

Should Metaphysics Care About Linguistics?

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Abstract Naturalized metaphysics is based on the idea that philosophy should be guided by the sciences. The paradigmatic science that is relevant for metaphysics is physics because physics tells us what fundamental reality is ultimately like. There are other sciences, however, that de facto play a role in philosophical inquiries about what there is, one of them being the science of language, i.e. linguistics. In this paper I will be concerned with the question what role linguistics should and does play for the metametaphysical question of how our views about fundamental reality can be reconciled with the everyday truisms about what there is. I will present several examples of two kinds of approaches to this question, linguistics-based accounts and purely philosophical accounts, and will discuss their respective methodological merits and shortcomings. In the end I will argue that even proponents of a purely philosophical answer to the metametaphysical question should take the results of linguistics seriously.

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1 Scientific Metaphysics and Scientific Metametaphysics

Of all of the subdisciplines of philosophy, metaphysics has the strongest flavour of pointlessness and the greatest potential to lead to frustration. At least this is what many non-philosophers as well as scholars working in other areas of philosophy think. They find it bewildering that anybody could be seriously bothered by questions such as whether the present is ‘more real’ than the past, whether there could be two numerically distinct things that share all of their properties, or whether there really are chairs and tables in their living rooms rather than only physical particles that are arranged chairwise and tablewise.

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Philosophers who do care about these questions are hence often confronted with two objections. The first is that of being lazy: metaphysics supposedly deals with the most fundamental structure of reality. It asks what there really is and what it is really like. But it is far from clear what philosophy can contribute to this inquiry, as there are alternative disciplines that deal with these questions and are very successful in answering them, namely the sciences. It seems presumptuous, so the objection goes, that philosophers think they are able to find out anything about the world (e.g. about the nature of time) that goes substantially beyond what these disciplines already reveal, let alone anything that refutes their results, and that they can do so ‘from their armchairs’, i.e. by mere thinking. The second objection against metaphysics is that of being idle and frustrating. It is fed by countless examples of metaphysical debates that seem to be entrapped in an endless battle in which no real progress is observable, at least not by outsiders, and in which, moreover, it does not seem clear at all what would count as progress concerning the question under discussion. What is even more embarrassing is that participants of metaphysical debates often respond to these stalemates with resources of rhetoric that would usually seem rather inappropriate in an academic debate: incredulous stares, exclamations of contempt (‘This is insane!’), or confessions that one really cannot believe how anyone could consider for a minute what one’s opponent claims (e.g. that there are no tables).

One reaction to both of these objections is to assume a tighter connection between philosophy and the sciences, or possibly to opt for what is sometimes called ‘naturalized metaphysics’ (cf. Ladyman and Ross 2007). The general idea behind this move is that philosophers should take seriously the results of those disciplines that uncontroversially make enormous progress in finding out what the world is like, namely the sciences, most importantly physics. If we do so, we might not only end up with a world view that is radically different from that of common sense, but might also see that the ontological categories which frame the thinking of many philosophers when they use their toy examples in their armchairs are utterly misleading, even if those philosophers try to put forward a scientific world view according to which only ‘the fundamental particles assumed by physics’ exist. For, if Ladyman and Ross are right, then taking seriously the formalism that underlies our best present theories in physics implies that at the most fundamental level of reality there are no individual objects at all (ibid.).

In the present paper, I will neither be concerned with the methodology nor with the specific contents of naturalized metaphysics directly. Instead I will deal with a question that becomes pressing once we have accepted a view about fundamental reality that is guided by the results of physics. The question is how this view is related to assumptions about what there is in the world that we hold true when we are not concerned with physics, either when we are engaged in other sciences, or in everyday contexts. In such situations we assume that there are chemical elements (and deny that there are more chemical elements than those described by modern chemistry), we assume that there are narwhals and populist politicians (and deny that there are unicorns and dark wizards), or we assume that there are prime numbers and possible humans that could result from human sperms and eggs (but deny that there is a largest prime number or possible humans that could result from the sperms and eggs of dolphins). Are these assumptions true? And if they are true, does accepting them as true commit us to there being more to reality than what physics tells us there is?

These are important metametaphysical questions,¹ and a further engagement with the results of physics does not help to answer them. Physics itself is silent about how its results

¹ For an overview over some recent answers to this question, see Chalmers et al. (2009).

relate to those of other disciplines or to our extra-scientific beliefs. Do we thus have to give up the idea that philosophy can be inspired and guided by the sciences when dealing with these questions and has to answer them on purely philosophical grounds? In this paper I want to show that this is not the case. There is indeed a science that should be taken seriously when dealing with the ontological implications of the claims of the special sciences or of everyday life, and the way they relate to those of physics: it is the science of language, linguistics.

At least linguistics is relevant if we want to hold a conciliatory view about the relation between the results of a physics-based theory of fundamental reality and all the other claims that we normally hold true, i.e. if we do not want to subscribe to an error theory about the latter.² As we will see, a common strategy to avoid the ontological implications of these claims is to make certain assumptions about the language and the users of the sentences in which the claims are formulated, assumptions that are supposed to show that accepting the claims does not carry any additional metaphysical implications after all. In contemporary metametaphysics this conciliatory strategy is de facto pursued in two rather distinct fashions, which differ with respect to how much weight is assigned to the results of linguistics. *Linguistics-driven versions* of the conciliatory account try to avoid alleged ontological implications of claims in natural languages like English by making assumptions about semantic and pragmatic aspects of these claims that are justified from the point of view of linguistics, independently of their role for the metametaphysical debate. *Purely philosophical versions* of the conciliatory account, on the other hand, base their attempt to reconcile their metaphysical world view with the truth of everyday claims on assumptions that are tailor-made to solve the metametaphysical problem, but are ‘unscientific’ in the sense that they are not concerned with theories or results from linguistics, either because they do not base their solution on considerations about language at all, or because they think that they deal with aspects of language that principally do not fall into the scope of linguistic theorizing.

In the following paper I want to compare these two strategies and investigate how certain of their respective methodological peculiarities resemble those of science-oriented and purely philosophical first-order metaphysics. In the next section, I will present three examples of *linguistics-driven* attempts, namely by Thomas Hofweber, by Stephen Yablo, and one of my own, to show that certain natural language claims do not carry the ontological commitments that they *prima facie* seem to imply. I will then comment on the methodological virtues of these attempts and also on the limits of their applicability to metaphysical debates. In Sect. 3, I will continue with a short exposition of three *purely philosophical* conciliatory accounts—those by Ted Sider and Cian Dorr, by Ross Cameron, and by Jonathan Schaffer, which all try to reconcile the putative ontological posits of everyday claims with a sparser metaphysical reality by distinguishing between what is

² If some metaphysical considerations, or maybe some results from physics, should lead us to conclude that at the fundamental level of reality there are no macro-physical objects but only subatomic particles that are arranged in certain ways (cf. Dorr 2005; Sider 2011, 2013a), or perhaps that there are in fact no individual objects at all but only fields or structure (cf. Ladyman and Ross 2007), then an error theory would tell us that no claims about objects like molecules, narwhales or populist politicians are true, let alone those about numbers of merely possible objects (although they may be acceptable as a *façon de parler*, i.e. ‘correct’ but not true in the sense of Sider 2011, 249). As far as the aims of this paper are concerned I have no objections against such an error theory although, as many others, I find error theories rather unattractive and have doubts that anybody can seriously believe for more than a minute that their cats, spouses or children do not exist. Note that linguistics is also relevant for the error theorist because she is typically not only interested in the *truth values* of the target sentences but also in their *truth conditions*. (Thanks to an anonymous referee for pointing this out to me.)

fundamentally the case and what is the case in some other sense. I will explain what is philosophically attractive about these purely philosophical solutions. In Sect. 4, I will also point to some issues one might find methodologically problematic about them from the point of view of linguistics-driven solutions. Finally, in Sect. 5, I will try to show why even adherents of a fundamentality-based conciliatory meta-ontology should take the results of the linguistics-based solutions seriously.

2 Linguistics-Driven Conciliatory Accounts

The following are two examples of ways of reasoning that lead to conclusions about what there is that we take to be uncontroversially true in non-philosophical contexts:

NUMBER: I have ten fingers. Hence, the number of my fingers is ten. This number is larger than that of my ears. Hence there are at least two numbers (namely that of my fingers and that of my ears).

POSSIBILIA: Here are two human sperms and one human egg. A human being could originate from a fertilization of the egg by the first sperm, and it would be distinct from the human being that would result from a fertilization of the egg by the second sperm. Hence, there are two possible human beings that could originate from this egg, and it might be the case that neither of them ever actually exists.

Prima facie, NUMBER and POSSIBILIA seem perfectly sound ways of reasoning. On the other hand, the assumptions that there are macro-physical objects, or numbers, or possibilities, are taken to be highly controversial in philosophical contexts, and many metaphysicians regard their truth to be an open question, or at least a question that is not answered by reasoning in the way of NUMBER and POSSIBILIA alone. As we have already seen, the issue is how to reconcile these two kinds of attitudes—the everyday one and the metaphysical one—towards the question of whether there are objects of a certain kind. A *linguistics-driven* account tries to show that accepting NUMBER or POSSIBILIA does not in fact imply accepting any philosophically controversial ontological commitments. It does so by making assumptions about semantic and pragmatic features of the sentences in question that are justified independently of their role in the meta-ontological debate. In the following I will present three examples of such accounts, and will discuss their methodological virtues and the reasons why they are not suited to deal with all cases that are relevant for the meta-ontological debate.

NUMBER contains the step from claim (1) to claim (2):

- (1) I have ten fingers.
- (2) The number of my fingers is ten.

It is only claim (2) that—at least *prima facie*—carries ontological commitment to numbers, for only (2)—at least *prima facie*—entails that there is at least one number. If one wants to deny that NUMBER answers the ontological question concerning the existence of numbers, one either has to explain how sentence (2) can be false although (1) is true, or argue that the truth of (2) does not imply that there are numbers in the sense relevant for the philosophical debate about their existence. In recent years, two prominent attempts have been made to achieve this on the basis of results from linguistics.

The first is by Stephen Yablo, who assumes that although what we claim by uttering sentence (2) is true, this does not mean that what (2) literally means is true.³ Yablo thinks that what is asserted by uttering (2) is just the same as what is asserted by uttering (1), namely that the speaker has ten fingers, whereas what (2) literally means is that one particular number, namely the number ten, is identical to the number of my fingers—an assumption that, according to Yablo, is false if there are no numbers. Yablo justifies the distinction between the literal meaning and the asserted content of utterances of (2) in the context of developing a general theory about so-called ‘non-catastrophic presupposition failures’. These are cases in which uttering sentences with definite descriptions results in claims with definite truth values although the definite description is empty and hence the sentence has a false semantic presupposition. (Yablo’s example is ‘The present king of France is sitting in this chair’, which seems intuitively false, whereas ‘The present king of France is bald’ seems intuitively neither true nor false.) Applied to the case at hand, Yablo’s theory can explain why the transition from (1) to (2) is accepted so offhandedly in everyday contexts, and why the acceptance of (2) in such contexts does not settle the question of the existence of numbers.

The second example of an attempt to renounce the ontological implications of (2) on the basis of general linguistic theory building comes from Thomas Hofweber.⁴ Hofweber observes that sentences of the form of (2) display what linguists call a ‘non-intonational focus effect’. This effect is responsible for the fact that although both (1) and (2) can be used to answer the question ‘How many fingers do you have?’, only (1) would be a felicitous answer to the question ‘What do you have?’. According to Hofweber, this datum is incompatible with the assumption that (2) is an identity statement because identity statements in general do not display non-intonational focus, and hence it is also incompatible with the assumption that the number word ‘ten’ functions as a singular term in (2). For this reason, Hofweber argues, when we infer from (2) a claim like ‘The number of my fingers is identical to something/to some number’, then the quantifiers ‘something’ and ‘some number’ are not understood as objectual quantifiers that pose conditions on a domain of objects (e.g. that of containing at least one number), but rather as substitutional quantifiers. Hofweber argues that there is other linguistic evidence that natural language quantifiers are not always associated with conditions on the domain of objects and have to be interpreted as substitutional (for example in ‘John admires someone, namely Sherlock Holmes’).

My example of a linguistics-driven attempt to avoid the alleged ontological commitment of POSSIBILIA is taken from my own work (cf. Rosefeldt 2017) and is concerned with the logical form of sentences such as (3):

- (3) There are two possible human beings that could originate from this egg and one of these two sperms.

In the present discussion on modal ontology such sentences are often used as evidence for the existence of merely possible objects. The reason is that they seem to resist strategies of actualist paraphrase: (3) neither means that it is possible that two human beings originate from the egg and the two sperms (for it is impossible that the egg is fertilized by two sperms), nor can it mean that two actually existing human beings are such that they each

³ For the following see Yablo (2006, 2014).

⁴ For the following see Hofweber (2005a, b, 2007, 2016).

could originate from the egg and the sperms.⁵ So, (3) seems to entail that there are two merely possible objects. The philosophical discussion then evolves around the question of what kind of things these objects are, for example whether they are concrete things that are situated in some other possible world (as Lewisians think), whether they are concrete objects that lack the property of existing (as Meinongians think), or whether they are existing things that could be concrete objects but actually fail to do so (as Williamson thinks).

In Rosefeldt (2017) I argue that these three accounts of the ontological implications of sentence (3) all erroneously take it for granted that the quantifier ‘there are two possible human beings’ ranges over individual objects. This assumption can be challenged when we compare (3) to other sentences with a similar syntactic structure in which we clearly do not quantify over individuals, such as:

- (4) There are two German cars that people drive all over the world—the *Volkswagen Beetle* and the *Porsche Cayenne*.
- (5) There are two electronic devices that I could buy with my 100 €—an iPad and a solar calculator.

It is clear that on their most plausible readings, neither does (4) say that there are two individual cars that are driven from one continent to the next, nor does (5) say that there is particular token iPad or token solar calculator that I consider as possible objects of purchase. A much more plausible reading is that in (4) and (5) we quantify over *kinds* of cars and *kinds* of electronic devices. Hence, the surface form of (4) and (5) is misleading for two reasons, which, however, are understandable once the relevant linguistic theories are taken into account. On the one hand the quantifiers ‘two German cars/electronic devices’ seem to be restricted to individual cars and devices, whereas they are in fact restricted to kinds of cars because the general terms ‘car’ and ‘electric device’ are used ‘taxonomically’ (just like in ‘The *Porsche Cayenne* is a German car’) (cf. Krifka et al. 1995). On the other hand, the relative clauses ‘that people drive...’ and ‘that I could buy...’ clearly ascribe properties not to the kinds themselves but rather to their instances. This feature can be accounted for if we assume that the interpretation of these sentences involves what linguists call ‘type shifting’.⁶

Once the syntactic and semantic structure of sentences such as (4) and (5) is elucidated it can no longer be taken for granted that accepting the truth of a sentence like (3) commits us to assuming that there are human beings that are merely possible, i.e. do not actually exist. It is in principle possible to read (3) as saying that there are two kinds of human beings such that for each one of them an instance of it could exist, where the two kinds are individuated by means of the egg and the sperm from which its instances would originate if there were any. (This reading is also plausible for purely philosophical reasons, since there could have been more than one human being originating from the egg and each of the sperms, namely if the zygote that resulted from them splits in such a way that monozygotic

⁵ Cf. Williamson (1998, 2013), who uses sentences like (3) for arguing for necessitism, i.e. the view that necessarily everything is necessarily identical to something. Of course, there have been proposals for actualist paraphrases of sentences such as (3) (cf. for example Fine 1985). The problem with these proposals is not so much that they cannot deal with (3), but rather that their account cannot be transferred to quantification over possibilities that uses generalized quantifiers or quantifies over uncountably many of them (see Fritz and Goodman 2017 for a detailed discussion).

⁶ See Rosefeldt (2017); for type-shifting in general see Partee (1987); for different ways of applying the idea to sentences that we use to speak about kinds of things see Krifka et al. (1995), Chierchia (1998), and Cohen (2007).

twins or triplets are born.) Hence, once the linguistic form of (3) is scrutinized we see that the philosophical debate about whether (3) commits us to Lewisian or Meinongian or Williamsonian possible objects was premature. All that (3) forces us to assume is that there are kinds of objects of which there could be instances—a commitment that we need to accept in order to allow for truths such as (4) and (5) anyway.⁷

I do not want to argue here that either of these linguistics-driven attempts to bypass alleged ontological commitments is ultimately successful. (In fact, in the case of Yablo's and Hofweber's account I am rather skeptical that they are.) What I want to point out in the context of this paper are two of their methodological characteristics, one advantage and one disadvantage. The advantage is that the accounts are not susceptible to laziness and idleness objections of the kind that are often raised against philosophical accounts of first-order metaphysics that are not in close enough contact with the sciences. As we have seen, all three accounts rely heavily on linguistic theorizing that is well established outside of any philosophical debates, i.e. theories of presuppositions, intonational focus, and type-shifting and generics. Although they take their motivation to engage with linguistics from a desire to solve the meta-ontological challenge, the rationale for their views does not come solely from this role for the meta-ontological debate but results from assumptions that are meant to be plausible independently and can be established by examples extraneous to the ontological debate. As the recent reception of Yablo's and Hofweber's views has shown, that means that linguistics-driven accounts can be criticized independently of any preferences in the (meta-)ontological debate. Berit Brogaard has objected that, contrary to what Hofweber assumes, identity sentences can exhibit an intonation independent focus.⁸ Katharina Felka, in turn, has argued that Hofweber's explanation of the focus behavior is implausible and offered an alternative analysis of sentences such as (4), which treats them as so called 'specificational sentences' (Felka 2014, 2016); see also Moltmann (2013) and Schwarzkopff (2016). Felka also provides detailed criticism both of Yablo's account of non-catastrophic presupposition failure and of his applying this account to the ontological debate (Felka 2015, 2016).

The clear disadvantage of linguistics-based conciliatory strategies is that none of them offers a strategy to avoid all ontological commitments that go beyond one's preferred view about fundamental reality. All three accounts deal with specific linguistic phenomena that are relevant for one kind of claims about what there is but not for others. Hofweber and Yablo are primarily concerned with the semantics and pragmatics of nominalization, which plays a role in the debate about abstract objects, and my own account is limited to cases of quantification into positions different from those of singular terms,⁹ and is only concerned with alleged commitments to possibilia. So none of the accounts will give us a once-and-for-all solution. Moreover, it seems rather unlikely that the linguistics-driven strategy will help us with the metaphysical claim that there are indeed no mereologically composite objects, which has dominated so much of the recent meta-ontological debate. One could try

⁷ Of course, there are many further questions that need to be addressed here. Do all general terms allow us to introduce quantification over kinds of things and what is the explanation if this is not the case? What happens if we introduce a name in order to speak about a person that could originate from the sperm and the egg—does this name then refer to a kind? These questions are addressed in Rosefeldt (2017), but would go beyond the scope of this paper, since the account is used here only for the purpose of illustrating a certain methodology.

⁸ Brogaard (2007); for Hofweber's response to Brogaard see Hofweber (2007); Felka shows that this response is not plausible (cf. Felka 2016).

⁹ For this kind of quantification see also Rosefeldt (2008).

to take the toy formulations used in the debate in order to construct the following analogue to NUMBER and POSSIBILIA:

TABLE: There is some tablewise arranged physical stuff. Hence, there is a table.

But this can hardly be the basis for a linguistically based bypassing of the ontological commitments of ‘There are tables’. The lingo of ‘tablewise arranged stuff’ is an artefact of the philosophical debate, and there will hardly be any evidence from linguistics on how it relates to talk about ordinary objects.¹⁰

So much for the pros and cons of linguistics-based conciliatory accounts. We will see in the next section that purely philosophical conciliatory accounts have quite the opposite advantages and disadvantages.

3 Purely Philosophical Conciliatory Accounts

I will focus on three purely philosophical attempts to reconcile the view that there is nothing (or little more) in the world than what physics tells us there is with the correctness of the claims of other sciences and of our everyday beliefs that introduce a distinction between what is ‘really’ or ‘fundamentally’ the case and what is the case in some other less fundamental sense. The idea behind this move is the assumption that metaphysics is only concerned with what there is in the most fundamental sense, or at the most fundamental level of reality, and hence does not stand in any immediate conflict with claims that are not meant to be about the fundamental. The idea of fundamentality and its role for metametaphysics has been spelled out in different ways over the last few years. I will provide a rough sketch of three variants—‘ontologese’-based accounts [proposed by Dorr (2005) and Sider (2011, 2013a)], truth-making-based accounts [proposed by Cameron (2008)], and ‘worldly grounding’-based accounts [proposed by Schaffer (2009) and maybe also by Fine (2009)]—and will then compare their methodological virtues and vices with those of the linguistics-based accounts.

According to Dorr and Sider, we should distinguish between two closely related though not identical languages or idiolects: ‘ontologese’, the language spoken ‘in the metaphysics room’ when people do serious metaphysics, and plain English, the language spoken outside the metaphysics room, be it by non-philosophers or by philosophers off duty. The two languages differ with respect to the meaning they assign to quantifiers of the form ‘there are *F*s’. This semantic distinction makes room for the assumption that the following two sentences are both true, namely if the first one is understood as part of English, while the second one is understood as part of ontologese:

- (6) There are_E chairs and tables in my office.
- (7) There are_O only simples.

How should we characterize these different quantifier-meanings? This depends, of course, on what language we speak when characterizing them. Within each language we could characterize the meaning of ‘there are_{E/O} *F*s’ in the usual way and assume that ‘there are_{E/O} *F*s’ expresses the higher-order property that a first-order property has just in case it is

¹⁰ There are also some simple arguments for the existence of certain composite objects that do not use this kind of jargon. ‘Peter and Paul have married. So, there is at least one married couple’, for example, could be seen as a simple argument for the existence of couples (cf. Fine 2009). However, I do not see any way to criticise this argument on linguistic grounds.

exemplified by at least one_{E/O} object. A difference between the two languages arises because in ontologese quantifiers are stipulated to have the most natural, ‘joint-carving’ meaning, which makes it the case that ‘there are_O *F*s’ is true only if the *F*s appear in the most fundamental description of reality. Dorr and Sider differ with respect to the question of how we should translate the English quantifier and a sentence such as (6) into ontologese in order to characterize under what conditions they are true. While Sider thinks that it is unnecessary (and probably also impossible for us) to *provide* such a translation and that it suffices to convince us by means of some toy-examples that there *is* such a translation, Dorr proposes a handy translation procedure. He thinks that a mereological nihilist like himself should describe the meaning of the English quantifier ‘there are_E *F*s’ as such that sentence (6) is true just in case there *would* be tables in my office *if* the kind of mereological composition that is taken for granted in folk-mereology took place. Analogously, the English quantifier ‘there are_E *F*s’ should be characterized in ontologese as expressing the higher-order property that a first-order property has just in case it *would* be exemplified by at least one_O object *if* folk-mereological composition occurred (Dorr 2005).

It is important to stress that in order to count as conciliatory, ‘ontologese’-based accounts have to understand their translation of English sentences and expressions in a hermeneutic rather than a revolutionary manner, i.e. they have to assume, for example, that their ontologese truth conditions of the English quantifiers are compatible with the meanings that the quantifiers in English *actually* have, not only with the meanings that they would have to have in order for the respective English sentences to come out true, or with which a nihilist metaphysician should use them in the future; that would not suffice to reconcile the truth of what speakers of actual English say with that of a nihilist metaphysics. Whereas Sider wants to stay noncommittal as to whether his strategy is conciliatory in this sense (Sider 2013a), Dorr thinks that the role the principle of charity plays for meta-semantics forces us to assume that most of what English speakers say is in fact true. I will come back to this point later.

My second example of a purely philosophical conciliatory account is Ross Cameron’s introduction of a truth-making criterion for ontological commitment.¹¹ Just like Dorr and Sider, Cameron tries to make room for the idea that our everyday claims about chairs and tables are true without ontologically committing us to the existence of chairs and tables in the sense relevant for metaphysics. But unlike the former, Cameron neither assumes any distinction between the language spoken by metaphysicians and the language spoken by the folk, nor any non-standard meaning for the English quantifier. Even the nihilist metaphysician should say that ‘There are tables’ in English just means that there are tables, and she should accept that this sentence is true and that indeed there are tables. However, says Cameron, making these claims does not ontologically commit the metaphysician to the existence of tables. The reason is that, contrary to what philosophical orthodoxy assumes, we are not ontologically committed to those things that have to exist in order for the true sentences to be true, but rather only to those things that *make* the true sentences true. Now, although the truth of sentence (6) above implies the existence of tables, it is not the fact that there are tables that makes sentence (6) true but rather the fact that there are table-wise arranged particles. Hence accepting the truth of (6) does not ontologically

¹¹ For the following see Cameron (2008). In Cameron (2010) we find a meta-ontological picture that is more similar to that of Sider and Dorr (cf. the interesting comparison between truth-making proposals and fundamentality in Von Solodkoff and Woodward 2013).

commit us to composite objects and is compatible with the metaphysical view of mereological nihilism,¹² or so Cameron claims.

Proponents of the third strategy such as Jonathan Schaffer do not base their conciliatory project on any assumptions about the language in which the claims about the metaphysically problematic entities are made, neither on the meanings of the quantifiers that appear in them nor on their truth-makers. They rather assume that the distinction between the fundamental and the non-fundamental is one ‘within the realm of being’ and can be spelled out by means of a worldly grounding relation, i.e. one among entities in the world (cf. Schaffer 2009).¹³ This implies that among all the things there are, some are metaphysical more fundamental than others, and that although physics might describe that part of the world that is most fundamental, this does not imply that there do not also exist others less fundamental things, which are described by the true claims of other sciences or everyday talk. Hence it is a metaphysically rather uninteresting claim that molecules, tables, politicians, numbers, or possible objects exist. What we should conclude from this is that, *pace* the Quinean tradition, metaphysics is not concerned with the question of what there is but rather with the question ‘what grounds what’. It has to find out about the metaphysical dependence relations among different kinds of things, or facts, and has to answer the question whether there is some most fundamental layer of reality and, if so, what it is like.

As in the case of the linguistics-based accounts, I will not go any further into evaluating the mentioned purely philosophical meta-ontological accounts in their own rights or compare their respective vices and virtues. I will rather explore how such accounts fare with respect to the two aspects which we have found to be an advantage and a disadvantage of the linguistics-based account. The first thing to note is that purely philosophical accounts have a strength exactly where we found the linguistics-based accounts to have their limits. Not only are all three accounts applicable to the relation between statements about physical reality on the one hand and macro-sized physical objects on the other; they are also tailor-made to deal with any claim whatsoever that one holds to be true in some non-metaphysical context but does not want to accept as part of the description of metaphysical reality. This is because once we have agreed that metaphysics is only concerned with what is fundamental, we can accept all of these claims as being true but not true in ontologese (*à la* Dorr and Sider), or true but not made true by fundamental reality (*à la* Cameron), or true but holding for a non-fundamental part of the world (*à la* Schaffer). This once-and-for-all character of the purely philosophical solutions is not surprising and in a way typical for purely philosophical theories in general, just as it is typical for scientifically inspired philosophical views that they inherit the regional applicability of the theories they incorporate.

This brings me to my second methodological remark and to a disadvantage that purely philosophical accounts have through their lack of contact with the relevant empirical science: they can be confronted with exactly the kind of laziness and idleness objection

¹² Cf. Cameron (2008, 7): ‘Complex objects are no addition of being because acceptance of their existence does not bring an ontological commitment to them. They are an ontological free lunch—nothing ‘over and above’ the simples that compose them—because the ontology needed to ensure the existence of complex objects is just an ontology of simples. It is true to say that complex objects exist; but that statement does not commit us to any new entities, because what really exists—what grounds the truth of statements concerning the existence of complex objects—are just the simples.’

¹³ Fine’s position has a certain similarity to Schaffer’s (cf. Fine 2009), but it has to be noted that the key term in Fine’s meta-ontological account is ‘reality’ rather than ‘fundamentality’. Fine also wants to stay neutral with respect to the question whether ‘grounds’ in ‘*p* grounds *q*’ designates a relation among facts or is rather only a sentential operator.

that were raised against firstorder metaphysics that does not care enough about physics. Just as we can ask: ‘How can you find out about fundamental reality from the armchair i.e. without taking into account the results of physics?’, we can ask: ‘How can you find out whether there is an ambiguity in the quantifiers that people use without taking into account the results of linguistics?’. And we may also wonder whether we might be trapped in idle debates in metametaphysics if we do not have any firm ground outside philosophy from which we can decide the rather frustrating competition between different meta-ontological views. Although I am not entirely convinced how decisive these methodological objections ultimately are, in the next section I will work out in some more detail a variant of them for Dorr’s and Sider’s account.

4 Skepticism About ‘Ontologese’-Based Conciliatory Accounts

As we have seen, in order to count as conciliatory, ‘ontologese’-accounts have to make (a) the semantic assumption that the expressions ‘there are’ or ‘exist’ are actually ambiguous and that their meaning varies depending on whether they are used in metaphysical or everyday context, and (b) the meta-semantic assumption that the principle of charity allows the metaphysician to assume that her translation of everyday English existence sentences into true ontologese sentences is compatible with the meaning the English sentences actually have.¹⁴ Now, neither of these two assumptions is justified by an application of those criteria that we normally use when deciding about ambiguity and charitable interpretations. The ambiguity tests that are typically used in linguistics do not identify ‘exist’ as being ambiguous, for example¹⁵: neither does conjunction reduction lead to a zeugma (‘Fundamental particles and fundamentalist politicians both exist’ sounds perfectly fine, even if uttered ‘in the metaphysics room’), nor does ‘There are existing things that do not exist’ sound any less contradictory than ‘There are red things that are not red’, nor is there a language in which the supposed ontologese ‘exist’ is translated differently than the English ‘exist’ (not even ancient Greek!). The only real empirical evidence that Dorr presents for the ambiguity thesis is that philosophers with extreme metaphysical views (like mereological nihilists) continue to make claims about ordinary objects in non-philosophical contexts. But there are certainly other explanations of this fact than the assumption of ambiguity.¹⁶

The meta-semantic assumption is equally hard to substantiate by the usual methods of interpretation. The principle of charity certainly does not tell us to interpret speakers as telling the truth no matter what. What it tells us is to avoid the ascription of unreasonable error. But it is far from clear, even if mereological nihilism is true, that people who think that there really are tables make a mistake that is *unreasonable* from their perspective (cf. Korman 2015, chap. 5). Moreover, whether an interpretation is charitable or over-sympathetic depends on complex assumptions about the psychology and overall linguistic and

¹⁴ The following is not directed against a version of Dorr’s and Sider’s conciliatory strategy that is ‘revolutionary’ in the sense that rather than assuming an actual ambiguity of expressions like ‘there are’ and ‘exist’, it suggests that metaphysicians should introduce their own metaphysically loaded existence predicate and quantifiers. For a criticism of the revolutionary strategy see Korman (2015, chap. 6).

¹⁵ For an overview see Sennet (2016).

¹⁶ Mereological nihilists might speak loosely in non-philosophical contexts, or allow themselves to utter useful falsehoods, for example (cf. also the excellent discussion of Dorr’s view in Daly and Liggins 2016). For facts about the behavior of metaphysicians that speak *against* the ambiguity thesis see Korman (2015, Chap. 5).

non-linguistic behavior of the speakers, and it is unclear whether Sider and Dorr are in a position to make these assumptions. As already mentioned, Sider does not claim to be able to give a translation of longer bits of English into ontologese, but only wants to convince us by some ‘toy examples’ that in principle such a translation is possible. One of the two toy examples that he gives in Sider (2011) is the translation of the English sentence (8) by the toy-ontologese sentence (9)¹⁷:

(8) There exists_E a hydrogen atom.

(9) There exist_O an electron and a proton, the first of which orbits the second.

Would a translation of (8) by (9) be charitable? Answering ‘yes’ is probably motivated by the thought that speakers of English utter sentence (8) in situations which we would describe in ontologese by uttering (9). However, this is hardly enough evidence, for translation is a holistic affair. In order to evaluate the translation we would also have to know, for example, how sentences such as the following, which speakers of (9) might also hold true, are translated:

(10) There exists_E a hydrogen atom that consists of an electron and a proton, the first of which orbits the second.

(11) There exist_E two/few/many/hydrogen atoms, and more hydrogen atoms than electrons.

The explicit reference to the mereological relation between the atom and its parts in (10), and the rich quantificational apparatus in the different variants of (11) seem to be *prima facie* evidence that these sentences would not be true if there were in fact no composite objects and that they cannot be translated into true sentences of a language that only speaks about electrons and protons. In order to evaluate whether this is indeed the case we would have to see what the ontologese translations of (10) and (11) look like. Does (10) simply receive the same translation as (8)? And how shall we translate English generalized quantifiers such as those in (11) into ontologese in general? It is far from clear that Sider could answer these questions, but as long as they are not answered we cannot really judge the translation of (8) by (9). The toy-translation is too toy-ish to decide whether it is charitable or just over-sympathetic. And this is bad news for a proponent of a conciliatory strategy who takes the existence of a charitable toy model as our prime evidence for assuming that there are charitable truth-preserving translations of all other English sentences.¹⁸

Dorr’s counterfactual-based proposal fares better in this respect because it offers a once-and-for-all strategy to translate English sentences into ontologese. It could translate (8), (10), and all variants of (11) simply by making each one of these sentences the consequence of a counterfactual conditional whose antecedent is the phrase ‘if mereological composition occurred’ (and by substituting the ontologese existence predicate for the English one, of course). But how can we decide whether the sentence ‘If mereological composition occurred, there would exist_O a hydrogen atom’ is a charitable translation of

¹⁷ It is only toy-ontologese because it assumes that the most fundamental particles are electrons and protons.

¹⁸ Sider is ambivalent about this result. In (2013a) he says that he does not want to fully commit to the meta-semantic claim that we can charitably interpret English sentences about composite objects as being true although he finds it likely that the conciliatory strategy works (Sect. 4). However, at other places he less cautiously claims that he accepts that these English sentences *are* true (Sider 2013b, 152f.). This is understandable, as many people would find it a rather heavy theoretical burden to assume that most of our ordinary claims are false.

(9) rather than an over-sympathetic one? (Translating claims of Ptolemaic cosmology into sentences of the form ‘If the earth were the centre of the universe, then...’ would certainly be over-sympathetic!) In normal cases of translation we would decide a question like this by trying to find out whether the respective speakers would accept our translation if we explained it to them. We would also have to check whether we used concepts in our translation that the interpreted speaker is able to grasp. But both methods lead to rather poor results in the present case: it is far from clear that English speakers would accept the counterfactual translation. Moreover, it can also not be taken for granted that they all have the conceptual resources to grasp it: most speakers will probably never have been ‘in the metaphysics room’ and acquired the ontologese existence predicate there, and—as linguists tell us—some of them, namely small children, make claims about chairs and tables long before they are capable of counterfactual thinking.¹⁹

A foreseeable reaction to these kinds of objections is the following: ‘It is no wonder that all the claims that linguists, psychologists, and philosophers of language make about principles of correct translation fail to apply to the translations into ontologese. All these claims are made in natural languages like English not in ontologese! But as long as we speak English, no counterfactual translation is necessary and we would characterize the truth conditions of (9) simply by saying that “There exists_E a hydrogen atom” is true iff there exists_E a hydrogen atom. And this certainly does not conflict with anything we believe about semantics or meta-semantics!’ The problem with this reaction is not that it would not allow the friend of ontologese to make his account consistent with the other beliefs about language which we find reasonable to have. It is rather that once we concede that all we know about languages and their translation is restricted to languages that are not ontologese we seem to be cut off from the resources that would allow us to give any *positive* evidence for the claim that the ontologese translations are really charitable and not over-sympathetic.

I do not think that any of the worries I have raised against Sider’s or Dorr’s view show that these views are untenable.²⁰ I have not given any conclusive arguments that their ontologese translations are *not* charitable in the required sense. Rather, what I have tried to show is that neither Sider nor Dorr have the means to demonstrate that their translations *are* charitable. However, this also significantly changes the dialectical situation: of course, if we already have a very strong belief in the truth of mereological nihilism and a very strong belief in the truth of our everyday claims about ordinary objects then we might take *this* as our evidence for concluding that the offered ontologese translations are charitable—as an inference to the best explanation of how our two beliefs can be true, so to speak. On the other hand, if we do not already take it for granted that these two beliefs are true, then any doubt about the correctness of the translation will result in doubts about either mereological nihilism, or the correctness of common sense, or at least their combination. Maybe this situation is not unusual in philosophy, but it certainly reveals a disadvantage that purely philosophical conciliatory strategies have compared to linguistics-based ones,

¹⁹ Developmental psychologists have found out that children learn counterfactual reasoning at a relatively late stage of their cognitive development, not before the age of six (cf. Rafetseder et al. 2013, and Rafetseder and Perner 2014).

²⁰ I also have not argued against a conciliatory strategy like that of Williams (2012), who wants to reconcile the truth of everyday existence claims with a sparse ontology without making any non-standard assumptions about their syntax and semantics. Williams introduces the idea of ‘requirements on reality’ connected with the truth of these claims and allows himself to describe these requirement in fictionalist terms. It would go beyond the scope of this paper to discuss whether he indeed succeeds in bypassing the standard objections against fictionalist accounts in meta-ontology.

which could, as we have seen, offer independent evidence for the claims upon which they base their proposal.

5 Why Even Purely Philosophical Conciliatory Accounts Should Care About Linguistics

Let us assume that we are unimpressed by the worries I have expressed about purely philosophical conciliatory accounts in the last section, and that the distinction between the fundamental and the non-fundamental, spelled out in one of the versions presented in Sect. 3, is the best theoretical tool to reconcile metaphysical theories with non-metaphysical claims about what there is. Do we then have to conclude that the linguistically inspired accounts from Sect. 2 are superfluous, or at least that they are useless for metaphysics although they might be valuable for linguistics? In this concluding section, I will try to demonstrate that this is not the case. I will first argue that metaphysics is not only concerned with what is fundamental but also with the non-fundamental. In a second step, I will show that linguistics-based ontology has to be taken seriously when we are concerned with the non-fundamental.

Philosophers who appeal to the distinction between the fundamental and the non-fundamental in metametaphysics and say that their views only concern the former, often claim that this attitude is in accord with the way metaphysics was understood throughout the history of philosophy [cf. Dorr (2005), Schaffer (2009)]. This is only partly correct. Metaphysics—or that part of metaphysics that we would nowadays call ontology—is traditionally defined as the investigation of ‘being qua being’, i.e. it is concerned with the most general features of what there is. Now, it is true that many metaphysicians in the history of philosophy believed in a distinction between fundamental and non-fundamental aspects of the world, and that they were especially interested in the fundamental aspects. However, if metaphysics investigates ‘being qua being’ then it is also concerned with the non-fundamental aspects and has to explain what these non-fundamental aspects are and why there is anything beyond the fundamental at all. There are countless examples that show that this is indeed how the aim of metaphysics was understood. Plato thought that only ideas are fundamental, but of course he needed to say something about the things that have derivative existence and receive their being by participating in ideas. The whole Aristotelian tradition of an ontology of substances assumed that substances are most fundamental and determine everything else, but this tradition was clearly also concerned with non-fundamental entities such as the modes or attributes that depend on these substances for their existence. And Spinoza (and similarly many theist metaphysicians) considered God as the infinite substance to be most fundamental and in some sense determines everything else; yet the *Ethics* certainly does not only talk about God, but also about less fundamental finite modes like bodies and minds.

Now, one might object that metaphysics only deals with the non-fundamental as long as the distinction between the fundamental and the non-fundamental is conceived of as one ‘in the realm of being’, and that not all of the metametaphysical accounts from Sect. 3 conceive of this distinction in this way. It is not clear, however, what exactly ‘in the realm of being’ means here, and we have to look at each account separately in order to make this objection precise.

Clearly proponents of an account like Schaffer’s should agree that metaphysics is not only concerned with the fundamental. If grounding is a ‘worldly’ relation, one that holds

between different entities in the world, then metaphysics should describe these relations between the (more) fundamental and the less fundamental and hence also its relata. Schaffer himself says that metaphysics is concerned with what grounds what. However, one might think that the situation is different in the case of Cameron's truth-making account, for truth-making, unlike grounding, is not a relation between different 'wordly' entities but one between entities in the world and linguistic items. Since Cameron thinks that we are ontologically committed only to the ultimate truth-maker of our claims he seems to be in a position to claim that metaphysics, as the science of being qua being, should only be concerned with these ultimate truth-makers (i.e. the simple things). However, this conclusion would be premature. It is an essential part of Cameron's story that we can accept all the claims of folk-mereology as being true without having to assume that they are not meant literally or are made in a language different from that of the metaphysician. Now, one such claim is: 'Tables consist of subatomic particles', and hence Cameron not only has to accept that there *exist* tables, but also that these tables consist of subatomic particles, i.e. that subatomic particles stand in certain mereological relations to them. These relations are relations between objects of different grades of fundamentality in the sense that they are relations between truth-makers and objects that are not truth-makers. Consequently Cameron has to accept that the distinction between the fundamental and the non-fundamental is one 'in the realm of being', one in the realm of what exists. What he would deny is that the distinction is one among the ultimate truth-makers of our claims. But traditional metaphysics is not just a theory about ultimate truth-makers. Spinoza would agree that God is the single ultimate truth-maker of all true claims. However, that does not mean that his metaphysics ignores items that are not ultimate truth-makers like finite bodies and minds. So if Cameron wants to continue to do metaphysics in the sense in which Spinoza did metaphysics, his ontological theory should also deal with things that are not truth-makers and not fundamental.

I think that the same is true for the 'ontologese'-accounts of Sider and Dorr, although *prima facie* one might again have the opposite impression. This impression could result from the fact that 'ontologese', the language that is described as the one we use 'in the metaphysics room' is only used to make claims about the fundamental. How could this be compatible with the assumption that metaphysics is also a theory about the non-fundamental? It is compatible, unless we assume that ontologese is the *only* language that is spoken in the metaphysics room. But it isn't, because people also constantly speak English as they develop their metaphysical theories. And it would also not be desirable if it were the only language, at least if what we do in the metaphysics room is meant to continue what the philosophical tradition has done. A Siderian Spinoza would use ontologese in order to speak about God. But he would have to use a natural language like English in order to speak about finite *modi* like minds and bodies. We could also say that he would speak 'philosophese', a mixture between ontologese and English, in order to carry out the project that the actual Spinoza pursued. Once we have seen that someone who wants to continue the project of traditional metaphysics has to speak philosophese rather than only ontologese, we are in a position to claim that even Sider can conceive of the distinction between the fundamental and the non-fundamental as one 'in the realm of being'. For, speaking philosophese, we can truly say that it is one among all the things there are.²¹

So let us agree then that metaphysics should also be concerned with the non-fundamental. But why does that mean that it should also be concerned with linguistics? I think

²¹ Sider (2016) acknowledges that there are substantial metaphysical questions that do not concern what is fundamental.

that we need linguistics for ontology because it is not always a trivial matter what kinds of things exist in the realm of the non-fundamental, and because we sometimes have to consult linguistics in order to answer this question. Proponents of the distinction between the fundamental and the non-fundamental often seem to take it for granted that once we have accepted that there is a realm of non-fundamental entities, the question what exists in this realm is a rather trivial one.²² ‘Of course there are composite objects, events, numbers, properties, propositions, and possible, intentional and fictional objects’, they seem to think, ‘because we quantify over these kinds of things in everyday claims that we take to be uncontroversially true. We need to only be aware that they exist in the non-fundamental sense.’ But this reasoning is misguided. We have seen in Sect. 2 that natural language sentences might not always wear their ontological commitments on their sleeves, not even the commitments to non-fundamental entities. If Hofweber or Yablo are right then sentences whose acceptance seems to commit us to the existence of numbers do not in fact do so. And if my own account of locutions of the form ‘there are possible *F*s’ is correct then, despite appearances, we do not quantify over individual possible objects when using these locutions. There are many other examples.²³ It is far from clear, for example, that we quantify over propositions when we say things like ‘There is something that Julia believes/hopes/fears/etc...’, as standard philosophical theories assume. This assumption is at odds with much of the linguistic behavior of ‘that’-clauses, and it neglects the possibility of non-nominal quantification in natural languages (cf. Moltmann 2003; Rosefeldt 2008). Or take sentences of the form ‘Karl is looking for the largest prime’. One might think that accepting these sentences commits us to the existence of merely intentional objects, one of which is the largest prime. Again this assumption would be premature given the best semantic theories in linguistics about the complements of intensional transitive verbs such as ‘look for’, which treat the complement either as an intensional quantifier (cf. Montague 1973), or as a higher-order quantifier (cf. Zimmerman 2006). Neglecting these theories would show disrespect for the results of science, just as neglecting the results of physics would.

What we should conclude from this is that sometimes when we want to find out what there is—at whatever level of fundamentality—and when we want to do so on the basis of natural language claims that we take to be uncontroversially true, we have to let linguistics help us to find out what these sentences really say and what they commit us to. And this is why metaphysicians should care about linguistics.

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References

- Brogaard, B. (2007). Number words and ontological commitment. *Philosophical Quarterly*, 57, 1–20.
- Cameron, R. (2008). Truthmakers and ontological commitment: Or how to deal with complex objects and mathematical ontology without getting into trouble. *Philosophical Studies*, 140, 1–18.

²² Cf. most importantly Schaffer (2009).

²³ For an overview see Moltmann (forthcoming).

- Cameron, R. (2010). Quantification, naturalness and ontology. In A. Hazlett (Ed.), *New waves in metaphysics* (pp. 8–26). New York: Palgrave-Macmillan.
- Chalmers, D., Manley, D., & Wasserman, R. (Eds.). (2009). *Metametaphysics: New essays on the foundations of ontology*. Oxford: Oxford University Press.
- Chierchia, G. (1998). Reference to kinds across languages. *Natural Language Semantics*, 6, 339–405.
- Cohen, A. (2007). Between kinds and properties: Bare plurals across languages. In T. Friedman et al. (Eds.), *SALT XVII* (pp. 53–70). Ithaca, NY: Cornell University Press.
- Daly, C., & Liggins, D. (2016). Dorr on the language of ontology. *Philosophical Studies*, 173, 3301–3315.
- Dorr, C. (2005). What we disagree about when we disagree about ontology. In M. E. Kalderon (Ed.), *Fictionalism in metaphysics* (pp. 234–286). Oxford: Oxford University Press.
- Felka, K. (2014). Number words and reference to numbers. *Philosophical Studies*, 168, 261–283.
- Felka, K. (2015). On the presupposition of number sentences. *Synthese*, 193(5), 1393–1412.
- Felka, K. (2016). *Talking about Numbers. Easy arguments for mathematical realism*. Frankfurt: Klostermann.
- Fine, K. (1985). Plantinga on the reduction of possibilist discourse. In J. E. Tomberlin & P. van Inwagen (Eds.), *Alvin Plantinga* (pp. 145–186). Dordrecht: Reidel.
- Fine, K. (2009). The question of ontology. *Chalmers, Manley, and Wasserman, 2009*, 157–177.
- Fritz, P., & Goodman, J. (2017). Counting impossibles. *Mind*. <https://doi.org/10.1093/mind/fzw026>.
- Hofweber, T. (2005a). Number determiners, numbers, and arithmetic. *Philosophical Review*, 114, 179–225.
- Hofweber, T. (2005b). A puzzle about ontology. *Noûs*, 39, 256–283.
- Hofweber, T. (2007). Innocent statements and their metaphysically loaded counterparts. *Philosophers' Imprint*, 7, 1–33.
- Hofweber, T. (2016). *Ontology and the ambitions of metaphysics*. Oxford: Oxford University Press.
- Korman, D. Z. (2015). *Objects. Nothing out of the ordinary*. Oxford: Oxford University Press.
- Krifka, M., Pelletier, F. J., Carlson, G. N., ter Meulen, A., Link, G., & Chierchia, G. (1995). Genericity: An introduction. In G. Carlson & F. J. Pelletier (Eds.), *The generic book* (pp. 1–124). Chicago: Chicago University Press.
- Ladyman, J., & Ross, D. (2007). *Every thing must go. Metaphysics naturalized*. Oxford: Oxford University Press.
- Moltmann, F. (2003). Propositional attitudes without propositions. *Synthese*, 135, 77–118.
- Moltmann, F. (2013). Reference to numbers in natural language. *Philosophical Studies*, 162, 499–536.
- Moltmann, F. (forthcoming). Natural language ontology. In *Oxford research encyclopedia of linguistics*.
- Montague, R. (1973). The proper treatment of quantification in ordinary English. In J. Hintikka et al. (Eds.), *Approaches to natural language* (pp. 221–242). Dordrecht: Reidel.
- Partee, B. (1987). Noun phrase interpretation and type-shifting principles. In J. Groenendijk et al. (Eds.), *Studies in discourse representation theory and the theory of generalized quantifiers* (pp. 115–143). Dordrecht: Foris.
- Rafetseder, E., & Perner, J. (2014). Counterfactual reasoning: Sharpening conceptual distinctions in developmental studies. *Child Development Perspectives*, 8, 54–58.
- Rafetseder, E., Schwitalla, M., & Perner, J. (2013). Counterfactual reasoning: From childhood to adulthood. *Journal of Experimental Child Psychology*, 114, 389–404.
- Rosefeldt, T. (2008). “That”-clauses and non-nominal quantification. *Philosophical Studies*, 137(3), 301–331.
- Rosefeldt, T. (2017). Counting things that could exist. *Philosophical Quarterly*, 67(266), 127–147.
- Schaffer, J. (2009). On what grounds what. *Chalmers, Manley, and Wasserman, 2009*, 347–383.
- Schwarzkopff, R. (2016). Number sentences and specificational sentences. Reply to Moltmann. *Philosophical Studies*, 173(8), 2173–2192.
- Sennet, A. (2016). Ambiguity. In E.N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Spring 2016 Edition). <https://plato.stanford.edu/archives/spr2016/entries/ambiguity/>.
- Sider, T. (2011). *Writing the book of the world*. Oxford: Clarendon Press.
- Sider, T. (2013a). Against Parthood. In K. Bennett & D. W. Zimmerman (Eds.), *Oxford studies in metaphysics* (Vol. 8, pp. 237–293). Oxford: Oxford University Press.
- Sider, T. (2013b). Reply to Jonathan Schaffer. *Analysis*, 73, 151–170.
- Sider, T. (2016). Substantivity in feminist metaphysics. *Philosophical Studies*. <https://doi.org/10.1007/s11098-016-0739-7>.
- Von Solodkoff, T., & Woodward, R. (2013). Noneism, ontology, and fundamentality. *Philosophy and Phenomenological Research*, 87(3), 558–583.
- Williams, R. (2012). Requirements on Reality. In F. Correia & B. Schnieder (Eds.), *Metaphysical grounding: Understanding the structure of reality* (pp. 165–185). Cambridge: Cambridge University Press.

- Williamson, T. (1998). Bare possibilities. *Erkenntnis*, 48, 257–273.
- Williamson, T. (2013). *Modal logic as metaphysics*. Oxford: Oxford University Press.
- Yablo, S. (2006). Non-catastrophic presupposition failure. In A. Byrne & J. J. Thomson (Eds.), *Content and modality: Themes from the philosophy of Robert Stalnaker* (pp. 164–190). Oxford: Oxford University Press.
- Yablo, S. (2014). *Aboutness*. Oxford: Oxford University Press.
- Zimmerman, T. E. (2006). Monotonicity in opaque verbs. *Linguistics and Philosophy*, 29, 715–761.