct moments of becoming. If one didn't distinguish the two moments of the empty worlds as I did, then one should state that the absolute indeterminate *is identical to* a determination (i.e. to the empty world *as world*); *but this is not what I propose*. Rather – since I distinguish the two moments of the empty world – I propose something like this: the absolute indeterminate *is represented* by a determination.

As we have seen, my possible worlds-approach to Hegel's opening of Logic needs to read Hegelian category of being as negation of any determination, moving away from Houlgate's interpretation of being (but keeping the idea of presuppositionlessness). Indeed, according to Houlgate, "pure being immediately vanishes into nothing because it is so pure and indeterminate that logically it is not even the very being it is" (2006, p. 280); instead in my proposal I must hold that being is the negation of any determination.

At this regard, I underline that in my interpretation I must use in particular four notions – possibility, world, consistency and representation – whereas Hegel endorses a notion of pure being that is not a world, a possible world, a consistent situation, a representation etc. That is certainly true; but these notions – or in general possible worlds as representation of consistent situations – can help us to give an account of the category of pure being (and pure nothing) that seems to be a very controversial category, above all in contemporary analytic metaphysics. Indeed, since I consider pure being the negation of any determination, then these notions do not undermine the idea of pure being, but they clarify it.

Finally we have seen that I need to replace Hegel's notion of becoming as passage from being to nothing in order to show an alternative strategy for deriving

*Dasein* from *Sein*. This is in my opinion one of the most important advantage of my approach to Hegel's Logic.

In summary I think my reconstruction of the opening of Hegel's Logic could contribute to make Hegel's thought more attractive to analytic metaphysics, provided that we are disposed to leave behind or to reinterpret some Hegelian conceptions.

## 5.2. The puzzle of nothingness in Emanuele Severino's ontology and the empty world<sup>99</sup>

### 5.2.1. The *aporia* of nothingness and its solution according to Severino

Severino (2013)<sup>100</sup> recalls the classical *aporia* of nothingness in the following way:

Parmenide porta alla luce l'assoluta nullità del nulla (*me eon*, 'non essente'). Proprio perché essa è tale, il nulla non può essere *qualcosa* di «conoscibile» e di «esprimibile» (fr.2). Infatti si può conoscere ed esprimere solo qualcosa che è, ossia un essente, mentre il nulla, assolutamente, non è un essente. E *tuttavia*, proprio nell'atto in cui si affermano questi caratteri del nulla, il nulla si presenta come qualcosa di conoscibile ed esprimibile<sup>101</sup>

More systematically, Severino (1958) proposes two ways according to which we can present the above-mentioned *aporia*, based on the use of 'nothingness' as a noun phrase:

(i) Nothingness is posited (or thought) as what *is not anything*; but since it is *posited*, it somehow *is something*.

(ii) Nothingness is the opposite of *what it is*; but since it is absolutely nothingness, it is neither the opposite of *what it is*.

---

<sup>99</sup>I consider Severino an anti-nihilist for the following reason. We will see that he considers nothingness a self-contradictory structure. Since I argue that we should account for nothingness by means of the empty world, then we get that Severinian nothingness as empty world turns out to be self-contradictory. Of course, that is just my reading of Severino's account of nothingness, not his own approach to the question.

<sup>100</sup> Severino has considered the puzzle of nothingness at least from Severino (1958)

<sup>101</sup> Severino (2013), p.106.

First, we should note that Severino assumes that the phrase ‘nothingness’ cannot be always reduced to a quantifier phrase, *contra* Carnap. As he writes in Severino (1958):

[...] Carnap non tiene distinta, nella proposizione  $\langle \neg(\exists x). x \text{ è al di fuori di } \dots \rangle$ , la situazione logica in cui la variabile  $x$  assume un numero limitato di valori positivi (si che ciò rispetto a cui  $x$  è ‘al di fuori’, ‘oltre’, è una dimensione limitata del positivo), dalla situazione logica in cui [...]  $x$  può assumere *tutti* i valori positivi (si che ciò rispetto a cui  $x$  è ‘al di fuori’ è la stessa totalità del positivo). È appunto in questo secondo caso che il nulla (l’al di fuori dell’intero) *si manifesta*: appunto in quanto nella proposizione:  $\langle \neg(\exists x). x \text{ è al di fuori della totalità del positivo} \rangle$  è manifesto il significato: ‘al di fuori della totalità del positivo’ (p. 228)

In other words, when we try to paraphrase ‘nothing’ by means of Carnap’s strategy (see section 1.1), if we admit that the domain of our discourse is absolutely unrestricted (see chapter 3), then the strategy does not work, since – according to Severino – we are constrained to quantify over a putative thing that is beyond the all-inclusive domain of all things. It is clear, then, that Severino must also assume the possibility of unrestricted quantification. However, chapter 1 of the present dissertation provides enough arguments for assuming that the phrase ‘nothing’ is not always a quantifier phrase.

Another way to spell out the aporia could be the following:

- (1) Everything that exists is positive [assumed]
- (2) Nothingness is not positive [assumed]
- (3) For all  $x$ , if  $x$  appears, then  $x$  is positive [assumed]
- (4) Nothingness appears (for example it appears as what is beyond the totality of positive)

Therefore

- (5) Nothingness is positive [by (3), (4)]

(6) Nothingness is not positive and nothingness is positive [by conjunction of (2) and (5)]

Could we avoid the contradictory result by rejecting (2)? That would mean to affirm that nothingness is positive so that we would be constrained to reject our intuition about *nihil absolutum*, i.e. the idea that nothingness is the absence of everything, so the absence of all positive determinations. Neither we could state that nothingness is positive by means of the idea of *nihil negativum*, namely a self-contradictory object: there are no contradictory positive determinations in Severino's ontology (see 1958 chapter 3). Neither we could reject (3), since it would be counterintuitive, appearance (*apparenza, erscheinung*) and positivity being two strictly related notions: what appears is *present* and it would be very hard to affirm that what is present is not positive.

The solution by Severino is an account of nothingness that is based on the following premise:

ogni significato (ogni contenuto pensabile, cioè ogni ente, qualsiasi il modo in cui esso si costituisce) è una sintesi semantica tra la positività del significare e il contenuto determinato del positivo significare; o, che è il medesimo, tra l'essere formale e la determinazione di questa formalità [...] – dove l'essere formale è appunto la positività della significanza della determinazione (Severino 1958, p. 213).

According to Severino, 'meaning' (*significato*), 'entity' and 'positive' *convertuntur*. Besides, for any entity or meaning, we can distinguish *the fact that it is an entity or a positive determination*, from *the content of that determination*. Broadly speaking, we can state that for any entity we can distinguish its *existence* from its *essence*. We should also note that in Severino, the existence of any entity is logically equivalent to its self-identity, so that: for all  $x$ ,  $x$  exists if and only if  $x$  is self-identical. As Berto (2013) recalls,

What Severino calls in his works existence or being *simpliciter*, or existence "in a transcendental sense", corresponds to self-identity: the being of existence unrestrictedly



shared by all things at all times just is their being themselves, that is, their being something, or their being what they are (and not something else).

Things that for the Meinongian lack being and/or existence [...] exist in the Severinian sense. [...] When Severino says that  $x$  has being or exists “in a transcendental sense”, the Meinongian says that  $x$  is an object, something, a thing (p. 154)

The self-identity (namely the existence) of any entity and what it essentially is<sup>102</sup> cannot be separated, although they can be discerned. For example, the noun ‘table’ refers to the fact<sup>103</sup> that the table is/exists/is self-identical and – at the same time – to the table as determination. The self-identity or existence of anything is the formal concept of being (“*essere formale*”), whereas any entity is a determination of being<sup>104</sup>. I recalled before that existence and essence – or self-identity as such and any particular determination – cannot be separated; Severino spells out this principle by stating that existence and essence are a “synthesis”, i.e. a structure of two aspects such that one can be discerned from the other, but it cannot be separated from the other. By following Hegel’s use of ‘moment’ (*das Moment*), Severino also spells out the above-mentioned structure as a two-moments structure.

With this essential background in mind, let us consider the notion of nothingness. According to Severino, since nothingness somehow appears to our thought (for example as what is beyond the all-inclusive totality) it is positive, it exists, it is self-identical. Yet its essence, what is as a determination, is the negation of unrestrictedly everything, the absence of all entities at all. Therefore the positivity of nothingness contradicts what nothingness really is; and *viceversa*, the negation of all entities contradicts the existence (or self-identity) of such a negation. In order to solve the puzzle of nothingness, Severino points out the two-moments structure of nothingness, that is – formally – the same structure that we use in order to think about any thing<sup>105</sup>:

---

<sup>102</sup> According to Severino, there is no distinction between intrinsic and extrinsic properties or between contingent and essential properties.

<sup>103</sup> I use ‘fact’ broadly speaking, with no commitment to any account of facts.

<sup>104</sup> “Il termine ‘essere’ indica un sintesi [...] tra il significato ‘essere’ (*essere formale*) e i significati costituiti appunto dalle *determinazioni* che, appunto, *sono*” (Severino 1958, p. 144).

<sup>105</sup> How nothingness can fulfil the same structure of anything? That seems to be a puzzle itself, since we should not use a formal structure for *something* in order to understand absolutely nothingness. However, the solution of this puzzle will be clear as well as the solution of any puzzle of nothingness (at least according to Severino’s proposal).

(Nothingness-<sub>P</sub>) The moment of positivity, i.e. the self-identity or existence of nothingness<sup>106</sup>.

(Nothingness-<sub>N</sub>) The moment of the negation of unrestrictedly everything, i.e. the absence of all entities<sup>107</sup>

Severino also refers to (Nothingness-<sub>N</sub>) by used a phrase such as “the content of the positive meaning of nothingness” or “the absolute negativity that is the content of the positive moment”. (I have some doubts about what kind of relation could there be between Nothingness-<sub>P</sub> and Nothingness-<sub>N</sub> if the latter was the *content* of the former. I will consider this topic later).

Maybe it is possible to provide an alternative paraphrase of the two-moments structure of nothingness by *improperly* using Barker-Jago’s account of negative facts (see chapter 2). I say “improperly” because – as I showed – the global absence cannot be spelled out by means of that account (see chapter 2). Yet I think it is an useful account to provide a paraphrase of Severino’s strategy, since it allows us to get a convergent result, as I will point out. Appealing to Barker-Jago’s account, nothingness as the global absence would be the negative existential fact that there are no objects at all. The absence itself would not be confused with what is absent. Therefore:

(Nothingness-<sub>F<sub>P</sub></sub>) The moment of positivity, i.e. the absence of everything

(Nothingness-<sub>F<sub>N</sub></sub>) What is absent

Both (Nothingness-<sub>P</sub>); (Nothingness-<sub>N</sub>) and (Nothingness-<sub>F<sub>P</sub></sub>); (Nothingness-<sub>F<sub>N</sub></sub>) are inconsistent pairs: since what is absent is unrestrictedly everything, (Nothingness-<sub>F<sub>P</sub></sub>) is in contradiction with (Nothingness-<sub>F<sub>N</sub></sub>), as well as in the case of the first pair that I recalled before.

Anyway, Severino argues that the contradictory two-moments structure is exactly the device for solving the aporia of nothingness:

---

<sup>106</sup> Severino usually calls this moment: “il positivo significare del nulla” or “il momento positivo del nulla”.

<sup>107</sup> Severino usually calls this moment: “il nulla-momento”.

[...] allorché si afferma che la posizione del non essere attesta l'essere del non essere, non si può intendere di affermare che 'nulla' significhi, in quanto tale, 'essere'; ma che il nulla, che è significante come nulla, è [...]. E, dall'altro lato, questo 'essere' del nulla non è significante come 'non essere'; ma, essendo significante come essere, è essere del nulla (che è significante come nulla). La contraddizione del *non-essere-che-è*, non è dunque *interna* al significato 'nulla' (o al significato 'essere' che è l'essere del nulla); ma è tra il significato 'nulla' e l'essere, o la positività di questo significato. La positività del significare è cioè in contraddizione con lo stesso contenuto del significare, che è appunto significante come l'assoluta negatività (1958, p.213).

Therefore Severino makes a distinction between the contradiction between the two moments of nothingness and the contradiction that would be internal to each moment: the first contradiction holds, whereas the second contradictions do not. In other words, the presence of (Nothingness<sub>-P</sub>) in the meaning 'nothingness' contradicts the presence of (Nothingness<sub>-N</sub>) because (Nothingness<sub>-P</sub>) entails the existence of an entity (since any positivity is an entity) and (Nothingness<sub>-N</sub>) entails the negation of any existence, included (Nothingness<sub>-P</sub>). Instead the "internal" contradictions do not hold because the two moments are not singularly (self)-contradictory entities: (Nothingness<sub>-N</sub>) is itself and it is not (Nothingness<sub>-P</sub>), as well as (Nothingness<sub>-P</sub>) is itself and it is not (Nothingness<sub>-N</sub>). The puzzle of nothingness would be a unsolvable aporia, if we didn't consider its two moments. Instead – according to Severino – nothingness is and is not a positive determination at the same time, but *in different respects*: nothingness is a positive determination *as* (Nothingness<sub>-P</sub>), whereas nothingness is not a positive determination *as* (Nothingness<sub>-N</sub>). The two-moments structure of nothingness is surely self-contradictory in Severino's ontology; yet – as I pointed out - the contradiction "externally" holds between the two moments and it does not "internally" occur in each moment: "I due lati o momenti di questa autocontraddittorietà (il negativo e il positivo) sono incontraddittori: il nulla è nulla e il positivo è positivo" (1958, p. 217).

The difference between the meaning 'nothingness' and the other meanings is granted by the fact that the two-moments structure of the other meanings does not entail a contradiction between the two moments (neither – certainly – an "internal" contradiction in each moment). Indeed a positive determination, as – say - a table, does not entail a contradiction between its positivity (the fact that the table exists) and its essence.

Given the two-moments structure of nothingness, (i) and (ii) are not controversial anymore because they should be read as follows:

(iii) Nothingness is posited (thought) in virtue of (Nothingness-<sub>P</sub>); that determination is the absolute negation of everything in virtue of (Nothingness-<sub>N</sub>). Nothingness holds as the opposite of being in virtue of (Nothingness-<sub>P</sub>); nothingness is truly what absolutely is not in virtue of (Nothingness-<sub>N</sub>)

At this end, Severino notes that the two moments are not two entities that are previously separated and then they are somehow “join” in order to form the meaning ‘nothingness’. Rather, they are originally joined so that they cannot be thought as separated, although we can discern them by considering them different (“Hegelian”) moments<sup>108</sup>. Yet one could object that one of the two moments, namely (Nothingness-<sub>N</sub>), could not be an entity, a positive determination, otherwise the aporia of nothingness surely would appear again. I will consider that topic in the next section.

Finally, Severino’s strategy allows us to solve the aporia spelled out by means of (1)-(6). Indeed, by means of the two-moments structure, we can reject premise (2), without ruling out our intuition of nothingness as absolutely negative: nothingness is positive and so it appears in virtue of (Nothingness-<sub>P</sub>), whereas it is absolutely negative in virtue of (Nothingness-<sub>N</sub>).

### 5.2.2. Objections to Severino’s solution and replies

Severino (1958) examines a fundamental objection to his strategy. The first obvious objection is the following: since (Nothingness-<sub>N</sub>) is the absolute negation of unrestrictedly everything, how can it be a (“Hegelian”) moment? Indeed a moment is broadly speaking an entity, it is an aspect of a semantic structure, it is somehow a determination. In other words, (Nothingness-<sub>N</sub>) as the absence of all entities is afflicted by the same contradiction of Priest’s **nothing** (see chapter 1), because it is and it is not something; but – unlike Priest – Severino does not admit contradictory objects in his own ontology, therefore he cannot count (Nothingness-<sub>N</sub>) among the entities. Severino’s reply is based on the fact that the two moments cannot be separated, as I pointed out in

---

<sup>108</sup> Although Severino inherits the notion of moment by Hegel’s philosophy, he does not approach the question of nothingness as Hegel does: see Severino (1958), chapter IV.

the previous section. At this end Severino uses an abstract/concrete distinction that we can call – following Lewis’ (1986) phrase – “the way of abstraction”. To be more precise, Severino’s way is based on Hegel’s and Italian Neoidealistic distinction between abstract and concrete. As Lewis (1986) notes, according to the Way of Abstraction, “abstract entities are abstractions from concrete entities. They result from somehow subtracting specificity, so that an incomplete description of the original concrete entity would be a complete description of the abstraction” (pp. 84-85). If we apply this schema to Hegelian (and Severinian) use of “moment”, we get the following: each moment of a (semantic) structure is an abstraction from the concrete entity which they belong to (certainly we should not read ‘concrete’ and ‘abstract’ as we usually do, for example by means of a spatiotemporally or causal account of concreteness). Besides – I suppose – concreteness and abstractness are features of our thought and not just simple features of the objects we think about. In this way, we are *concretely* thinking of a moment of a structure if and only if we are thinking of it *as related to the other moment of its own structure (and to the structure itself)*. In the case of nothingness, (Nothingness<sub>-P</sub>) and (Nothingness<sub>-N</sub>) are two abstractions of the concrete structure, since each of them is an incomplete description of nothingness, for the latter is a positive determination, namely (Nothingness<sub>-P</sub>), that is the absence of every determination, namely (Nothingness<sub>-N</sub>).

Given that, we have two options: either thinking of each moment as related to its own structure and to the other moment, or thinking of each moment as separated from the other one and from the structure itself. The first way of thinking is called by Severino: *concrete thought of the abstract moment* (“pensiero concreto dell’astratto”); the second way is called: *abstract thought of the abstract moment* (“pensiero astratto dell’astratto”). According to Severino, if we employ such a distinction, we can avoid the above-mentioned objection:

È chiaro che anche in questo caso l’aporia sorge perché il nulla-momento è astrattamente concepito come irrelato al suo essere, al suo positivo significare. In quanto la distinzione dei momenti viene intesa come la loro astratta separazione, certamente il nulla, come negatività assoluta, non può nemmeno valere come momento di una concretezza semantica. Si dovrà dunque dire che l’assoluta negatività può distinguersi dal suo positivo significare, e valere come momento semantico, proprio in quanto la stessa positività di questo valere come momento è l’altro momento [...] e cioè [...] appartiene alla struttura

dello stesso positivo significare dell'assoluto negativo, col quale significare il negativo deve essere tenuto in relazione affinché il concetto concreto non divenga concetto astratto dell'astratto (Severino 1958, pp. 221 – 222).

In other words, we are not really quantifying over (Nothingness<sub>-N</sub>); we just need to quantify over (Nothingness<sub>-P</sub>). The positivity of (Nothingness<sub>-N</sub>), its being somehow an entity, is in fact the positivity of (Nothingness<sub>-P</sub>) as we expected. The aporia would arise if one considered (Nothingness<sub>-N</sub>) without relating it to (Nothingness<sub>-P</sub>); in this way, the positivity of (Nothingness<sub>-N</sub>) would be exactly puzzling, because we should quantify over (Nothingness<sub>-N</sub>) *before* thinking about it as a positive determination. Instead, we quantify *just* over (Nothingness<sub>-P</sub>): any positivity one attributes to (Nothingness<sub>-N</sub>) is *de facto* the positivity of (Nothingness<sub>-P</sub>). So (Nothingness<sub>-N</sub>) – one of the abstract moments of nothingness - can be intentioned either by means of an abstract thought (“pensiero astratto dell'astratto”), or by means of a concrete thought (“pensiero concreto dell'astratto”). In the first case the aporia appears again and it produces a regressus or progressus in indefinitum (since (Nothingness<sub>-N</sub>) should be treated as a two-moments structure – say: (Nothingness<sub>-N'</sub>) and (Nothingness<sub>-P'</sub>); but (Nothingness<sub>-N'</sub>) would be aporetic as well as (Nothingness<sub>-N</sub>); therefore one should introduce another two-moments structure, et sic in infinitum). In the second case the aporia does not appear at all, since we can quantify over (Nothingness<sub>-P</sub>) in order to refer to (Nothingness<sub>-N</sub>), given that the latter is not separated by the former.

Anyway it is not clear which kind of relation holds between (Nothingness<sub>-N</sub>) and (Nothingness<sub>-P</sub>), if (Nothingness<sub>-N</sub>) does not exist at all; Severino would reply that such a question presupposes a mistaken separation between the two moments, as well as any aporia of nothingness. Yet I am not fully convinced of that reply. Severino's solution seems to be afflicted by a vicious circularity: in order to avoid the aporia of (Nothingness<sub>-N</sub>), he assumes the two moments-structure of nothingness, where (Nothingness<sub>-N</sub>) is already “at work”. I will return to this topic later. Besides it is not clear what the belonging of (Nothingness<sub>-N</sub>) to (Nothingness<sub>-P</sub>) (“l'altro momento appartiene alla struttura dello stesso positivo significare”) means. Again, I will return to such a question later.

### 5.2.3. Another way for spelling out the aporia of nothingness

Severino (2013) proposes another way for spelling out the aporia of nothingness. By following Severino's phrases, let us call pN the previous formulation of the aporia (see section 5.2.1.) and uN the new one.

The new version is based on Severino (2011). It is based on the paraphrase of 'nothingness' as 'not-being' and on the distinction between simple and complex meaning ("significato"). Let us assume the following premises:

(CX) For all meanings, if a meaning  $d$  is composed by other meanings, then  $d$  is complex.

(SX) For all meanings, if  $d$  is not complex, then it is simple.

Therefore, the simple/complex distinction is exhaustive and exclusive. Consider for example the meaning 'lampada' (lamp):

Questa lampada [...] è un significato complesso. Significati che compongono questo significato sono il lume, la base e il fusto di bronzo, il paralume, ecc. [...] L'*unione* di questi significati costituisce il significato *questa lampada*. Tale unione è il loro stare insieme secondo una forma di unità che non sussiste tra essi e altri essenti, per esempio tra il paralume di questa lampada e questo libro (Severino 2013, p. 120).

(As I recalled before, in Severino's lexicon 'meaning', 'entity', 'determination', etc. *convertuntur*).

Since a complex meaning – say  $c$  – is the union of its components, it is impossible that  $c$  can be counted among its components. If it was counted as such, then the unity would be identical to one of its components and so the unity would not be the unity (contradiction); similarly, the component would not be the component, being the unity itself (contradiction). Therefore:

(CX\*) For all meaning, if a meaning  $d$  is complex, then  $d$  is different from all its components

Given that, Severino analyzes the meaning 'not-being' ('non-essere') which appears as a complex meaning, since it is composed by the determination 'not' and the

determination ‘being’<sup>109</sup>, and neither ‘not’, nor ‘being’ can be considered identical to ‘not-being’. The (putative) new aporia  $uN$ <sup>110</sup> raises in so far as the meaning ‘not-being’ seems to be also composed by itself, although it is a complex meaning, because ‘not’ is itself a not-being, since it *is not* ‘being’; and ‘being’ is itself a not-being, since it *is not* ‘not’. Therefore the complex meaning ‘not-being’ turns out to be identical to one of its component, *contra* (CX\*). Besides Severino notes that the reason according to which ‘not-being’ is self-contradictory - namely the presence of itself among its components - is in fact the same reason according to which ‘not-being’ is the meaning that it is: if ‘not-being’ was not identical to each component of ‘not-being’, then ‘not’ and ‘being’ could not be discerned; therefore ‘not-being’ could not appear as the meaning that it is.

By following Severino (2013), let us be:

$M$  = the complex meaning ‘not-being’

$a$  = the meaning ‘not’ [that is a component of  $M$ ]

$b$  = the meaning ‘being’ [that is a component of  $M$ ]

$m$  = the meaning ‘not-being’ that is identical to  $a$  [because  $a$  is not  $b$ ] and to  $b$  [because  $b$  is not  $a$ ]<sup>111</sup>

As Severino (2013) points out

[...] in entrambe le parti  $a$ ,  $b$  di  $M$  è contenuto il ‘non è’; che in esse è identico nella misura in cui è distinto dai due diversi contesti in cui esso si trova. Questo ‘non è’ – lo si indichi con  $m$  – è cioè distinto dal ‘non è’ in cui  $M$  consiste» (Severino 2013, p.129).

$m$  is a component of  $M$ ; if  $M$  is identical to  $m$ , then the unity ( $M$ ) is identical to each of its components, turning out to be different from itself. On the other hand, if  $M$  is

<sup>109</sup> I recalled before that according to Severino ‘meaning’ and ‘determination’ and ‘entity’ are synonymous. Since for example ‘entity’ ranges over *absolutely everything*, also the negation ‘not’ is – broadly speaking – an entity. We can find a similar situation in Priest (2014b): “anything we can think about is an object, a unity, a single thing” (p. 15). Replace ‘object’/‘unity’/‘single thing’ with ‘entity’/‘meaning’/‘determination’ and... that’s it!

<sup>110</sup> I say ‘putative’ for the reason I will recall later.

<sup>111</sup> We need to introduce both  $M$  and  $m$  because ‘not-being’ as complex meaning ( $M$ ) is different from its components (‘not being’ is not ‘not’ ( $a$ ) and it is not ‘being’ ( $b$ )), but ‘not-being’ is identical to  $a$  and to  $b$  for the reason I recalled before. In other words,  $M$  is ‘not-being’ as unity, whereas  $m$  is ‘not-being’ as each of its components. Of course, they are the same and they are not the same at the same time; but that is exactly the aporia.



*different* from *m*, then *m* is not *M* (by definition of difference) and so it is a not-being whose components are *different* each other. Therefore *M* is a complex meaning with itself as component (*contra CX\**): that is the aporia uN.

Is there a solution for this new aporia? According to Severino, we are not considering a real aporia and so we don't need to solve it. If there is a solution to the new aporia, it is exactly an argument for showing that it is just a false aporia. pN is a *real* aporia because it is represented by a *real* contradiction, namely the contradiction of nothingness. However such an aporia can be solved by means of the two-moments structure of nothingness. Instead uN is not a real aporia because – as I will recall – the contradictory determination 'not-being' is just an instance of the contradictory determination 'nothingness'. Therefore trying to solve the putative aporia uN would mean trying to avoid the contradiction of nothingness, whereas such a contradiction cannot be avoided; rather it should be approached by the two moments-structure. According to Severino, the meaning 'nothingness' is not a non-contradictory structure; rather it is a contradictory structure that we should spell out by means of the two moments<sup>112</sup>.

Let us analyze why 'not-being' is an instance of 'nothingness'. We have seen that 'not-being' is a non-self-identical meaning, since it is a unity that is not itself, being identical to each of its components. Since 'not-being' is not self-identical, it can be spelled out as a particular instance of the concept 'nothingness', because nothingness is exactly the general non-self-identical structure: the absence of unrestrictedly every determination is a determination and so it is and it is not a determination (see the previous section). Since 'not-being' is an instance of 'nothingness', we can discern the positive determination of 'not-being' and its "content", say (Not-being-p) and (Not-being-N). As in the previous strategy, (Not-being-N) is not "internally" self-contradictory, as well as (Not-being-p): the contradiction just "externally" holds between the two moments:

Il 'non è' è contraddicentesi secondo la contraddizione uN; tuttavia questa contraddizione non fa sì che *non è* significhi *è*: *non è* significa *non è*, così come il nulla, in quanto significato distinto dal proprio positivo significare, significa *nulla* e non significa *essente*<sup>113</sup>

---

<sup>112</sup> The fact that pN is a real contradiction entails an objection against Severino's proposal. I will consider that topic in the next section.

<sup>113</sup> Severino 2013, p.148

One could object that ‘not-being’ is identical – for example – to ‘being’, given the aporetic situation Severino presented (namely the fact that the complex meaning ‘not-being’ is identical to each of its components). Therefore, unlike the meaning ‘nothingness’, in this case we cannot affirm that the positive moment (Not-being-<sub>p</sub>) is not self-contradictory. The latter – the objection would say – is identical to ‘being’ (as I recalled) and so (Not-being-<sub>p</sub>) is and is not itself. However, Severino’s strategy consists in taking such a self-contradiction exactly as the self-contradiction of nothingness. Therefore (Not-being-<sub>p</sub>) is a positive determination whose content is exactly nothing at all, in so far as what is self-contradictory is no entities at all. Now, Severino proposes to consider that content by means of the two moments-structure of nothingness. In other words, ‘not-being’ is related to ‘nothingness’ in the following way: (Not-being-<sub>p</sub>) is different from (Nothingness-<sub>p</sub>); but (Not-being-<sub>N</sub>) – namely the “content” of (Not-being-<sub>p</sub>) – is identical to (Nothingness-<sub>N</sub>), since the latter is exactly the negation of unrestrictedly everything because a non-self-identical determination (as the content of ‘not-being’ is, according to the putative aporia uN) is no entities at all. Any self-contradictory (namely non-self-identical) determination – a round-non-round entity as well as not-being - is a positive meaning whose content is (Nothingness-<sub>N</sub>). Therefore we should not worry about the aporia uN: the contradiction which it is based on is nothing but the contradiction of the aporia pN. So, uN it is not a new aporia; rather the contradiction of not-being is just one among the self-contradictory determinations that can express the classical aporia of nothingness, from which I begun section 5.2.1. Certainly uN has a particular role among the self-contradictory determinations, since ‘not-being’ is also *prima facie* closer to nothingness than – for example – a round-not-round entity. Yet the basic structure is the same. Indeed, according to Severino, the content of any contradiction is the same: (Nothingness-<sub>N</sub>). (We should note, however, that we cannot separate (Nothingness-<sub>N</sub>) from (Nothingness-<sub>p</sub>), as I recalled before. Therefore (Nothingness-<sub>N</sub>) is always related to its positive determination (Nothingness-<sub>p</sub>), although in the case of ‘not-being’ its (Nothingness-<sub>p</sub>) is (Not-being-<sub>p</sub>), i.e. an instance of (Nothingness-<sub>p</sub>)).

5.2.4. The empty world at work: approaching Severino’s question of nothingness by means of possible worlds

I will argue that the notion of absolutely empty world as account of the phrase ‘nothing’ (see section 1.4.) is very similar to Severinian notion of nothingness and the former could be considered a way in order to clarify what Severinian nothingness is. Let us start from the “naïve” or pre-theoretical conception of nothingness. We saw in the first chapter that such a conception can be spelled out as a thought about the absence of unrestrictedly everything (as Priest – for example - correctly proposes). Then I employed the following argument (section 1.4):

(i) every relevant account of nothingness – implicitly or explicitly - appeals to the notion of the absolute absence of every thing (global absence)

(ii) the notion of absolute absence of every thing cannot be *separated* from the notion of empty world

Therefore:

(iii) every relevant account of nothingness – implicitly or explicitly – appeals to the notion of the empty world

I recall that (ii) is based on the following argument (see section 1.4):

(ii.1.) A possible world is something that represents a maximal consistent situation [assumed]

(ii.2.) When we think about the absence of absolutely everything, we think about the maximal consistent situation according to which there are no objects at all [by the pre-theoretical intuition of absolutely everything]

(ii.3.) An absolutely empty world is an entity that represents the maximal consistent situation according to which there are no objects at all [by (ii.1) and the definition of the empty world]

Therefore

(ii.3.) If one thinks about the absence of everything, one in fact refers to the empty world [by (ii.3)].

Even Severino's account of nothingness appeals to the notion of the absolutely absence of everything. Therefore even Severino's notion of nothingness should be treated by means of the empty world.

Such an operation shows relevant agreement to Severinian nothingness. I think that as well as Priest, Voltolini, Oliver-Smiley's accounts of nothingness, Severinian account of nothingness can express its advantages and lose its weak points being reconsidered within the notion of the empty world.

As Severinian nothingness, the empty world is constituted by two moments: the world *as world* and what such a world represents, namely the absence of everything. Let us be

(Nothingness-<sub>p</sub>)\* = the (empty) world as such

(Nothingness-<sub>N</sub>)\* = what the empty world represents, namely the absence of unrestrictedly everything

As in Severinian nothingness, the positive moment is an entity (in this case a possible world) and the other moment ("il nulla-momento") is no entity at all. As in Severinian nothingness, each moment is related to the other moment: they can be discerned, but they cannot be separated. Indeed – as I argued in the first chapter – the maximal consistent situation according to which there are no objects at all (namely (Nothingness-<sub>N</sub>)\*) is in fact what is represented by the empty world and the empty world is what that represents the situation of the global absence.

Approaching Severinian strategy by means of possible worlds also allows us to account for the aporia pN and for the aporia uN. As I pointed out in section 3.2.1, an empty world could be considered a contradictory entity, since it is something that represents the absence of everything, included the world itself. Anyway, the contradiction holds between the empty world *as world* and the "content" of it. The contradiction holds between the two moments (Nothingness-<sub>p</sub>)\* and (Nothingness-<sub>N</sub>)\*, as well as in Severino's account the contradiction holds between (Nothingness-<sub>p</sub>) and (Nothingness-<sub>N</sub>). So it is neither a contradiction between the world as world and itself;

nor a contradiction between the global absence (as content of the empty world) and itself. We can find a similar structure in Severino's account (see 5.2.1.). Therefore, the counterpart of  $pN$  – say  $pN^*$  – would be the contradiction between the presence of the empty world and what the empty world represents, namely the absence of unrestrictedly everything.

Even the contradiction  $uN$  has its own counterpart – say  $uN^*$ . Let us assume – as Severino seems to assume and as I assumed in section 3.2 – that a contradictory object (*nihil negativum*) is in fact the absence of everything (*nihil absolutum*). As the contradiction  $pN^*$  spells out, the empty world is self-contradictory; consequently the empty world is no entities at all, namely the absence of unrestrictedly everything. Anyway, given that the global absence ( $\text{Nothingness}_{-N}$ )\* cannot be separated from the empty world ( $\text{Nothingness}_{-p}$ )\*, the empty world “contains” itself, as well as not-being is composed by itself (aporia  $uN$ ). Indeed the complex meaning or determination ‘empty world’ is composed by two determinations, namely the world as world and the global absence; but such a world is a contradictory entity, so it is in fact the global absence (*nihil negativum* and *nihil absolutum* being in fact the same). Therefore the empty world “contains” itself, since it is the global absence and the latter cannot be separated from the empty world. (The reader should note that such a strategy is exactly what I called “elenctic argument” in chapter 3). Among the components of the empty world we can count the empty world itself as well as not-being is composed by itself. But the empty world – as well as not-being – is a complex meaning; therefore, by (CX\*) the empty world cannot be composed by itself. Yet it is. So we get the aporia<sup>114</sup>.

One could object that my approach to Severino's account of nothingness is based on a misunderstanding, namely an improper similarity between the two moments-structure of Severino's nothingness and the two moments-structure of the empty world.

---

<sup>114</sup> A clarification: when I say that the empty world is identical to the global absence because it is self-contradictory (assuming that *nihil negativum* and *nihil absolutum* convertuntur), I am not ruling out the two-moments structure of the empty world. It is in virtue of that two-moments structure that the empty world is identical to the global absence, since the self-contradiction of the empty world holds in virtue of the “external” contradiction between ( $\text{Nothingness}_{-p}$ )\* and ( $\text{Nothingness}_{-N}$ )\*. Now, the strategy for getting  $uN^*$  (that is the same strategy on which the elenctic argument is based) consists in going on after the identity between the empty world and the global absence exactly in virtue of the same two-moments structure of nothingness. Indeed the global absence that we get by the self-refusal of the empty world cannot be separated from ( $\text{Nothingness}_{-p}$ )\* (since the naïve notion of global absence should be accounted by means of the empty world, for the reason that I recapped at the beginning of this section). Given that, the global absence that we get by the self-contradiction of the empty world exactly is what in fact the empty world is and given that such an absence is represented by the empty world itself, then the empty world “contains” itself, as well as the determination ‘not-being’.

That similarity could be undermined by the fact that each moment of the empty world seems to be in turn a two moments-structure of existence and essence (I use those terms according to the meanings I spelled out in section 5.2.1.), i.e. the positivity of a determination and the “content” of such a determination. I would reply as follows. First, that objection is based on the separation of the two moments of the empty world and it is very similar to an objection that Severino considers for his own account:

[...] se i due momenti sono (più o meno esplicitamente) intesi come separati, tuttavia l'assoluta nientità del nulla *appare*, e appare come *significante*, ossia è: il nulla appare inevitabilmente come un essente. Se i due momenti vengono separati, è cioè inevitabile che il positivo significare del nulla (il primo momento) si ripresenti nel secondo momento, ossia nel significato ‘nulla’ che è il contenuto di quel positivo significare, sì che l'*esito* inevitabile di quella separazione è la constatazione che il nulla è un essente<sup>115</sup>

Similarly, in the case of the empty world, if one thinks about it as a determination that is separated from the global absence, then one thinks about the empty world and the global absence as two separated things. But the empty world as world cannot be separated from the global absence that it represents and the global absence cannot be separated from the entity which is represented by, although the two moments can be discerned. Again, we find a solution by disentangling the relation between the two moments: they are different, but they are not separated.

Secondly, I would point out that the possible worlds-approach to Severino’s account provides a strategy in order to overcome what I would call a “metaphorical load” of his own account. I am referring to his use of the verb ‘to contain’ (‘contenere’) and of the noun ‘content’ (‘contenuto’) that often occur in Severino’s works. For example, consider the quotations above: “‘nulla’ che è il contenuto di quel positivo significare”). We find out the same phrase when he deals with the relation between contradictions and contradictory objects: “la contraddittorietà (il contraddittorio) è il contenuto della contraddizione” (Severino 2013, p. 109). What does exactly mean that (Nothingness<sub>-N</sub>) is the *content* of (Nothingness<sub>-P</sub>)? Besides – and strictly related the previous question - the possible worlds-approach also provides a general clarification of the relation between (Nothingness<sub>-N</sub>) and (Nothingness<sub>-P</sub>), by means of their counterparts (Nothingness<sub>-N</sub>)\* and (Nothingness<sub>-P</sub>)\*. Indeed the relation between the

---

<sup>115</sup> Severino (2013), p. 110.

latter pair is plain: (Nothingness-<sub>P</sub>)\* is an entity, namely a possible world, whereas (Nothingness-<sub>N</sub>) is what is represented by that world. Therefore relation between the world and its “content” is interpreted as a relation of *representation* (see 4.1 ). Of course, we usually speak about the *content* of a possible world and often I did it. Yet it can be a metaphorical way, if we assume that the world-object relation is a relation of representation. I am sure in Severino’s thought the phrases ‘container’ and ‘content’ are used in a metaphorical fashion. But it would be preferable that he exactly spells out what is the non-metaphorical approach to the relation between the two moments of nothingness.

Another objection against my possible worlds-approach to Severino’s account of nothingness could be a general objection against the use of a notion such as possibility. Severino’s ontology notoriously rules out any kind of possibility, arguing that everything (unrestrictedly) is necessary<sup>116</sup>. Therefore my use of *possible* worlds would be fully misleading, since a possible world represents how things might be, by usually assuming that thing could have been different from how they actually are. I would reply that such an objection would work if my aim was an attempt to read all Severino’s ontology by means of possible worlds, whereas my aim is just a reading of Severinian account of nothingness (as well as – for example - assuming Priest’s thesis that ‘nothing’ is not always a quantifier phrase does not entail that I assume Priest’s dialetheism or noneism. See chapter 1).

The possible worlds-approach to severinian account of nothingness allows us to reply to a fundamental objection that Visentin (2011) presents against Severino’s two-moments-structure of nothingness. I recalled before recalled that (Nothingness-<sub>N</sub>) *prima facie* seems to restore the aporia, since it is somehow a determination, whereas it should be the absence (or the negation) of all (unrestrictedly) determinations. However, I also recalled that Severino (1958) replies to such an objection by pointing out that the fact that (Nothingness-<sub>N</sub>) is a determination is granted by (Nothingness-<sub>P</sub>): the “positivity” of (Nothingness-<sub>N</sub>) (namely, the fact that it is an entity) is exactly (Nothingness-<sub>P</sub>). I also recalled that such a solution seems to be afflicted by a vicious circularity and that the Severinian relation between the two moments is not quite clear. I think Visentin (2011) correctly spells out (one of) the main trouble with Severinian account:

---

<sup>116</sup> At this end, see Severino (1980).

si tratta insomma di approfondire la concreta struttura di questo porre [cioè del porre l'autocontraddizione del nulla, n.d.a.] (che, proprio in quanto concreta, tuttavia, non può essere, come invece ritiene possa essere Severino, autocontraddittoria). Pertanto, se la domanda di partenza fosse quella che consiste nel chiedersi che cosa *realmente* (concretamente) pensa chi si contraddice, essa dovrebbe essere interpretata nel senso non di attribuire una realtà alla contraddizione o al pensiero che si contraddice, ma in quello di chiedere a che cosa effettivamente corrisponda quella posizione, posto che essa non può corrispondere a ciò cui sembra corrispondere, ovvero ad un contraddirsi *reale*: se il pensiero si contraddicesse *realmente*, se fosse *realmente* aut contraddittorio, visto che il pensiero è una realtà, la realtà sarebbe autocontraddittoria (almeno in quella sua individuazione che è rappresentata dal pensiero che si contraddice) (p. 321).

According to Visentin, given that severinian nothingness as self-contradictory two moments-structure is *concrete* (whereas their moments are both abstract)<sup>117</sup>, nothingness turns out to be a contradictory object of reality, for somehow concreteness and reality *convertuntur*. Yet, such a conclusion should not find place in Severino's ontology, for he does not admit any contradictory entity or impossible entity<sup>118</sup>. Of course, Severino would reply that both (Nothingness-N) and (Nothingness-p) are not "internally" self-contradictory, sine the contradiction of nothingness just "externally" holds between the two non-contradictory moments. Yet the whole two-moments structure of nothingness is self-contradictory, as Severino affirms; and such a structure is *concrete*, therefore it is fully real as determination (it is not an incomplete description of something that turns out to be contradictory just because it is incomplete).<sup>119</sup>

I think that the empty world-account avoids Visentin's objection; at this end the contradiction between (Nothingness-N)\* and (Nothingness-p)\* must be reconsidered, by rejecting the assumption that nothingness or the empty world is self-contradictory. We have seen that the counterpart of pN – say pN\* - is the contradiction between the presence of the empty world and what the empty world represents, namely the absence of unrestrictedly everything. In other words, the contradiction holds between the

<sup>117</sup> He uses 'abstract' and 'concrete' in the same way I recalled before.

<sup>118</sup> See for example Severino (1958, 1982).

<sup>119</sup> Severino affirms that the concrete self-contradictory two moments-structure of nothingness exists (namely it is something, it is a determination, it is a meaning, and so on) only *as negated* by the Law of non contradiction (as he writes in Severino 1958, chapter IV). Yet that is not a solution, because Severino himself affirms that the Law of non contradiction must negate the *concrete* structure of nothingness. Therefore, in order to negate it, such a structure must be somehow a determination so that the aporia appears again.



determination (namely the empty world as world) and what such a determination represents (namely the negation of *all* determinations). Now, why should we consider the two moments-structure of nothingness/empty world self-contradictory? Maybe we can avoid any contradiction, since nothingness is a determination *as world* and it is not a determination *as the global absence*: at the same time, but in different respects – so avoiding the contradiction - nothingness is an entity and it is not an entity (see section 1.4). Yet, we have seen that the presence of nothingness as determination - (Nothingness-<sub>P</sub>)\* - is in contradiction with the global absence - (Nothingness-<sub>N</sub>)\*. But such a contradiction can be solved by distinguishing what for a world is *existing* from what for a world is *obtaining*. The empty world exists among the possible worlds; but if it obtained, then it would not exist as well as any other entity. Therefore there would not be a determination whose presence contradicts the global absence. That is the same strategy I employed in order to spell out the question of creation out of nothing.

## **BIBLIOGRAPHY**

- Armstrong, D. (1989), *A combinatorial theory of possibility*, Cambridge: Cambridge University Press.
- Armstrong, D. (1997). *A world of states of affair*. Cambridge: Cambridge University Press.
- Armstrong, D. (2004). *Truth and truth-makers*. Cambridge: Cambridge University Press.
- Baldwin, T. (1996). "There might be nothing." *Analysis*, 56, 231-238.
- Barker, S. – Jago, M. (2012). "Being positive about negative facts". *Philosophy and Phenomenological Research* 85/1: 117-138.
- Berto, F. (2004). *Che cos'è la dialettica hegeliana? Un'interpretazione analitica del metodo*, prefazione di D. Marconi, Padova: Il Poligrafo.
- Berto, F. (2006). *Teorie dell'assurdo. I rivali del principio di non contraddizione*. Roma: Carrocci.
- Berto, F. (2007). *How to sell a contradiction: the logic and metaphysics of inconsistency*. Studies in Logic, vol. 6, London: College Publications.
- Berto, F. (2010). *L'esistenza non è logica. Dal quadrato rotondo ai mondi impossibili*. Roma: Laterza.
- Berto F. (2013a) "Impossible Worlds". In: Zalta E.N. (ed), *The Stanford Encyclopedia of Philosophy* (Winter 2013 Edition). Available at URL = <http://plato.stanford.edu/archives/win2013/entries/impossible-worlds/>.
- Berto, F. (2013b). *Existence as a real property. The ontology of meinongianism*. Dodrecht: Springer.
- Carnap, R. (1932). "The Elimination of Metaphysics through Logical Analysis of Language". (A. Pap, Trans.). In Ayer, A.J. (Ed.), *Logical Positivism* (60-81), New York: The Free Press, 1966. (Original work published in 1932).

- Cartwright, R. L. (1994). "Speaking of everything". *Nous*, 28 (1), 1-20.
- Coggins, G. (2003). "World and object. Metaphysical nihilism and three accounts of world." *Proceedings of the Aristotelian society*, 103 (3), 353-360.
- Coggins, G. (2010). *Could There Have Been Nothing? Against Metaphysical Nihilism*. London: Palgrave Macmillan.
- D'Agostini, F. (1998 ed). *Il nulla e le tenebre. La nascita filosofica dell'Europa*, Genova: Il melangolo.
- D'Agostini, F. (2010). "The thinkability of Nothing". In: Bertinetto, A.-Binkelman C. (eds.), *Nichts, Negation, Nihilismus. Die europäische Moderne als Erkenntnis und Erfahrung des Nichts*. Frankfurt am Main: Peter Lang GmbH, pp. 133-146.
- Demos, R. (1917). "A discussion of certain types of negative propositions". *Mind*, 26: 188-196.
- Dieveney, P. (2013). "Quantification and metaphysical discourse". *Theoria*, 80 (3):
- Divers, J. (2002). *Possible worlds*, London: Routledge.
- Dubois, L. (2013). "Lambda theory. Introduction of a constant for 'nothing' into set theory, a model of consistency and most noticeable conclusions. *Logique et Analyse* 222: 165-181.
- Dummett, M. (1981). *Frege: philosophy of language*. Harvard University Press.
- Efird, D. – Stoneham, T. (2005), "The subtraction argument for metaphysical nihilism", *Journal of philosophy* CII, 6: 303- 325.
- Efird, D. – Stoneham, T. (2009). "Is metaphysical nihilism interesting?". *Pacific Philosophical Quarterly* 90 (2): 210-231.
- Florio, S. (2014). "Unrestricted quantification". *Philosophy compass* 9 (7): 441-454.
- Frank, P.W. (2005). *All or nothing. Systematicity, transcendental arguments, and skepticism in German Idealism*. Cambridge-Massachusetts: Harvard University Press.

- Fredegisus of Tours (1998). *De nihilo et tenebris*. D'Agostini, F. (Ed.). Genova: Il melangolo.
- Forster, M. (1993), *Hegel's dialectical method*, in *The Cambridge companion to Hegel*, ed. F.C. Beiser, Cambridge: Cambridge University press
- Goldschmidt, T. (2012). "Metaphysical nihilism and necessary being". *Philosophia* 40 (4): 799-820.
- Goldschmidt, T. (2013), *The puzzle of existence. Why is there something rather than nothing?*, London: Routledge.
- Hegel, G.F.W. *Science of Logic*, trans. A. V. Miller, London: Allen and Unwin, 1969.
- Hegel, G.F.W. *Enciclopedia delle scienze filosofiche in compendio*. Croce, B. (ed.). Roma-Bari: Laterza (2009).
- Heidegger, M. (1935). *Introduction to Metaphysics*. (G. Fried & R. Polt, Trans.). New Haven: Yale University Press, 2000. (Original work published in 1953).
- Heidegger, M. (1929). "What is Metaphysics?." (D. F. Krell, Trans.). In: Krell, D.F. (Ed.), *Martin Heidegger: Basic Writings* (93-110). London: Routledge, 1993. (Original work published in 1929).
- Heil J. (2013) "Contingency". In: Goldschmidt T. (ed), *The puzzle of existence. Why is there something rather than nothing?*. Routledge, London and New York.
- Hellman, G. (2006). "Against 'absolutely everything'". In: Rayo, A.- Uzquiano, G. (eds), *Absolute Generality*, Oxford: Oxford University Press, pp. 75-97.
- Houlgate, S. (2006), *The opening of Hegel's Logic: from being to infinity*, Purdue University Press.
- Inwood, M. (1992). *A Hegel dictionary*. Oxford: Blackwell.
- Jacquette, D. (2010). "Truth breakers". *Topoi* 29: 153-163.

Kant, I. *Critique of pure reason*. Guyer, P.-Wood, A. (eds). Cambridge: Cambridge University Press 1998.

Lavine, S. (2006). "Something About Everything: Universal Quantification in the Universal sense of Universal Quantification." In: Rayo, A.- Uzquiano, G. (eds), *Absolute Generality*, Oxford: Oxford University Press, pp. 98-148.

Lewis, D. (1986). *On the plurality of worlds*. Oxford: Blackwell.

Lewis, D. (1991). *Parts of classes*. Oxford: Blackwell.

Linnebo, O. (2012). "Plural quantification". In Zalta, E. (ed.), *The Stanford Encyclopedia of Philosophy*. URL= <http://plato.stanford.edu/archives/fall2014/entries/plural-quant/>

Lowe, E. J. (1998). *The Possibility of Metaphysics: substance, identity and time*. Oxford: Clarendon Press.

Lowe E. J. (2013) "Metaphysical nihilism revisited". In: Goldschmidt T. (ed), *The puzzle of existence. Why is there something rather than nothing?*. Routledge, London and New York, pp. 182-196.

MacBride, F. (2013). "Truthmakers". In Zalta, E. (ed.), *The Stanford Encyclopedia of Philosophy*. URL= <http://plato.stanford.edu/archives/spr2014/entries/truthmakers/>

McDaniel, K. (2013). "Ontological pluralism, the gradation of being, and the question 'Why is there something rather than nothing?'. In: Goldschmidt T. (ed), *The puzzle of existence. Why is there something rather than nothing?*. Routledge, London and New York, pp. 272- 286.

McGee, V. (2000). "Everything". In: Sher, G. – Tieszen, R. (eds.), *Between logic and intuition. Essays in honor of Charles Parsons*, Cambridge: Cambridge University Press, pp. 54-78

Melamed, Y. (2012): "Omnis determinatio est negatio": determination, negation and self-negation in Spinoza, Kant, and Hegel. In Förster, E. – Melamed, Y. (eds.): *Spinoza and German Idealism*. New York: Cambridge University Press, 175-196.

Menzel C. (2013). "Possible Worlds". In: Zalta E.N. (ed), *The Stanford Encyclopedia of Philosophy* (Spring 2014 Edition). Available at URL = <http://plato.stanford.edu/archives/spr2014/entries/possible-worlds/>.

Miller, K. (2010). "Three routes to contingentism in metaphysics". *Philosophy Compass* 5 (11): 965-977.

Molnar, G. (2000). "Truthmakers for negative truths". *Australasian Journal of Philosophy* 78 (1): 72-86.

Mumford, S. (2007). "Negative truth and falsehood". *Proceedings of the Aristotelian society* 107 (1pt1): 45-71

Nef, F. (2008). "Which variety of realism? Some asseverations on the dependence of abstracta upon concreta". *Philosophia Scientiae* 12-1: 77-91.

Oliver A, Smiley T (2013) "Zilch". *Analysis* 73: 601-613.

Parmenide. *Sulla natura*. Reale, G. (ed), Milan: Bompiani 2001.

Parsons, C. (2006). "The problem of absolute universality". In: Rayo, A.- Uzquiano, G. (eds), *Absolute Generality*, Oxford: Oxford University Press, pp. 203-219.

Paseau, A. (2002). "Why the subtraction argument does not add up". *Analysis* 62 (1): 73-75.

Paseau, A. (2006). "The subtraction argument(s)". *Dialectica* 60 (2): 145-156.

Platone. *Sofista*. In: Reale, G. (ed), *Tutti gli scritti*. Milan: Bompiani 2000.

Pollard, S. (1985). "A peculiarity of the empty set". *The Southern Journal of Philosophy* 23 (3): 355-360.

Potter, M. (2004). *Set theory and its philosophy. A critical introduction*. Oxford: Oxford University Press.

Priest G. (2000) *Logic. A very short introduction*. Oxford: Oxford University Press.

- Priest, G. (2002). *Beyond the limits of thought*. Oxford: Clarendon Press.
- Priest, G. (2005). *Towards non-being. The logic and metaphysics of intentionality*. Oxford: Oxford University Press.
- Priest, G. (2007), Review of Rayo-Uzquiano (2006), <https://ndpr.nd.edu/news/23150-absolute-generality/>
- Priest G. (2014) “Much ado about nothing” [forthcoming in *Australasian journal of logic*]
- Priest, G. (2014b). *One*, Oxford: Oxford University Press
- Putnam, H. (1980). “Models and reality”. *Journal of Symbolic Logic* 45: 464-482
- Rayo, A. (2003). “When does ‘everything’ mean everything?”. *Analysis* 63 (2): 100-106.
- Rayo, A.- Uzquiano, G. (eds) (2006), *Absolute Generality*, Oxford: Oxford University Press.
- Redding, P. (2010). “Georg Wilhelm Friedrich Hegel”, In Zalta, E. (ed.), *The Stanford Encyclopedia of Philosophy*. <http://plato.stanford.edu/archives/spr2014/entries/hegel/>
- Reicher, M. (2014). "Nonexistent Objects". In Zalta, E. (ed.), *The Stanford Encyclopedia of Philosophy*. URL= <http://plato.stanford.edu/archives/sum2014/entries/nonexistent-objects/>
- Rodriguez-Pereyra, G. (1997). “There might be nothing. The subtraction argument improved”. *Analysis* 57 (3): 159-166.
- Rodriguez-Pereyra, G. (2004). “Modal Realism and Metaphysical Nihilism.” *Mind*, 113 (452), 683-704.
- Rodriguez-Pereyra, G. (2013). “The subtraction argument for metaphysical nihilism: compared and defended”. In: Goldschmidt T. (ed), *The puzzle of existence. Why is there something rather than nothing?*. Routledge, London and New York, pp. 197 – 214.
- Sasso, G. (1987), *Essere e negazione*, Napoli: Morano.

- Sasso, G. (2011), *Il logo, la morte*, Napoli: Bibliopolis.
- Savitt, S. (2013). "Being and becoming in modern physics". In: Zalta, E. (ed.), *The Stanford Encyclopedia of Philosophy*. <http://plato.stanford.edu/archives/sum2014/entries/spacetime-bebecome/>
- Severino, E. [1958] (1981). *La struttura originaria*. Milan: Adelphi.
- Severino, E. (1980). *Destino della necessità*. Milan: Adelphi.
- Severino, E. (1982). *Essenza del nichilismo*. Milan: Adelphi.
- Severino, E. (2013). *Intorno al senso del nulla*. Milan: Adelphi.
- Simionato, M. (2013). "Emanuele Severino e il nichilismo metafisico nella filosofia analitica contemporanea". *Divus Thomas* 116 (2): 287-306.
- Simionato, M. (2014a). "How to account for nothing(ness)" [manuscript]
- Simionato, M. (2014b). "Everything for nothing". *Organon F. International journal of analytic philosophy*, 4, 458-470.
- Sorensen, R. (2005). "The ethics of empty world". *Australasian Journal of philosophy* 83 (3): 349-356.
- Sorensen, R. (2012), "Nothingness", *The Stanford Encyclopedia of Philosophy (Winter 2012 Edition)*, Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/win2012/entries/nothingness/>
- Suarez, F. *Disputationes metaphysicae*. In: *Opera omnia*, Paris: Vivès 1861.
- Tarca, L.V. (2001). *Differenza e negazione. Per una filosofia positiva*. Napoli: La città del sole.
- Tarca, L.V. (2013). "Negazione del non-essere e verità dell'essere", *Il Pensiero*, 60: 31-46.
- Van Inwagen, P. (1996). "Why Is There Anything at All?." *Proceedings of the Aristotelian Society*, 70: 95–110.



Van Inwagen, P. (2014). "Nothing is impossible". In: Szatkowski, M. (ed.), *God, truth and other enigmas*, Walter de Gruyter, pp. 225-254.

Veber, M. (2008). "How to derive a 'Not' from an 'Is': a defense of the incompatibility view of negative truths". *Metaphysica* 9 (1): 79-91.

Visentin, M. (2011), *Il neoparmenidismo italiano – Vol.2*, Napoli: Bibliopolis.

Voltolini, A. (2012). "Il nulla nulleggia ancora." *Rivista di estetica*, 52: 9-113.

Williamson, T. (2003). "Everything". *Philosophical perspectives* 17 (1): 415-465.