



## **TÜBINGEN METAPHYSICS WORKSHOP 2013**

### **Existence, Truth and Fundamentality**

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The conference venue was nothing less but the highest tower of the Tübingen castle; we had amazing views! Anyway, so much for Tübingen, which is a lovely town, by the way<sup>1</sup>.

Since last year, major initiatives have been undertaken by the chair of theoretical philosophy at the University of Tübingen in order to enhance the reception of analytic metaphysics in the European landscape. Here we review the 2013 summer workshop, intended to be the first of an annual series, on “Existence, Truth and Fundamentality”, the invited speakers being Graham Priest (Melbourne), Stephan Leuenberger (Glasgow), Dan López de Sa (Barcelona), Francesco Berto (Aberdeen), Friederike Moltmann (Paris – Pantheon Sorbonne) and Jason Turner (Leeds).

The workshop’s scope is fairly large, focusing on three different aspects of contemporary research in metaphysics. However, the underlying idea of organizers Thomas Sattig and Alessandro Torza consisted in exploring their interconnections and even new areas which possibly share the same problem spectrum. Also, they thought of bringing together both young and senior protagonists of the contemporary debate. In this sense, the main thread followed by the speakers consisted in enquiring the ideas of fundamentality, dependence and grounding with respect to ontology (Berto, López de Sa, Turner) and the truthmaking debate (Priest, Moltmann, Leuenberger), thus pretty much in line with some latest tendencies in metaphysics, such as, *prima inter paria*, the works of Kit Fine.

When we say that something is more fundamental than something else, we move into a non-conventional (for the standards of 20<sup>th</sup> century philosophy) methodological framework, hardly focusing on the question about what there is, and rather tackling the issue of how fundamentally there is what there is, or how the existence of something is required as a ground for the existence of other things. Here is how Jonathan Schaffer explains the methodological transition in his influential “On What Grounds What” (2009):

<sup>1</sup>Tuomas E. Tahko, “Metaphysics Workshop @ Tübingen”, available at: <http://www.ttahko.net/2013/metaphysics-workshop-tubingen/#!prettyPhoto>.

Among the many assumptions Quine and Carnap share is that metaphysical questions are existence questions, such as whether numbers exist. They only disagree on the further issue of whether such questions are meaningful (at least as the metaphysician might pose them). But why think that metaphysical questions are existence questions of this sort? Return to Aristotle's *Metaphysics*. There are virtually no existence questions posed. The whole discussion is about *substances* (fundamental units of being). At one point Aristotle pauses to ask if numbers exist, and his answer is a brief and dismissive *yes*. [...] For Aristotle, the question about numbers is whether they are transcendent substances or grounded in *concreta*. The question is not *whether* numbers exist, but *how*. (Schaffer, 2009, p. 347)

The conference opened with Graham Priest's intriguing and peculiar review of Buddhist cornerstone "The Fundamental Verses of the Middle Way" (*Mūlamadhyakamakārikā*) by Nāgārjuna (ca. 150-ca. 250 AD), seen as a unrecognized forerunner of multi-valued semantics and dialetheism. Priest shows that Nagarjuna's thought indeed has valuable analytic grip (contrary to the traditional mystical dismissal of his works altogether) and is even in accord to some formal schemas rejecting both the laws of excluded middle and non-contradiction.

Dan López de Sa was interested in the topic of grounding, raising concerns about how to explain the kind of "reality" exemplified by what is not fundamental, but rather derivative on something else. He proposes a conceptual and non-primitive analysis of grounding as linked to fundamentality and derivation, and argues that the view can be advocated along with the acceptance that at least something is not fundamental. Subsequently, he illustrates an impressive range of applications linked to contemporary debates in meta-ontology, truth-making and philosophy of time.

Stephan Leuenberger discussed a semantics for "total logic", a variant of first order logic which is claimed to have several applications with respect to the issue of excluding negative existentials from the scope of theories accounting for a given 'totality' of facts. For example, materialism is the claim that everything there is can be traced back to physical facts or to truth implied by those facts. What about the claim that "There are no angels"? According to Leuenberger, ordinary logic falls prey of modal arguments (if it is possible that there are angels, by *modus tollens*, that it is not metaphysically necessary that everything there is is physical). So, there is space for the introduction of a new operator, the totality operator, claiming of what enters its scope that "that's the whole truth". Consequently, total logic's semantics tackles David Chalmers' well-known conceivability-based argument in favour of zombie's (subjects producing behaviour but experiencing no *qualia*) possible existence.

Friederike Moltmann presented a massive array of natural language-based examples on the role played by case-constructions, such as "it is the case *that* Caesar crossed the Rubicon", "the case *of* the stolen statue", "the case *in which* it might rain", and so forth. She suggests that we should take surface phenomena of our language very seriously with regard to the determination of ontological categories and truth-makers. Cases are provided by many natural languages with their own existence predicates ("to occur" and "to present itself"), and these do not apply to other kind of entities, such as objects and events. Trying to derive a substantive thesis on their nature, she claims that they are *filtered entities*, a structure taking into account some features of the corresponding objects and events and preserving their relational pattern.

Jason Turner discussed meta-ontological concerns against the claim that ontological de-

bates are defective. Analysed the structure of a metaphysical theory and identified two different forms of defectiveness that can occur in ontological questions, the *defection from without* and the *defection from within*, the author provided an original solution in order to avoid such difficulties. He argued thus in favor of a *logical constancy*, a translation principle thanks to it would be possible reconceive an ontological defection.

Lastly, Francesco Berto's talk closed the workshop with a sagacious discussion of meinongian quantification. He sustains that Meinongians and Quineans experience no conceptual equivocation. Even if the former claims that "There are things that do not exist", something that the latter contrasts with the interpretation of existential quantifiers as all-including, they still rely upon the same concept of "existence" and they understand each other when they are outside the ontology room, so that it cannot be that they lack competence. Subsequently, Berto deals with the objection that Meinongians commit analytic falsehood in separating the meaning of "to be" from that of "exists". The Quinean has no independent evidence for analytic equivalence aside from her emphatic stress on the "is" in "there is". Meinongians, however, can retort to linguistic considerations and claim that existence predicates display fairly different functions.

As for what regards our internal division of the "philosophical labor", Fabio Ceravolo reviewed Moltmann and Berto's talks; whereas Mattia Cozzi took care of Priest's and Leuenberger's, and Mattia Sorgon of those given by López de Sa and Turner.

Conclusively, we would like to thank Thomas Sattig and Alessandro Torza for all of their organizational efforts and the kind welcome they reserved to us. We hope we will have further opportunities to collaborate with Tübingen in supporting similarly innovative and valiant european initiatives.

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## Contents

1	<i>Nāgārjuna, fundamentality and truth</i> Graham Priest (University of St. Andrews)	97
2	<i>Grounding the reality of the derivative</i> Dan López de Sa (Universitat de Barcelona)	101
3	<i>Total logic</i> Stephan Leuenberger (University of Glasgow)	105
4	<i>On the semantics and ontology of cases</i> Friederike Moltmann (French National Centre for Scientific Research, Paris)	110
5	<i>Are ontological debates defective?</i> Jason Turner (University of Leeds)	115
6	<i>There is an “is” in “There is”: Meinongian quantification and existence</i> Francesco Berto (University of Aberdeen)	117

### 1 *Nāgārjuna, fundamentality and truth* Graham Priest (University of St. Andrews)

Graham Priest’s talk, the first of the conference is mostly, as Priest himself stated, a review of Nāgārjuna’s *Mūlamadhyakamakārikā* (MMK hereafter); despite being a book review, it is one of its own particular kind, since Priest tries to understand the metaphysics that lays beneath Nāgārjuna’s book.

Nāgārjuna was a buddhist monk and philosopher (the most influential after the historical Buddha) who lived in II-III century AD and was the founder of the Madhyamaka school of Buddhism. The title of the book under consideration is *Mūlamadhyakamakārikā*, which means “Fundamental (*mūla*) Verses (*kārikā*) on the Middle Way (*madhyakama*). Priest states since the very beginning that MMK is a very difficult book to read, and the reasons for this difficulty are, in his view, four:

- it is written in verses and derives from an oral tradition;
- in MMK statements come from multiple speakers, but it is not made explicit by Nāgārjuna which character is talking (i.e. Nāgārjuna himself or an opponent);
- the book is written in Sanskrit, forcing Western readers to use a translation, and entering in a well-known hermeneutic circle; English translations of MMK were published by Mark Siderits and Shōryū Katsura and by Jay L. Garfield (the latter is the one mainly used by Priest and by the author of this report);
- for Western readers, MMK belongs to a very different tradition (both in a spatial and conceptual way).

Graham Priest’s talk is divided in two sections: the first one is about what Nāgārjuna is against, the second one is about what Nāgārjuna is for.

Regarding the first section, Priest states that Nāgārjuna is against one of the most shared assumptions in many cultures, i.e. that there is a fundamental level of reality (the Sanskrit word for this is *svabhāva*, roughly translatable as “self-being”). According to the Buddhist tradition, *svabhāva* does not depend on anything else but itself. Everything else is a mental construction based on the things that have “self-being”, i.e. is ontologically dependent. In the Buddhist tradition the fundamental level is called *dharma* (a word having a lot of meanings, but intended here as “element of reality”).

It is easy to see in this particular view the most basic guidelines of Western culture too, and Nāgārjuna is exactly against this assumption. Most of MMK tries to undermine the idea that something has “self-being”. As a matter of fact, Chapter I criticizes causation, Chapter II criticizes motion, Chapter VIII criticizes the possibility that things can come into being and then pass away, and so on. The conclusion of Nāgārjuna’s arguments is that the object of inquiry does not exist.

One might think, at this point, that Nāgārjuna proposes a certain kind of nihilism, but this is not true. There is a particular passage in which Nāgārjuna explicitly quotes a sūtra (a canonical text involving the historical Buddha). In this sūtra the historical Buddha states that the way to be followed is the “middle way” (remember at this point the title of Nāgārjuna’s book). Priest proposes then to interpret the statements about the non-existence of things as statements about the thing not having “self-being”: objects exist, but they do so dependently.

To support this last thesis, Nāgārjuna exposes a great number of arguments, usually arguments by cases. Generally, he assumes that something has “self-being” and then exposes the four corners (*koṭi*) of a tetralemma (*catuṣkoṭi*, “four corners”). Nāgārjuna then rejects every corner, showing that each corner leads to absurd conclusions. For example, in Ch. I Nāgārjuna asks if it is possible for something to be caused by itself (first koṭi), by something else (second koṭi), by both (third koṭi) and by neither (fourth koṭi). After that, he proposes an argument to reject each of all the corners<sup>2</sup>. Using similar arguments, Nāgārjuna in Ch. V argues that space (we can understand his notion of “space” as our usual geometric space) does not exist (read “does not have self-being”).

Let’s skip now to the second section of Graham Priest’s talk, regarding what Nāgārjuna is *for*. According to Priest, the main thesis in MMK is that everything has the same ontological status; everything exists dependently from something else: nothing has “self-being”. Nāgārjuna’s catchphrase would be:

Everything is empty (of *svabhāva*)!

Nāgārjuna’s words for this are *sūnya* (empty) and *sūnyata* (emptiness). At this point it should be easy to notice that such a theory is difficult (if not impossible) to find in Western thinking.

If we consider the thesis that everything depends on something else, we encounter easily an infinite regress. We are usually assuming that an infinite regress is vicious (Leibniz and Kant do so), but Priest notices that an argument for this assumption is rarely given. As a matter of fact, this is not Nāgārjuna’s own view.

At this point we encounter a problem: Nāgārjuna himself uses arguments to show that his opponent’s theses lead to an infinite regress, and in virtue of this, he refuses them. How can he propose an infinite regress not being vicious and then use this infinite regress against his opponents? Priest’s view is that those arguments are *ad hominem* arguments:

<sup>2</sup>It is also important to note that in the Buddhist tradition it is not unusual for a proposition to be true, false, both true and false, and nor true nor false.

Nāgārjuna's opponent, deeming that an infinite regress is vicious, can only admit his defeat, once Nāgārjuna showed him how his assumptions lead to such an infinite regress.

This is where the real troubles start: in Buddhist culture it is assumed that a fundamental level of reality exists and two specific expressions are used: *paramārtha-satya* ("ultimate truth/reality") and *saṃvṛti-satya* ("conventional/deceiving truth/reality"). Notice that *satya* in the Buddhist tradition means both "truth" and "reality", an idea not shared by Western culture: the idea that there are two realities and (specially) two truths is strange to us (and this is probably an understatement).

Since Nāgārjuna holds that everything has the same ontological status, one would expect he to take one side or another. It looks like he does so in MMK XXVII:30<sup>3</sup>, where we read:

I prostrate to Gautama  
Who through compassion  
Taught the true doctrine,  
Which leads to the relinquishing of all views.

Here Nāgārjuna seems to give up the idea that there is an ultimate reality (and so an ultimate truth). Nevertheless, in MMK XXIV:8-10 he writes:

The Buddha's teaching of the Dharma<sup>4</sup>  
Is based on two truths:  
A truth of worldly convention  
And an ultimate truth.

Those who do not understand  
The distinction drawn between these two truths  
Do not understand  
The Buddha's profound truth.

Without a foundation in the conventional truth,  
The significance of the ultimate cannot be taught.  
Without understanding the significance of the ultimate,  
Liberation is not achieved.

So what? What is Nāgārjuna *for*? Priest's proposal is to interpret Nāgārjuna's verses as meaning that there are two realities, but they are both dependent. In other words, everything has the same ontological status, there is *one* reality with *two* different aspects, and every aspect has its own truth.

Conventional reality (Priest calls it *Lebenswelt*) is deceiving, made of interpretations and meanings, which Nāgārjuna thinks to be delusive and empty. Ultimate reality, i.e. what remains after we strip away language is also empty. See MMK XXIV:24:

<sup>3</sup>The Roman numeral is for the chapter, the Arab numeral is for the quatrain, letters after this indicate the single lines.

<sup>4</sup>Meaning here "doctrine".

Whatever is dependently co-arisen  
 That is explained to be emptiness.  
 That, being a dependent designation,  
 Is itself the middle way.

and MMK XXII:11:

“Empty” should not be asserted.  
 “Nonempty” should not be asserted.  
 Neither both nor neither should be asserted.  
 They are used only nominally.

Nāgārjuna is telling us that something is ineffable, and what is ineffable is liberation. As a matter of fact, we are told that reality and a Tathāgata (a Buddha, an enlightened person) have the same nature (MMK XXI:16ab):

Whatever is the essence of the Tathāgata  
 This is the essence of the world.

Ultimate reality is ineffable, but be careful here: “ineffable” for Nāgārjuna does not mean that ultimate reality cannot be experienced: it can be experienced by knowledge, not by description. Training is necessary, and since language does not apply to ultimate reality, we can only make an ostensive gesture: ultimate reality is a “that-ness” (in Sanskrit, *tathāta*). See MMK XVIII:9:

Not dependent on another, peaceful and  
 Not fabricated by mental fabrication,  
 Not thought, without distinctions,  
 That is the character of reality (that-ness).

Let’s go deep into this issue. If ultimate reality is ineffable, how is it possible that Nāgārjuna himself says something about it? Priest says that this is the same problem we encounter in medieval philosophy discussing the ineffability of God. What has Nāgārjuna to say about this problem? Looks like he doesn’t tell us nothing at all, but, for such an important and deep thinker, this seems rather unlikely. Graham Priest thesis is that we are here inside the third corner of the tetralemma, a corner in which we both can and cannot talk about ultimate reality (we have already noticed that this is not unusual in the Buddhist tradition).

The final part of Priest’s talk is about soteriological applications of Nāgārjuna’s metaphysics of emptiness (i.e. the role of this metaphysics in the theory of salvation/liberation). The historical Buddha said that men are not happy because they do not understand the world they live in. His fundamental dharma is that nothing is permanent, everything goes under change, and this is the starting point for the way of liberation, in order to reach *nirvāṇa*, which is the liberation from *saṃsāra* (the latter, meaning “cyclical existence”, is the unenlightened state).

A problem arises here, and it is made explicit by a Nāgārjuna’s opponent: if everything is empty, then even the Four Noble Truths of Buddhism do not exist. Nāgārjuna answers that in a world where things have “self-being”, every change is impossible, even the change

from the saṃsāra state to the nirvāṇa state (MMK XXIV-XXV). We should be careful not to identify “being empty” and “not existing”. Nāgārjuna states that even nirvāṇa is as empty as saṃsāra (MMK XXV:19ab):

There is not the slightest difference  
Between cyclic existence and nirvāṇa.

Are then nirvāṇa and saṃsāra the same? At this point, Nāgārjuna seems to go strongly against the very fundamental dharma of the historical Buddha! Priest’s proposal to interpret this statement is that even in the state of saṃsāra everyone is illuminated, that the ultimate reality is already available, but the unenlightened is not aware of this (this is, roughly, what we are being told in the Chinese tradition of Buddhism).

Graham Priest’s talk was indeed very interesting and neat, willing to enlighten a tradition most of us are unfamiliar with, showing its differences from Western thought and the common points (and issues) they share.

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## **2 Grounding the reality of the derivative**

**Dan López de Sa (Universitat de Barcelona)**

«Some things ground other things». Focusing on this thesis Lopez de Sa develops his talk through three distinct sections: the in-depth analysis of the claim, its defence and the review of its most interesting applications.

In order to provide an initial grasp of the notion of *grounding*, López de Sa illustrates some paradigm cases of “things standing in particularly strong and close relations”:

- physical properties *determine* mental properties;
- facts involving wholes obtain *in virtue of* facts involving their parts;
- sets *depend* on their members.

These theses show that some things, in a certain sense, are nothing *over and above* some other things. In this general formulation, the notion of grounding is defined as a relation strictly based on its unrestricted relata, which could thus hold between any sort of objects resulting compatible with *identity*. Stated in this way indeed, being nothing “over and above” something would be being identical to it. Referring to one of the above mentioned paradigm cases, mental properties are grounded in (*i.e.* are nothing over and above some) physical properties for the reason that the mental is just identical to the physical. Other relevant



consequences of this definition concern the denial of the assumption that grounding need to be irreflexive (Jenkins, 2011), given its compatibility with identity, and the contrast with the significant and alternative formulation linked to the notion of *explanatoriness*. According to the author, the conception of grounding as essentially involved with a special sort of explanation should not be taken for granted: claiming that grounding is explanatory could indeed mean a number of things, entailing different conceptions of “metaphysical explanation” which could in turn be undermined by the mutual notion of “explanatory gap”. Hence, considering again the grounding case of physical/mental properties, López de Sa clearly shows how the assumption of a metaphysical explanation provided by the relation of grounding could result compatible with assuming an epistemological gap between the physical and the mental, dismissing the metaphysical explanation assumed. Concluding the analysis, the author defines in the end grounding as a non basic notion related to the concepts of *being fundamental* and *being derivative*: something *is fundamental* if is not grounded in other things; something *is derivative* if it is not fundamental.

Having defined grounding, López da Sa focuses on the defense of the thesis according to which not everything is fundamental. Referring to the meta-metaphysical view provided by Schaffer (2009), the author argues that, for most things, the question of their existence and reality has an *easy* affirmative answer. In this regard, he considers the following arguments:

- (1) There are prime numbers.
- (2) Therefore there are numbers.
- (3) There are properties that you and I share.
- (4) Therefore there are properties.
- (5) My body has proper parts (*e.g.* my hands).
- (6) Therefore there are things with proper parts.
- (7) Arthur Conan Doyle created Sherlock Holmes.
- (8) Therefore Sherlock Holmes exists.

Concerning the first argument (1)-(2) López de Sa quotes directly Schaffer’s words:

Here, without further ado, is a proof of the existence of numbers:

- (1) There are prime numbers.
- (2) Therefore there are numbers.

(1) is a mathematical truism. It commands *Moorean certainty*, as being more credible than any philosopher’s argument to the contrary. Any metaphysician who would deny it has *ipso facto* produced a *reductio* for her premises. And (2) follows immediately, by a standard adjective-drop inference. Thus numbers exist. End of story. (Perhaps there are no completely knock-down arguments in metaphysics, but this one seems to me to be as forceful as they come: *c.f.* (Fine, 2001, p. 2). (Schaffer, 2009, p. 357)

While regarding the last three arguments he claims that the reality and existence of properties, composite objects and fictions, as implied by (4), (6), and (8), trivially follows from the uncontroversial truths (3), (5), (7). Hence, basing on this conception of *easy existence* the

author affirms, in agreement with Schaffer, that all these metaphysical debates should be rephrased as grounding questions. Nevertheless they could seem focused on the existence and reality of some kind of objects, these discussions do not concern existence and reality (which is, as argued above, *easy*) but they rather interest grounding relations between entities. Considering what grounds what, instead of what exists or not, these issues would result more fruitful and their reconceiving as debates about grounding could show new interesting developments. To support his claim, López de Sa refers again to Schaffer (2009, p. 357):

The debate between the realist and constructivist about numbers [...] concerns mind-dependence. The question is whether numbers are independent of the mind, or based on our concepts.

showing also how this theoretical move maintains the possibility to restate grounding questions back into discussions about existence:

Grounding questions can be rephrased as existence questions, by packing grounding information into the description of a candidate entity. For instance, take the debate over whether numbers are abstract substances (Plato), grounded in concrete instances (Aristotle), or grounded in the mind (Kant). Now define a “transcendent number” as a number that is an abstract substance, define an “immanent number” as a number that is independent of the mind but grounded in the concrete realm, and define a “conceptual number” as a number that is grounded in the mind. Then the classical debate about numbers can be rephrased in terms of whether there exist transcendent numbers (Plato), immanent numbers (Aristotle), or only conceptual numbers (Kant). Likewise the debate between the metaphysical realist and idealist can be rephrased in terms of whether there exist mind-independent rocks. (Schaffer, 2009, p. 365)

Concluding thus his defence the author claims that, given the possibility to switch between existence and grounding problems and assumed the *easy existence*, all questions “of existence” remain ultimately questions about grounding.

In the last section of his talk, López de Sa focuses on new fruitful insights provided by some applications of grounding, showing the scope of the thesis that not everything is fundamental on truthmaking, reconceiving some debates in metaphysics, and indifferentism in meta-metaphysics.

The concept of truthmaking concerns the intuition that truths need to be strictly connected to reality. A significant definition of this notion can be traced in Armstrong (2004), who claims that each truth requires a *truthmaker*, something in virtue of which the truth is true. In this regard, the author endorses the idea that truthmaking *is* grounding, providing some evidence of the kinship of this two notions. Many characteristic features of grounding apply indeed to truthmaking: it states a “trans-categorical” way through which truths depend on other bits of reality, it is neutral about the nature of its unrestricted relata (which can be individuals, tropes, states of affairs or whatsoever as truthmakers, and thoughts, propositions, sentences or whatsoever as truths), and it is not essentially linked to explanatoriness. This last point is deepened by the author considering the constraint about “aboutness”, which requires that truthmakers for a truth should be among the things the truth is “about” (Merricks, 2007). Arguing that this requirement is not necessary for truthmaking and should so assumed and motivated independently by its definition, López de Sa shows also the compatibility of aboutness within Armstrong’s definition:

Suppose  $p$  to be a truth and  $T$  to be a truthmaker for  $p$ . There may well exist, often there does exist, a  $T'$  that is contained by  $T$ , and a  $T''$  that contains  $T$ , with  $T'$  and  $T''$  also truthmakers for  $p$ . We may say that truthmakers for a particular truth may be more or less *discerning*. The more embracing the truthmaker, the less discerning it is. For every truth, the least discerning of all truthmakers is the world itself, the totality of being. The world makes every truth true, or, failing that, every truth that has a truthmaker true. (Armstrong, 2004, p. 359)

Nevertheless, the author claims that one immediate application of the existence of derivative things (*i.e.* things grounded in other things) is that they can be part of truthmaking. A derivative, for instance a chair, can indeed be a truthmaker for truths in the domains in question being at the same time nothing over and above (that is, grounded in) a more fundamental truthmaker involved in larger domains. In this way different derivatives can be involved in truthmakers for truths in different domains, regardless whether they are part of fundamental reality or grounded in other things.

Another interesting application of the view that some things ground other things consists in reconceiving some debates in metaphysics. López de Sa focuses in particular on philosophy of time, analysing the thesis of *presentism*:

(P) Everything (absolutely unrestricted) is present.

This claim, concerning existence and reality of present as “metaphysically privileged” respect past and future times, is trivially false if we assume *easy existence*. Indeed, the existence of past and future entities is entailed by uncontroversial truths provided by arguments as:

(9) Julius Cesar crossed the Rubicon.

(10) Therefore Julius Cesar (unrestrictedly) exists.

In this regard the theoretical move provided by grounding could allow to highlight some interesting and non-trivial issues about presentism, rephrasing the discussion on grounding terms instead of existence ones. López de Sa refers hence to Baron (2013)’s *priority presentism*:

(PP) Everything (absolutely unrestrictedly) is grounded in the present.

showing how the metaphysical debate about presentism could benefit by this reconceiving and avoid the trivial counter-example. At the same time the author illustrates how, *mutatis mutandis*, this “grounding rephrasing” move can apply to other debates, such as alternative views of time (the *priority growing block*, “everything is grounded in the past and present”) or modality (the *priority actualism*, “everything is grounded in the actual”), underlining a very fruitful theoretical virtue of the notion of grounding.

Finally, López de Sa concludes his talk presenting a meta-metaphysical picture based on the role which grounding could play within different metaphysical debates. Reconceiving a dispute into grounding terms would indeed mean turning it in questions concerning whether reality provides or not structures able to discern among opposite alternatives. In this general way grounding would work as a meta-metaphysical criterion able to state whether a particular debate could reveal itself as *genuine*, if reality succeeds in providing a structure, or as *spurious*, if reality fails to do so.

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## 3 Total logic

### Stephan Leuenberger (University of Glasgow)

Stephan Leuenberger’s talk is about a logical operator which he calls the “totality operator”. Suppose we have  $\phi$ , a physical description of the world. We want to know if  $\phi$  is *comprehensive*, i.e. if  $\phi$  tells us the whole truth about the world. Chalmers and Jackson (2001) introduced a “that’s-all” statement  $A$  about another statement  $P$ , the first asserting that our world is a minimal world satisfying  $P$ . Leuenberger takes this totality statement as the result of applying an operator to  $P$ . He uses the symbol  $T$  for this operator and pronounces it “and that’s it” or “and that’s all”.

The questions he faces after this introduction are:

1. What is the logic of this operator?
2. What is the semantics/model theory of this operator?

Leueberger starts by justifying the introduction of the totality operator with the zombie argument, which is:

1. Zombies are conceivable
2. If zombies are conceivable, then zombies are metaphysically possible
3. If zombies are metaphysically possible, then physicalism is false
4. Physicalism is false

Formally, if  $\phi$  stands for the complete physical description of the world, if  $M$  is the claim of me being phenomenally conscious (and then  $\neg M$  is the claim that I am not phenomenally conscious, or the claim that I am a zombie), the argument can be formalized as follows:

1.  $\phi \wedge \neg M$  is conceivable
2. If  $\phi \wedge \neg M$  is conceivable, then it is possible
3.  $\phi \wedge \neg M$  is possible
4. If  $\phi \wedge \neg M$  is possible, then physicalism is false
5. Then: physicalism is false

Let's take a deeper look in the fourth premise of the argument: it relies (intended as a strict implication) on (E) being a commitment of physicalism:

(E) " $\phi$ " entails every truth

However, we easily find out that (E) is false. As an example, if physicalism is true and therefore there are no such things as angels,  $\phi$  does not entail that there are no angels, for there is a possible world in which there are angels. Then, (E) can come out false, even if we take physicalism to be true.

The zombie argument can be formalized then in a second way, refining it using the totality operator  $T$ . Let's consider the world in which  $\phi$  is true and there are no angels. In this world physicalism is false because  $\phi$  doesn't tell us the *whole* truth about the world, or at least it doesn't tell us that there are no angels.

1.  $T(\phi) \wedge \neg M$  is conceivable
2. If  $T(\phi) \wedge \neg M$  is conceivable, then it is possible
3.  $T(\phi) \wedge \neg M$  is possible
4. If  $T(\phi) \wedge \neg M$  is possible, consciousness is not physical
5. Then: consciousness is not physical

In this case, the fourth premise relies on:

(TE) " $\phi$ , and that's all" entails every truth

What we have here is basically Chalmers and Jackson's account for the introduction of the totality operator. Leuenberger, taking  $T$  as an operator, changes their notation, writing  $T(\phi)$  (or simply  $T\phi$ ) instead of the original  $T \wedge \phi$ .

The second section of Leueberger's talk is about the mereological account of  $T$ . Being  $w$  and  $w'$  two possible worlds, we say that:

$w$  outstrips  $w'$  iff some proper part of  $w$  duplicates  $w'$ , but no proper part of  $w'$  duplicates  $w$

It's easy to understand that outstripping is asymmetric and, by adding the following principle, that it is also transitive.

If  $x$  and  $x'$  are duplicates and  $y$  is a proper part of  $x$ , then there is a proper part  $y'$  of  $x'$  that is a duplicate of  $x'$

That being said, it turn out that outstripping is a partial order. Leuenberger also proposes an alternative account of outstripping in terms of fundamentality:

$w$  outstrips  $w'$  iff every fundamental fact of  $w'$  obtains in  $w$ , but not vice versa

The next section of the talk is dedicated to the logic of the  $T$  operator. He starts with the language  $\mathcal{L}_T$ , the language of propositional modal logic with the substitution of the necessity operator  $\Box$  with the totality operator  $T$ . A totality frame  $\mathcal{F}$  is a pair  $\langle W, < \rangle$ , where  $W$  is a set and  $<$  is a binary relation on  $W$ . A totality model  $\mathcal{M}$  is a triple  $\langle W, <, P \rangle$ , where  $P$  is an assignment, a function that maps from the non-negative integers to subsets of  $W$ .  $P(j)$  is then the set of worlds where  $p_j$  is true in  $\mathcal{M}$ .

What does it mean for a sentence of  $\mathcal{L}_T$  to be true at a world in a model? For the atomic sentences, this means that  $p_i$  is true at  $w$  in  $\mathcal{M}$  iff  $w \in P(i)$ . For non-atomic sentences, we can rely on the usual clauses from propositional logic. But what is the clause for the operator  $T$ ? Following Chalmers and Jackson, Leuenberger claims that:

(Df-T)  $T(A)$  is true at  $w$  in  $\mathcal{M}$  iff  $A$  is true at  $w$  in  $\mathcal{M}$  and for all  $w'$  such that  $w' < w$ ,  $A$  is not true at  $w'$  in  $\mathcal{M}$

We can say then that  $T(A)$  is true at  $w$  in  $\mathcal{M}$  iff  $w$  is a minimal one in the set of worlds where  $A$  is true. So now we have a model theory for the language  $\mathcal{L}_T$ . And what about validity? Leuenberger assumes the standard definitions of validity, e.g.:

- $A$  is valid in a model  $\mathcal{M} = \langle W, <, P \rangle$  iff  $\models_w^{\mathcal{M}} A$  for every  $w \in W$
- $A$  is valid on frame  $\mathcal{F}$  ( $\models^{\mathcal{F}}$ ) iff it is valid in every model on  $\mathcal{F}$
- $A$  is valid in a class of frames (models) iff it is valid in every frame (model)

The next step Leuenberger takes is to axiomatize the class of  $\mathcal{L}_T$ -sentences that are valid in all the totality models (or, equivalently, in all the totality frames). The axioms schemes are:

A0 All the tautologies of propositional logic

A1  $T(A) \rightarrow A$

A2  $T(A) \wedge T(B) \rightarrow T(A \vee B)$

Leuenberger states that this system is sound and complete (however, we will not go all the way through this in this report). The rules of inference are the following:

RMP If  $\vdash A \rightarrow B$  and  $\vdash A$ , then  $\vdash B$ <sup>5</sup>

RIM If  $\vdash A \rightarrow B$ , then  $\vdash A \rightarrow (T(B) \rightarrow T(B))$ <sup>6</sup>

In particular, the second rule preserves validity in all totality models. Let us call this system  $C$ . Leuenberger introduces now the notion of “system of total logic”, i.e. a class of  $\mathcal{L}_T$ -sentences that contains all  $\mathcal{L}_T$ -sentences of A0-A2 and is closed under RMP and RIM. The speaker shows then that the smallest system of total logic is exactly  $C$  (again, we will not show all the passages here), and it turns out that  $C$  is determined by the class of all totality frames<sup>7</sup>. The problem here is that the intended models are models in which  $<$  is a strict partial order, and  $C$  is not complete with respect to partial order frames. In order to have a system which is determined by the class of partial order frames we have to add another axiom:

<sup>5</sup>This first rule is called the “Rule of Modus Ponens”.

<sup>6</sup>This second rule is called “Rule of Inverse Monotonicity”.

<sup>7</sup>A system is said to be *determined* by a class of frames iff it is sound and complete for it.

A3  $T(A) \rightarrow T(A \leftrightarrow (T(B) \rightarrow T(A \vee B)))$

Let us call this new system *C3* (the demonstration of the theorem saying that “*C3* is sound and complete for the class of all partial order frames” was not given during the talk, but can be found in the relative paper).

At this point, Leuenberger heads back to the zombie argument and quotes a passage from Frankish. Frankish wants to show in this quote that we cannot accept the principle that what is conceivable is possible:

I shall call an object  $x$  a *bare physical duplicate* of an object  $y$  if  $x$  is a physical duplicate of  $y$  and has no further properties of a non-physical kind. Then we can define anti-zombies as beings which are bare physical duplicates of us, inhabiting a universe which is a bare physical duplicate of ours, but none the less having exactly the same conscious experiences as we do. (Frankish, 2007)

That being said, we can construct an anti-zombie argument, parallel to the original zombie argument. The argument is:

1. Anti-zombies are conceivable
2. If anti-zombies are conceivable, then anti-zombies are metaphysically possible
3. If anti zombies are possible, then consciousness is physical
4. Then: consciousness is physical

More formally:

1.  $T(\phi) \wedge M$  is conceivable
2. If  $T(\phi) \wedge M$  is conceivable, then it is possible
3.  $T(\phi) \wedge M$  is possible
4. If  $T(\phi) \wedge M$  is possible, consciousness is physical
5. Then: consciousness is physical

This argument has, of course, a conclusion that is incompatible with the conclusion of the original zombie argument. In Frankish’s words:

The zombie argument is an elegant and seductive piece of philosophical argumentation. But the idea that we can determine the nature of consciousness by an exercise of the imagination seems too good to be true, and the fact that we can construct an anti-zombie argument suggests that it is not true. When zombies and anti-zombies meet, they annihilate each other, and in so doing reveal that considerations of conceivability have little role to play in debates about the nature of consciousness. (Frankish, 2007)

Frankish is then claiming that his anti-zombie argument is a *reductio ad absurdum* that undermines the principle that everything that is conceivable is also possible. What seems to be incompatible here is the third premise of the zombie argument in its “totality” version ( $T(\phi) \wedge \neg M$  is possible) and the third one from the anti-zombie argument ( $T(\phi) \wedge M$  is possible). However, given the previously explained semantics for the  $T$  operator, it turns out that

these two premises are in fact compatible. Interpret for example  $\phi$  as “there is a proton or a neutron” and  $M$  as “there is a proton”, and it will be easy to see that the *reductio* of the link between conceivability and possibility fails. Then, if the anti-zombie argument is constructed as shown, using the given semantics for the totality operator, it fails. So, as Leuenberger says, let’s run with the fact that conceivability entails possibility.

Leuenberger studies now the interaction between the totality operator, necessity and possibility. Let  $\mathcal{L}_{T\Box}$  be  $\mathcal{L}_T$  with the addition of the modal operators  $\Box$  and  $\Diamond$ . Then, we can define a *modal totality frame* as a triple  $\langle W, >, R \rangle$ , being  $\langle W, < \rangle$  a totality frame and  $R$  a binary relation on  $W$ . *Modal totality models* are then defined the same way we did before, with the addition of  $R$ . The interaction between  $T$  and  $\Box$  is shown by:

$$\text{B1 } \Box(B \rightarrow A) \rightarrow (B \rightarrow TA \rightarrow TB)$$

$$\text{B2 } TA \wedge B \rightarrow \Box(TA \rightarrow B)$$

$$\text{B2}' \neg(\Diamond(TA \wedge B) \wedge \Diamond(TA \wedge \neg B))$$

B1 is valid in all modal totality frames, while B2 and B2’ each define the class of all connected totality frames.

The next step is the introduction of another totality operator,  $T^*$ , which we may call the “*strong* totality operator” ( $T$  is then the “*weak* totality operator”) and the speaker pronounces it as “it is the whole truth that”. However, this reading may be misleading, since the concept of truth is not a component of the operator. What  $T^*(A)$  says is that  $T^*A$  is the unique minimal  $A$ -world (while  $TA$  says that  $A$  is a minimal  $A$ -world). The truth conditions for  $T$  and  $T^*$  are:

- $TA$  is true at  $w$  in  $\mathcal{M}$  iff  $A$  is true at  $w$  in  $\mathcal{M}$  and for all  $w' < w$ ,  $A$  is not true at  $w'$  in  $\mathcal{M}$
- $T^*A$  is true at  $w$  in  $\mathcal{M}$  iff  $A$  is true at  $w$  in  $\mathcal{M}$  and for all  $w'$  such that  $w' \neq w$  and  $w' \not< w$ ,  $A$  is not true at  $w'$  in  $\mathcal{M}$

The following define, respectively, the class of all asymmetric modal totality frames and the class of all connected modal totality frames:

$$\text{B3 } T^*A \rightarrow TA$$

$$\text{B3 } TA \rightarrow T^*A$$

The interaction between the necessity, weak and strong totality operators is shown by:

$$\text{B4 } T^*A \wedge B \rightarrow \Box(TA \rightarrow B)$$

$$\text{B5 } T^*A \wedge B \rightarrow \Box(T^*A \rightarrow B)$$

B4 is valid in all modal totality frames and B5 is valid in all asymmetric modal totality frames. The speaker now compares the strong and the weak totality operators, and notices that:

- $T^*A$  entails  $TA$  if outstripping is asymmetrical
- If  $TA$  is true and  $T^*A$  is false, then  $A$  may be disjunctive or multiply realizable
- If  $TA$  is true, then  $T^*A$  is either true or impossible



In the final part of his talk, Leunberger return again on the zombie argument, addressing the problem of the third premise. We have four valid variants of the argument:

3.  $T\phi \wedge \neg M$  is possible

3'.  $T\phi \wedge M$  is possible

3\*.  $T^*\phi \wedge \neg M$  is possible

3\*'.  $T^*\phi \wedge M$  is possible

The incompatible options are 3\* and 3\*', 3 and 3\*', 3\* and 3'. And what about the initial issue, comprehensive truths? Being  $\phi$  a truth, (initially we were working on physicalism, but assume we can generalize this case to all candidate comprehensive truths) we have four possible candidates:

(i)  $T\phi$  entails every truth

(ii)  $T\phi$  is true

(iii)  $T^*\phi$  entails every truth

(iv)  $T^*\phi$  is true

Given  $\phi$ , (ii) are equivalent. (ii) asserts that  $\phi$  is comprehensive but, given the previous discussion, this can't be right, as we have seen in the response to the anti-zombie argument: (ii) is not enough to ensure that  $\phi$  is comprehensive (e.g.  $T\phi$  may be true even if  $\phi$  is disjunctive or multiply realizable, and then it doesn't tell us everything about the world). Working with  $T^*$  instead, (iii) is clearly not enough to be comprehensive, because (iii) turns out true whenever  $T^*\phi$  is impossible (it shares the same problems of (i)). The last candidate is the right one: (iv) is *sufficient* for  $\phi$  to be comprehensive, since it ensures that the world is outstripped by every  $\phi$ -world, and it also entails all the other candidates. The last thing to notice is that if we assume that there are no indiscernible worlds, (iv) turns out to be also *necessary* for  $\phi$  to be comprehensive.

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## 4 *On the semantics and ontology of cases*

**Friederike Moltmann (French National Centre for Scientific Research, Paris)**

Referring to cases is a distinguishing feature of many natural languages, although it does not appear explicitly in all of them. Major studies have still not been performed on non-European

idioms, and also on the European side this feature is not a constant (for instance, it does not figure in Swedish and Danish). However, it is strongly presumed that all languages possess at least an implicit device which performs the same function. Cases present various possible constructions: (a) nominal (“The case of a stolen statue”), (b) clausal (“The case in which a student fails the exam”) and (c) modal (“In case it rains, we won’t go”). Significantly, case work also as a device to make explicit reference to truth-makers, such as in “It is not the case that *S*”. Since cases are *something* we make reference to in natural language, Moltmann wishes to trust the latter and claims that they stand for a genuine ontological category. For this reason they are the best candidates for answering the question: “What is a truth-maker?”. If we ask ourselves: what makes the sentence “Caesar crossed the Rubicon” true, we can find the answer in the structure of a sentence like “The case in which Caesar crossed the Rubicon occurred”. Notice that, like Francesco Berto in his talk on meinongianism and quantification (see further), Moltmann draws inspiration from Kit Fine’s philosophical approach in drawing *substantive* metaphysical theses from the structure of natural languages. This may strike many, for natural language is considered to be so unstable that it seems even empirically inadvisable to draw the features of the most fundamental structure of the world from it. However, the approach is gaining relevant consensus in contemporary metaphysics and constantly receives fairly compelling arguments in his favour (see Fine, 2012).

#### 4.1 Cases denote an ontological category

Moltmann begins by introducing a list of linguistic devices, suggesting that at least some of them may effectively denote ontological categories. But let us proceed gradually. She calls the clausal cases-related category’s elements “situational cases”, and these are shown to be ontologically different from events, facts, states of affairs, objects and possibilities. Natural languages employ multiple *existence predicates* and eschews unconstrained quantification in existence-attributing contexts, thus immediately challenging the mainstream Quinean view on existential quantifiers. Distinctions among existence predicates are a typical mark of language<sup>8</sup>: they simply do not apply to *all* kind of entities. In particular, “exists” typically refers to material objects, “obtain” to facts and conditions and “happen” to events. So we can trace the difference between substantive ontological categories by means of the grammaticality expressed by the structure of natural language. Consider<sup>9</sup>:

- (11) Vulcan does not exist
- (12) A. The number four exists  
B. (?) The number four happened/took place
- (13) A. The accident never happened  
B. (?) The accident existed yesterday.

And notice that the second variant of (12) and (13) appears starkly ungrammatical. The verb “to exist” simply does not apply to all entities. Events (and accidents) do not exist, but rather *happen or take place*<sup>10</sup>. On the contrary, objects “exist” and “are there”, but do not “happen”

<sup>8</sup>See Francesco Berto’s talk “There is an ‘is’ in ‘there is’: Meinongian quantification and existence”, further in this report.

<sup>9</sup>Sentences’ labels are assigned according to Moltmann’s original numeration in her handout.

<sup>10</sup>One easily applies the same example to many european languages, e.g. Italian: (11) Vulcano esiste; (12A) Il numero quattro esiste; (12B) Il numero quattro è *avvenuto/ha avuto luogo*; (13A) L’incidente non è mai avvenuto;

or “obtain”. What about situational cases? Moltmann notices that their belonging to one of these categories is not straightforwardly determinable:

- (15) A. (?) The case in which John will not return might exist/might take place/might happen.  
 B. (?) The case in which it rains on Sunday has never existed/happened/taken place/obtained<sup>11</sup>.

Since the latter sentences do not grammatically describe the behavior of the cases’ category and are semantically unacceptable, cases will have other existence predicates, which in English are *occur* and *present itself*.

- (15) A. The case in which John will not return could occur/present itself.  
 B. The case in which it rains on Sunday has never presented itself/has never occurred.

Respectively, in German and French the equivalent existence predicate for cases is “*ein-treten*” and “*se produire*”. Interestingly, Italian does not distinguish between the predicate for states and events and that of cases, and uses “*avere luogo*” (take place) or “*avvenire*” and “*accadere*” (happen/occur) for cases as well as events. Moltmann does not mention this issue here, for it is probably shared by many other languages and her response to the empirically oriented objection that not all natural languages exhibit similar predicates’ and cases’ construction structures is that the structure we are looking for is more general. There must be at least an *implicit* device to make reference to cases or to distinguish the existential predication for cases, even if it does not appear in the surface of the language. She does not further inquire this seemingly Chomskian aspect of the argument, but we can well take this suggestion as an assumption, for it does not represent the topic directly concerned in the talk. In this respect, the first point made by Moltmann consists in claiming that situation-like cases denote a different ontological category with respect to events, states, possibilities and objects. The idea is to draw information on the cases’ ontological category by means of associating situation-like cases (clausal cases) with nominal cases. She will thus provide a *unified* account of cases as *filtered entities* which inherit some of the metaphysical and ontological features of objects and events, but nevertheless are to be fundamentally distinguished from these. Let us then approach nominal cases.

#### 4.1.1 Nominal cases

There are three linguistic sub-categories of nominal cases that Moltmann takes into account. First, we have (a) cases as instances of universals, like in “The incident is a case of fraud”. Then there are (b) object-related cases, such as “the case of that incident”, in which it is clear that the case exhibits different properties (surfacing in semantics) in comparison with the correlated objects. Finally, there are (c) event-related cases, which account for events taken in single occurrences: “the case of a defeat”, i.e. that particular singular occurrence of the event “defeat”. The three present relevant similarities and thus Moltmann focuses in particular on the relation of cases to objects. She notices that the former seem to inherit some

(13B) L'incidente è esistito ieri. Undoubtedly, it is the same ungrammaticality that appears here in the employment of categorically different existential predicates.

<sup>11</sup>Notice that in (15B) no modal commitment is implied. That the case that it might rain presents itself bears no consequences – nor it is reducible to – to the fact that it is *possible* that it rains. In order to bring the two situations closer, we should rather say that the fact that it rains *might* present itself.

relational features of the latter, but share no equal belonging to the same category. For instance, think of legal cases. They can be initially thought to stand for objects, as is clear from the grammaticality of “A legal case concerning Mr. Smith *existed*”. However, we should not fall prey of this appearance. Although “to exist” can be easily applied to the legal case, this is not sufficient, according to Moltmann, to make it part of the objects’ category. Some cases seem to be build-up from few, selected structural aspects of the corresponding objects, including their mode of existence and some of their logical features, e.g. we can *discuss* a legal case, say that it is *interesting* or *compare* it to another one. The correlation between cases and objects (as that between events and objects, with possible drawbacks on four-dimensionality) allows the “loan” of the objectual existence predicates. But the differences between the two are quickly detectable. Cases and objects have (a) different mereological structure (parts of the case of a stolen statue are not parts of the statue); (b) different concreteness-related properties (such as spatial location and persistence conditions) and (c) different causal powers (a case cannot have the same effects that the related objects produces). According to Moltmann, we should employ the evidence obtained to construct a theory of both nominal and situation-like cases as *filtered entities*. That is, we should carry out the task of identifying filtering conditions associated with both the nominal correlation *and* the clauses-related instances of cases. These conditions seem to be structural in nature, thus the proposal is to identify them in the former case with a general condition  $C$  that picks out only the relevant relational and intrinsic features of the object and assigns it to the case: [The case of the stole statue] $^C$  = [case]( $C$ , [the stolen statue]). In the latter filtered construction she proposes to identify the case with a plurality of objects and the relations holding between them. In other words, with a structure<sup>12</sup>. For instance, the case in which John likes Mary corresponds to the plurality of John and Mary and to the two-place relation of liking holding between them.

## 4.2 “Is the case” and truth-making

The locution “is the case” plays a crucial role in inquiring the relationship between natural language’s semantics and ontology. Moltmann believes that this clause expresses truth-making conditions explicitly. Initially, it is commonly held that its meaning wholly corresponds to *is true (that)*... , but this *prima facie* plausible identification is fallacious. Some natural contexts make the semantic difference visibly emerge. Examples are the *location modifier* (sentences (45)-(46)), the *adverbs of quantification* (sentences (47)-(48)) and the *interpretation of degree quantifiers* (sentence (50)).

(45) A. In our firm, it is not the case that one gets fired without explanation.

B. (?) In our firm, it is not true that one gets fired without explanation.

(46) A. In John’s family, it is not the case that children respect their parents.

B. (?) In John’s family, it is not true that children respect their parents.

(47) A. Given that she has developed Alzheimer, it will often be the case that Mary forgets something.

B. (?) [...] It will often be true that Mary forgets something.

<sup>12</sup>A structure, at least in its standard set-theoretic definition, is an ordered tuple consisting of a set of objects (called its domain) and a set of relations specifying different ordering of the domain. Relations are defined extensionally. The formal expression is  $C = \langle F, \{x_1, \dots, x_n\} \rangle$ , where  $C$  is the case,  $F$  the relevant relation and  $\{x_1, \dots, x_n\}$  the set of objects to which the relation applies.

(48) A. It was twice the case that someone was absent.

B. (?) It was twice true that someone was absent.

(50) A. It is hardly the case that John drinks coffee.

B. (?) It is hardly true that John drinks coffee.

The last issue raised by Moltmann concerns the ontology of truth-makers and its compatibility with the ontological category of cases. What do we learn from language about the nature of truth-makers that can be used in the long-standing truth-making debate? The main questions concern grounding and the range of applicability of truth-making to all sentences: (a) is it the case that truth-making requires *entities* in which the truth of a given sentence is grounded? (b) Do *all* sentences require truth-makers? As for the first question, the answer firstly appears to be positive, for case constructions in natural language already suggested that cases denote an ontological category. So where should we look for truth-grounding entities if not in this category? Moltmann, though, has a number on reservations. In fact, since they are linguistically derived from objectual and eventual constructions as expressed in a structure (see par. 4.1.1), they introduce entities only in a *derivative* way. Lewis (2001) argues that sentences need not be grounded in real entities, but rather in *how* things are. Filtered structures, in this sense, are thus not a way to reify the linguistic expression, but rather to describe the pattern of relations taking place between a plurality of objects. So, it seems that Lewis' thesis receives some support from natural language's semantics and that truth-makers should not be grounded in genuine entities.

Secondly, as for what regards the applicability to *all* kinds of sentences, there are typically irksome examples for which it is not clear whether a truth-maker is required: negative sentences and sentences expressing existential predication. In Moltmann's view, however, they both undoubtedly fit the case analysis, in that it is unquestionable that the reference of 'is the case' is achieved directly, such as in (64): "The case in which John fails to show up . . ." (negative sentence), and (66) "We took into consideration the case in which Sasha might be a cat" (existential predication).

Conclusively, Moltmann discusses some implications on the nature of truth-makers. Case constructions and their analysis may avoid the hinders of a major view, defended by Mulligan, Simons, and Smith (1984), and Lowe (2006), which accounts for truth-makers as wholly individuated entities (often of a metaphysical kind, such as tropes, events and universals) to ground the truth of sentences. Moltmann's account of cases, however, avoids the two objections raised against this conception that (a) individuated entities – especially tropes – may often not meet the conditions for an exact truth-making (i.e. not all features of the entity in question are relevant to ground the truth of the sentence); and that (b) presentism in the philosophy of time undermines the possibility that truth-makers exist in a time different from the sentence's utterance. More precisely, cases are filtered entities identifiable by means of a structure, and as such they are suited for exact truth-making, without vagueness on whether the truth-maker is really relevant in making the sentence true. Moreover, given the use of tense in natural language and in case constructions, cases can be conceived as existing time-independently: (68): "There *are* only three known cases of this disease", and, as a very inspiring last example, (70): "There *are* three famous philosophers that had studied in Tübingen: Hegel, Fichte and Schelling". Philosophical figures – as also inspirational and memorable ones – appear in language as filtered entities, like cases. They are identified by means of their works and life (a structure) and then, given the tensical status of (70) they exist time-independently, like cases do.

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## 5 Are ontological debates defective?

**Jason Turner (University of Leeds)**

During recent years, the viability of ontological and metaphysical inquiries has been a issue frequently discussed in philosophy. Questioning the role and scope of such researches within the philosophical scenario and whether they could or could not be reduced to other disciplines, these discussions have provided some interesting insights to the contemporary definition of ontology and metaphysics. Jason Turner focuses on this topic arguing against the defectiveness of ontological debates and providing a meta-ontological possible solution.

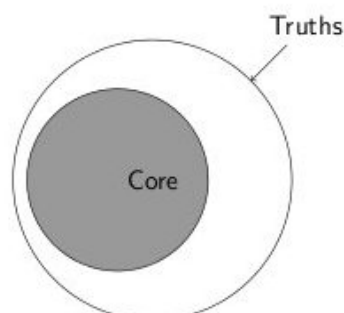
Turner starts his talk from the concept of *metaphysical analysis*, defined as an inquiry which aims to claim that, for  $\phi$  and  $\psi$ :

What it is for  $\phi$  to be the case just is for  $\psi$  to be the case.

Then the author characterizes this kind of analysis as inquiries which:

- are (in some sense) reductive;
- don’t have to (but might) plumb our *conceptual* structure;
- don’t have to (but might) be *a priori*;
- don’t have to (but might) be finite/recursively specifiable.

Following this schema, a *metaphysical theory* is thus composed by a set of truths. Among these truths, some have been developed by specific analyses, whereas others compose the *core* of the theory, a particular proper subset of *primitive* truths. These latter have not been derived by previous analyses, but were assumed by the theory in order to structure the conceptual building.



Introduced these notions, Turner presents the argument of *defection from without*, a traditional attempt to undermine ontological questions. The argument, based on a simplified ontological debate

- (1) There is a chair here.
- (2) There are particles arranged chairwise here.

develops a criticism about the fruitfulness of such discussions following this way:

- Our use of words makes (1) true whenever (2) is true.
- The ontological question is whether (1) is true.
- The debating parties don't disagree about (2).
- ∴ So they don't disagree about anything.

Hence, in order to delineate a strategy to void this argument, the author refers to the simple case of *hairstyles*:

- (3) There are three hairstyles in fashion this summer.
- (4) Many people this summer are getting their haircut to look like *a*, like *b*, and like *c*.

which shows the possibility to *analyse* haircuts *away*. Asking thus whether this move could be available also in the ontological case, allowing to *analyse* chairs *away*, Turner focuses on two study cases both concerned on improper analyses of primitive truths. The first one consists in a debate between two philosophers arguing on the relationship between possibility and necessity. They claim two opposite views and thus state:

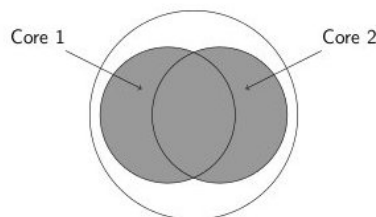
- *A*: «Necessity is primitive!»
- *B*: «Possibility is primitive!»

In meta-ontological terms, this dispute is solved recognizing two different metaphysical analyses:

Analysis *A*: Possibly,  $\phi \Rightarrow$  Not necessarily not  $\phi$

Analysis *B*: Necessarily,  $\phi \Rightarrow$  Not possibly not  $\phi$

which both fail to correctly analyse the reciprocal cores containing their primitive truths:

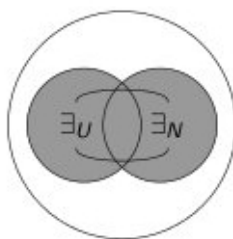


The second case regards a dispute between nihilism and universalism views on chairs' question. Again, difficulties arise due to an improper analysis of the primitive truths own of the opponent, providing two different interpretations of the expression "there are", a nihilist version and a universalist one:

- $C$ : «There are <sub>$u$</sub>  chairs!»
- $D$ : «There are <sub>$n$</sub>  no chairs!»

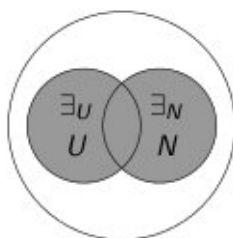
These cases clearly show how even *defections from within* could affect ontological debates.

In the last part of his talk, Turner presents thus a possible solution for the ontological defections examined. He starts defining the notion of *naïve logical constancy*, a translation  $t$  between cores belonging to different theories.  $T$  preserves all logical consequences own of each account, allowing to reconceive the dispute between two opposite theories on the basis of their derived truths.



Following  $t$ , the mentioned dispute between opposite views of possibility and necessity would be solved through the reference to their logical consequences: translated from their primitive truths, they should indeed allow a comparison on a common ground.

Finally, moving from this first attempt Turner introduces the *sophisticated logical constancy*, an augmented version of the analysis-induced translation which is able to preserve *theoremhood* between cores, allowing to combine a core with some governing principles.



Concluding his talk, Turner claims the viability of a meta-ontological reconceivability of such ontological defections in virtue of this helpful theoretical tool.

## 6 *There is an “is” in “There is”: Meinongian quantification and existence*

**Francesco Berto (University of Aberdeen)**

This talk on meinongianism and quantification by Francesco Berto closes the Tübingen workshop. Tuomas Tahko and Graham Priest – the latter being one of the most known contemporary meinongians – provided comments at the end of the session.

Berto presents Meinogian quantification (M) as the well-known claim that “There are things that do not exist” and that existence is a *real* predicate, denoting a genuine property of individuals and not analyzable with logical means. He contrasts this with mainstream



Quinean meta-ontology (Q), also by noticing that most handbooks and introductions to ontology do not hang off in submitting the Quinean framework as the most natural and worth-accepting<sup>13</sup> (e.g. see Varzi, 2005; Van Inwagen, 2006). According to Quine and his followers, Meinongian quantification is *badly wrong* in being a mistake about the *meaning* of the concept of existence. This amounts to the well-known claim that ontological asserts are taken to express variable-binding logical devices, and that the quantifier is innocent with regard to the type of entities that can enter its domain (it is, in Berto's terminology, a *blanket* property). In sum, it would be this concept of existence that the Meinongian lacks or misses, and the whole dispute would reduce to an problem of linguistic equivocation. To start, Berto identifies two different objections convened in the same argument, and argues that neither is decisive:

- (1) **Argument from equivocation.** In misunderstanding the concept, the meinongian *changes the subject* in question. The two philosophers simply speak about two different predicates.
- (2) **Argument from inconsistency.** The Quinean meaning of the quantifier is a logical truth (a tautology). By negating it, the Meinongian produces an *analytic falsehood*.

The difference is straightforward. In both it is presupposed that “exist” is a genuine concept and that speakers employ it with more or less semantical competence. In (1) it is claimed that the disagreement arises simply from a divergence of their competence, whereas (2) states that the Meinongian does not simply disagree on the concept of existence, but that she expresses a contradictory stance. In particular, Berto stresses that the two objections cannot be raised together, for (2) includes an assumption that is rejected by (1), namely, that the Meinongian and the Quinean really express contradictory propositions on existence and are not engaged in a question begging discussion about the meaning of the english word “exists”.

## 6.1 Equivocation

Following Paul Boghossian's analysis of understanding a sentence as believing it to be true<sup>14</sup>, Berto explains that according to the first objection (Q) and (M) express two different beliefs on the conceptual status of existence. Although the Meinongian tries to contradict (Q), what he really expresses is another meaning. The two views are simply incompatible for the one to be contradicted by the other. However, he excludes that the disagreement could concern *only* language. If it did, it would not regard the question of *what* entities are included in the ontological domain, but only the logical role of the quantifier. For example, some Meinongians accept a logic with *multiple* quantifiers ranging over actually existing and merely possible entities. Hence, they satisfy the sufficient condition to be susceptible to the Quinean argument from equivocation. Berto's solution is to claim that there is no compelling reason to think that Meinongians should not be wholly competent speakers of English. Indeed, by means of Marconi's (1997) definition of competence as taking actively part in the linguistic community, Berto claims that Meinongians satisfy the requirement and convey exactly the same meaning as non-Meinongians. In particular, Berto stresses that the concept of quantification is

<sup>13</sup>Varzi (See 2005, p. 3): “It is customary to identify ontology with that branch of philosophy that originates from the question: “What is there?”. And it is customary to claim that this question has two kinds of answer. The first answer is easy, if not trivial, and can be summed up in one word: “Everything”. As Quine has written [...] everything exists because it makes no sense to speak of ‘nonexistent entities’, and those who think otherwise would manifest, not an ontological disagreement, but a misunderstanding of the very concept of existence. [...] precisely because it would be inconsistent to claim that *something does not exist*, though, to claim that *everything exists* is tautological, that is, devoid of content, therefore of interest”

<sup>14</sup>See (Boghossian, 1996).

something employed solely in “ontology rooms”, whereas the whole dispute between (Q) and (M) concerns meanings more generally – as is required by something so much employed and important in the linguistic praxis as the verb “to be”. So, competence is attributed to Meinongians and Quineans independently of their stance in ontology rooms, and since disagreement cannot be tracked in the speakers’ everyday semantic pattern (they communicate and clearly *understand* each other), we can exclude that there subsists a phenomenon of equivocation. Thus, “it is implausible that the quantifier changes its meaning in the Meinongians’ mouth” (p. 5). From the logical point of view, this is compatible with a form of meinongianism which does not alter the Quinean limitless extension of the quantifier, but also introduces ‘existence’ as a real predicate of *some* things (a restricted number of them) which fall into the quantificational domain. Such an interpretation of Meinongianism has been defended by Zalta (1988), but it is not at all equal to Berto’s aim in this talk. He wishes to maintain loyalty to Meinong’s original idea that things that do not exist *lack* being altogether. This will be summarized in section 6.2. Notice that Berto’s discussion of the argument from equivocation cannot be reduced to the simple claim that community cohesion implies substantial agreement, but *first* acknowledges equivocation in some forms of meinongianism (e.g. those with multiple quantifiers) and then derives that it is another form that Meinongians *must* have in mind, *given* that they are competent speakers and there is no disagreement. In other words, the answer to the argument of equivocation tells us that Berto thinks of meinongianism as employing *one single quantifier* (just as the Quinean), so that there is no disagreement on the meaning of “to be”.

The disagreement enters the picture only after having fixed the meaning of the quantifier, and is purely *ontological*. Namely, it regards two things: (A) *logical equivocation*, for the Quinean believes that the property of existence can be reduced to a logical notion, and corresponds to the formula “ $\exists x(x = a)$ ”, whereas the Meinongian believes it to be a non-reducible *real property*; and (B) *theoretical equivocation*, since the two philosophers apparently disagree on the particular entities that belong to the unrestricted domain, and those that instantiate the real property. At the end of the first section Berto provocatively (but not strikingly) declares to agree with Peter Van Inwagen (2006, p. 53) – who is definitely not a Meinongian – in claiming that “The neo-Meinongians and I have different *theories* about what “exists” means [. . .]. When they use the English word “exist”, they mean by it what it means, and if that happens to be, as I say it is, “not-all-not”, they mean “not-all-not” by “exists” – although, according to their mistaken theory about the meaning of ‘exists’, that is not what they mean by it”. Moreover, Berto adds to his support that (M) and (Q) generally exhibit a *de re* attitude towards the notion of existence. They do not generally struggle flaunting contrasting, different notions, but disagree in characterizing *the same property*. This is everything to which the dispute boils down.

## 6.2 Analytic Falsehood

According to the second objection, in speaking of existence the Meinongian negates a logical truth and therefore incurs in contradiction. The Quinean believes that there is no semantic difference in asserting that “there is something”, that “something exists” and even that “something is” *simpliciter*. The claim amounts to recognizing *synonymy* between the terms. Berto follows again Boghossian (1996) in introducing the notion of *Frege analyticity* as follows:

**Frege analyticity.** A sentence is Frege-analytic if and only if it can be derived

from a logical truth by synonymic substitution of its non-logical terms.

The Meinongian is in trouble if she cannot dispel the objection that the parallel forms of “to be” are synonyms expressing the same meaning and, derivatively, identifying the same truth-conditions. According to Berto, there are two strategies to show that the objection fails. Either the Meinongian answers the Quinean accusations directly (par. 6.2.1), or retorts to linguistic considerations (par. 6.2.2) to support the thesis that, at least in natural language, allegedly parallel forms of “to be” behave indeed very differently from one another. In general, Berto complains that the argument from inconsistency cannot just stop by the definition of Frege-analyticity and then simply declare that the Meinongian incurs in contradiction. It must provide independent evidence for the thesis that forms of “to be” are synonyms. The following argument constitutes such an attempt.

### 6.2.1 The argument from “italics”

The Quineans usually employ a strategy which Berto<sup>15</sup> nicely labels “argument from *Italics*” to bring support to the synonymy thesis. It simply consists in stressing the fact that there is no compelling reason to account for a difference in meaning between the terms “there *is*” and “exists”, for quantification itself captures no other meaning than that of existence and therefore to quantify implies nothing else than to attribute existence. The argument from Italics follows the pivotal motto that “There is an ‘*is*’ in ‘there *is*’”. In his book *Existence as a Real Property. The Ontology of Meinongianism*, which is the main reference work for the talk, Berto mentions a well-known passage by Peter Van Inwagen as a limpid example of such a strategy:

In sum, there are no things that do not exist. This seems to me so obvious that I have difficulty in seeing how to argue for it. I can say only this: if you think that there are things that do not exist, give me an example of one. The right response to your example will be either “That does too exist”, or “There is no such thing as that”. (Van Inwagen, 2006, p. 16, quoted in Berto, 2013, p. 68)

On the other hand, the Meinongian insists typically that quantification has no ontological import on the basis that some objects can instantiate logical features and function as property bearers although they do not properly exist. For example, Gandalf or the fountain of youth can still be taken to possess a number of different properties. The former is a wizard, and is the idol of many fantasy novels lovers. The latter has been sought by Ponce de León. She thereby concludes that there are objects . . . that do not exist, and that therefore they must have something like a *weaker* form of being (which is presumably captured by means of quantification but in any case does not correspond to the existence domain). This distinction between being and existence traces back to Meinong himself and is a firm ground of Meinongian ontology. The non-existing objects, it is claimed, do not instantiate the existence property, but *have being*. Some Meinongians usually refer to this by saying that they have a “mode” of being which is in its nature “watered-down” with respect to the existence property<sup>16</sup>. So the argument from Italics, if plausible, would raise a challenge against all Meinongians who are committed to this distinction. Now, Berto identifies again two different claims:

(a) To quantify is to ascribe being to what one quantifies over.

<sup>15</sup>Also to be found in (Berto, 2013) and in (Berto and Priest, 2013).

<sup>16</sup>See Berto (2013), par. 4.4.

(b) Being is the same as existence.

and notices that the argument does indeed help supporting (a), as he also recognized in his answer to the argument from equivocation. However, it does simply *not* imply that being is *the same as* existence, that is, that sentences uttered by the Meinongian are Frege-analytic. Indeed, (M) and (Q) *could* equally think that quantification is an ascription of being, but we need again independent evidence to suppose that this “being” semantically corresponds to “exist”. We will see in the next paragraph that natural language is the methodological basis to claim that “to be” has an unexpected fairly vague semantics. Finally, Berto rejects the previously described distinction between “watered-down” being and existence, for it seems to him just a form of quineanism in disguise. Namely, it concedes to the Quinean his very use of the quantifier, attributing being (even if not existence) to absolutely everything. Meinongians, he argues, had better accept (b) and deny (a), in order to say that really all there is is all that exists, and there are things that genuinely do not exist (this allows him to prove his loyalty to Meinong’s original claim).

### 6.2.2 Linguistics to the rescue

A further strategy employable by the Meinongian to remark that *blanket* quantification does not correspond to existence consists in retorting to linguistic considerations, and here Berto employs literature by Friederike Moltmann (2007) to stress the crucial role played by *locative constructions* and *locational restrictions* in natural languages such as English, French, German, Italian.

In natural language, quantification corresponds to expressions such as: “for some”, “there is”, “es gibt”, “il y’a”, “c’è”, but it seems – in the first place – not to carry any ontological import: it makes no reference to existence just as they do not have any relationship with the syntactically corresponding verb: “to give” in German, “to have” in French<sup>17</sup>. These devices are called *locative constructions*. They function as object introducers, positioning them in a grammatical context. Berto notices (with Moltmann) that they do not give any information about metaphysically substantive properties of objects (such as existence, subsistence, identity or persistence conditions). Rather, they just present *any* object in a context of discourse. Examples are:

- (1) There is a girl.
- (2) C’è una ragazza.
- (3) Es gibt ein Mädchen.

When locative constructions are accompanied by *locational restrictions*, the substitution of “exist” to “there is” or other parallel forms becomes highly problematic. Consider:

- (4) There was a girl *this morning looking for you*.
- (5) *Stamattina c’era una ragazza che ti cercava*.
- (6) *Heute morgen gab es ein Mädchen, das dich gesucht hat*.

And try to perform the substitution (I shorten the argument by employing only the English form):

<sup>17</sup>Graham Priest remarked in the comment section following Berto’s talk that there are several difficulties with the middle form “to be”, which seems indeed to make syntactic reference to existence in some languages.

(7) A girl *existed* this morning, looking for you.

(perhaps: “*There* existed a girl this morning, looking for you”?)

As Berto notices, the employment of “there is” in (4) is closer to quantification (“for some”) than “existed” in (7) is, and the latter sentence tends to become starkly ungrammatical. This seems to be due to its falsity. It is not the case that a girl *persisted* in existence this morning only while she was looking for me.

What is then to say of the acceptance of (b), the claim that “being is the same as existence”? Haven’t we shown that quantification and existence are separate *because* they are not synonyms? And if so, why should a Meinongian like Berto insist that (b) can be accepted on the grounds of a non-synonymy of the forms of the verb “to be”? The answer is *restricted quantification*. It is not always the case with locational restrictions that they do not involve existence at all. Most of the times, on the contrary, they subtly do. For this reason, given that (Q) is not Frege-analytic, the Meinongian should not directly rule out that existence and quantification coincide. Only, he has to accept that existence *is* restricted quantification, and namely the quantification that works on those cases in which locative restrictions imply or encode existence. This leads Berto to the genuinely Meinongian conclusion that one quantifies over everything that exists, and that at the same time there are things with *no being at all*.

A final remark concerns that fact that, like Moltmann, Berto uses the structure of natural language to draw support for several substantive metaphysical theses. This really requires further methodological justification, which unfortunately goes beyond the scope of his talk. For example, (7) is assigned a “stronger” meaning with respect to (6) by means of nothing more than an almost irresistible semantic intuition (based on linguistic praxis). Not everyone would be prone to accept the conclusion that “There is a girl” and “A girl exists” are *not* Frege-analytic only on the basis of natural language structure and community behaviour. As Berto recognizes, this proposal is bound to Marconi’s ideas on competence and has “as much theoretical strenght as charitable interpretation allows”. It is remarkable, however, that associating natural languages and metaphysics constitute a growing tendency in contemporary philosophy. This is not meant in a neo-positivistic fashion (a criticism of falsely meaningful theses by means of logical analysis), but rather as a genuine piece of substantive metaphysics. Both Berto and Moltmann make reference to Kit Fine (2001) as one of their first sources of inspiration. Also, Berto recognizes that relationships between meinongianism and Fine’s metaphysics are worth exploring.

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