Thomas Hofweber

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## 1 The problem in a nutshell

Easy arguments are a special group of arguments that seem to show that an apparently difficult issue can apparently be resolved quite easily. Easy arguments appear in different parts of philosophy, but in particular in epistemology and in metaphysics. My focus here will simply be on a particular kind of easy argument in metaphysics, in particular ones that appear to be relevant for ontology. These are all well known, so I hope I can be brief in setting up the issue. I will use easy arguments for numbers as my example.

Whether there are numbers has been widely debated in the philosophy of mathematics, and whichever side one takes, yes or no, it seems to bring with it a very different picture of what arithmetic, the mathematical discipline concerning natural numbers, is like from a philosophical point of view. Does it aim to describe a domain of entities, the numbers, or does it do something completely different? However, the question whether there are natural numbers can apparently be answered easily, using a simple argument from uncontroversial premises to the conclusion that there are. The standard examples of this goes back to Frege in [Frege, 1884]:
(1) a. Jupiter has four moons.
b. Thus: the number of moons of Jupiter is four.
c. Thus: there is a number which is the number of moons of Jupiter.
d. Thus: there is at least one number.
e. Thus: there are numbers.

In light of this argument, there are several reactions one can have. The list includes:
(2) a. The argument is not valid, since one or another step is mistaken.
b. The argument is valid, and it answers the question we originally asked.
c. The argument is valid, but it does not answer the question as we asked it.
d. The argument is valid, but it shows that we should have asked a different question to begin with. Not: are there numbers, but: are there fundamentally numbers, or are numbers real, or the like.

In [Thomasson, 2015] Amie Thomasson has given a detailed, forceful, and very influential defense of the second option, (2b): The argument is valid, it does answer the question we asked, and we were simply mistaken in thinking that this question was hard. Ontology is easy, and easy inferences like our example above show that it is. ${ }^{1}$

In this short essay I would like to critically discuss Thomasson's account of what is going on in these easy arguments. I will focus in particular on issues in the philosophy of language. I will argue that there are features of the English sentences that occur in these trivial arguments which are in tension with Thomasson's preferred account of what their significance is for ontology. In particular, I will argue that they are in conflict with Thomasson's easy ontology program. Part of my motivation comes from thinking about what needs to be explained in this generally puzzling situation. In part the problem here is that if ontology is easy, why is there still so much debate about it? And if the easy arguments are tied to our competence with out own language, why do so many competent speakers who happen to be philosophers not follow through and endorse easy ontology? And why are those arguments so compelling and apparently trivial to begin with?

## 2 What needs to be explained?

The whole situation with easy arguments is puzzling and in need of an explanation of various things. One thing, obviously, concerns the argument itself: is it valid or not, and why or why not? But there are many other things in the neighborhood of these arguments and their role in philosophy that need to be explained as well. Some concern the argument as a whole, some only certain parts of it. As for those that concern the argument as a whole, we need to explain why the steps in the argument certainly appear to many to be valid. But why is there this appearance, whether or not they are valid in the end? And we need to explain why there is a persistent majority of philosophers who insist that these arguments do not settle the questions that we set out to settle? Why is there this persistent debate about there being numbers despite these arguments?

Thomasson can try to explain this in the following way. The inference form 'Jupiter has four moons' to 'The number of moons of Jupiter is four' is based on a conceptual truth or conceptual connection between how many things there are and what their number is. This conceptual con-

[^0]nection arises from the application conditions associated with the relevant words. Grasp of these application conditions is part of linguistic competence, and these application conditions get incorporated into the meaning of the relevant expressions, giving rise to the corresponding conceptual or analytic connections. And similarly for the quantifier inferences: There is a conceptual connection between the number of moons being four and there being a number which is the number of moons. That there are four moons of Jupiter is established empirically, but, of course, for other examples we would not even need an empirical premise. We could have started with there being no things which are not self-identical, and therefore their number being zero, or the like. Conceptual connections support that the relevant steps are compelling, and thus no wonder that many are inclined to accept them as unproblematic. Or so the explanation in outline that Thomasson can naturally give for why the inferences seem compelling to many. ${ }^{2}$

But this outline of an explanation given so far won't be good enough by itself, since even though it might explain why we are tempted to accept the inferences, it does not explain why many are resistant to take this to settle the question we started with, even though the question was naturally articulated as 'Are there numbers?' If in the end it all comes down to conceptual connections, why is there still a debate here? After all, there is no corresponding debate about how many sides triangles have, something also settle by conceptual connections. Since we are all presumably competent with our concepts, what explains the persistent philosophical debate about there being numbers? Wouldn't our competence simply settle the issue?

Thomasson's answer here, as I interpret and extract it from my reading of [Thomasson, 2015], is that on her conception of a conceptual truth and of conceptual connections this is an epistemic and normative notion, one that is not tied to what dispositions speakers or thinkers actually have, but only to what entitlements they have. Thus we are entitled to infer, but we don't have to infer. It is thus perfectly compatible with her view that some stubborn philosophers just don't accept it and don't follow the entitlements they have. And so they are hesitant to either draw the inferences they are entitled to draw or else to accept that they answer the question we originally asked, as they would be entitled to accept.

This is a fine reply to why there are some holdouts, but this doesn't really resolve the overall issue. After all, if we move to entitlements and away from dispositions or actual inferential practice,

[^1]then the question re-arises, why we generally do infer this way. We don't usually infer what we are entitled to infer, so more needs to be said why the entitlement is generally followed in this case. To mention just one case, if there is a valid mathematical proof of a certain theorem, then I am entitled to infer to that theorem. But if the theorem is unproven, then I don't draw that inference even though I am entitled to. Now, that example is disanalogous in various ways, but it brings out the issue of a gap between entitlement and actual inference. Why is that gap bridged in the easy arguments, although not in general? And whatever one says here, the issue re-arises why one then doesn't go all the way where our entitlements lead us, namely to consider the issue tied to the ontology of numbers settled and done with.

Thus I see a tension in Thomasson's view in that conceptual connections on the one hand are great for explaining why we infer as we do, but on the other hand, they are terrible at explaining why there is this large resistance to easy ontology among philosophers. Why does it seem to many of us that there are substantial questions here, despite our ordinary inferences and our general conceptual competence?

My own view is that we can explain all this by paying closer attention to what is actually going on in the language we employ in the various steps of these inferences. This paper is not about my view, so I will spare you the details, ${ }^{3}$ but the issues that motivated my view are ones that arise for everyone, and I can't spare you the details of those issues. I believe thinking about them is significant for understanding the easy arguments, and why we react to them the way we do. What these issues highlight points away from Thomasson's easy ontology position, or so I will argue in the following. Thus I will need to discuss some of the issues that motivated my own position in the following, and why I think they pose problems for Thomasson's view. And in doing this I will also need to point to what I think these issue motivate when it comes to the easy arguments. I will also need to briefly return to my position on the easy arguments towards the end to contrast it with Thomasson's and to highlight how it seems to me some things can be explained in a more satisfactory way.

Conceptual connections give us a very tight connection between what is connected. This can seem too tight, and give rise to the puzzle of extravagance, see [Hofweber, 2007]. The problem is simply this: If it is a conceptual truth that

[^2](3) Jupiter has four moons iff the number of moons of Jupiter is four.
then the question arises why we would have both of these conceptually equivalent sentences in our language, and why we would ever utter one rather than the other in ordinary communication. They are conceptually equivalent, after all, so which one we would use might make no difference. In particular, since one of the equivalent sentences is longer and more complex, it would seem that this one should get little use. Why the extra effort, after all?

There are several ways this puzzle could be solved. One is to highlight the increased expressive strength one gets by combining singular terms with quantifiers, a line nicely defended by Stephen Yablo in [Yablo, 2005]. ${ }^{4}$ Here the thought is that there is an advantage to having singular terms for numbers, since those can interact with quantifiers and that gives rise to expressive strength. After all, once I nominalize number words into singular term position I can then use quantifiers and say that there is some number of dogs, while before I would have had to say that either there is one dog, or there are two, or three, etc. etc. But that etc. would never end, or at least I wouldn't in general know where it ends, and so is just out of reach expressively, while the quantified statement is not.

That is all fair and good, but it only explains why we would want to have quantifiers over numbers, and why we might need number words as singular terms to get there, but it doesn't explain why we would ever utter 'the number of moons of Jupiter is four', in particular, why we would do this even though we also have the simpler, and shorter, 'Jupiter has four moons'. When I say that the number of moons is four, then I am not relying on the increased expressive strength that number words as singular terms are associated with in a language. In fact, I could have said a conceptually equivalent, but shorter thing instead. So, this line might explain why it is good for a language in general to have number words as singular terms in it, but it does not explain why anyone would use them on a particular, quantifier-free occasion when conceptually equivalent, but shorter, options are available. So, why would we do that, and what does it show for what is going on in the easy arguments?

To bring out the issue at hand, as well as what seems to me to be the right answer, let me relate a story: I once had a meeting with the syntactican Sam Epstein about such uses of number words. I told him that I am trying to figure out what the syntactic structure of 'the number of

[^3]moons of Jupiter is four' is, and that I could really use his help with it. He thought about it for a while and then said 'You know, I once knew a guy who talked like that.' And not only did I think that was funny, it is also an important observation: it is a weird thing to say. Not because of the content, but because of how it is said. Considered in isolation it is a weird way of talking. And that is puzzling. Why would anyone talk like that? And how is it weird? It might be a personal style of speech, as presumably in Epstein's friend's case, or it might be connected to ordinary purely communicative reasons.

The right answer seems to me to be this: when one utters 'the number of moons is four' one thereby brings about a certain focus effect that comes from the syntax of the sentence uttered. That focus effect could have been achieved also via intonation, by stressing part of the sentence as in 'Jupiter has FOUR moons', properly pronounced. But without special intonation, 'Jupiter has four moons' has no focus effect, whereas 'the number of moons of Jupiter' does have a focus effect even without special intonation. The focus effect of the latter sentence comes from the syntax, not from an optional additional intonation. That this is so can be argued by looking at question-answer congruence of the different sentences, i.e. which sentences are proper answers to which questions. In a nutshell, if you ask what I had for lunch, it is fine to answer that I had two bagels, but awkward to answer that the number of bagels I had is two. That stresses the wrong thing: how many I had, not what I had. But if you ask how many bagels I had, then it is OK. The details of this proposal are in [Hofweber, 2007] and [Hofweber, 2016]. If it is correct, then it would explain why anyone would ever utter 'the number of moons is four'. Even though I can say something with the same truth conditions, even something that might be conceptually equivalent, I say it in a different way with that sentence, with a focus effect that is guaranteed by the syntax. And even though I can achieve this focus effect also with intonation, that is itself a cost, and having the option of getting a focus effect from the syntax is a reasonable one to have and to draw on. For example, it can be combined with a secondary focus by using intonation in addition to the syntactic focus. And it makes a lot of sense in written language, where phonetic focus is not captured in the writing.

In chapter 9 of [Thomasson, 2015] Thomasson very generously discusses this proposal, and she mentions that she finds it plausible. She also holds that it is compatible with her own view on easy ontology, for the following reason: even if the focus effect story is correct, it doesn't mean that the number word in 'the number of moons is four' isn't referential. And that is all that matters for her
position: number words refer to numbers, and thus such sentences imply that there are numbers, as the easy arguments require. There might well be a focus effect, and it might well be that this is why we use the sentence in communication. But that doesn't mean that 'four' isn't referential in addition.

But this is mistaken, or so I will argue now. The account of the focus effect of 'the number of moons is four' outlined above is not compatible with the easy arguments leading to easy ontology. I hope to make this case in the next section. If this is correct, then the easy ontology approach is missing an explanation of the role of sentences like 'the number of moons is four' in ordinary communication, and relatedly it will fail to explain what needs to be explained about our use of number words and, I will argue further down below, our reaction to the easy arguments and the persistence of ontological debate.

## 3 Easy ontology, focus, and reference

A structural, syntactic focus effect can explain what use 'The number of moons is four' has in ordinary communication. But why does the focus effect occur? Here there are several different proposals that are worth considering. One is motivated by an asymmetry between 'Jupiter has four moons' and 'the number of moons of Jupiter is four'. The former does not have a focus effect coming from its syntax, while the later does. What explains this asymmetry? One option is to look at other cases of such an asymmetry, for example pairs like these:
(4) a. Mary entered quietly.
b. Quietly Mary entered.

Here, too, there is a one-sided difference in focus. The second has a focus effect coming from the syntax, focusing on how Mary entered, whereas the first does not. An explanation of this difference suggests itself in outline: 'Quietly' is an adverb that belongs to the verb phrase, and in the first sentence that is where it appears. But in the second one it is displaced, it appears out front, away from the verb that it modifies. This gives it prominence and leads to a focus effect. Now, how that all goes in proper syntactic theory is another question, but it motivates a connection between syntactic displacement and focus effect. And 'displacement' here just means 'appearing away from where you properly belong'.

Taking this analogy, we can also apply it to our pair concerning Jupiter's moons. In 'Jupiter has four moons' 'four' appears where it belongs. It modifies the noun, and its semantic function in this use is just that: to modify a noun and help form a quantified noun phrase, which combines with 'has' to form a predicate. But in 'the number of moons of Jupiter is four' 'four' is displaced, it appears away from where it belongs, and thus we get a focus on it, and on how many moons Jupiter has. That focus effect comes from the syntax, as discussed above, and not from optional, additional intonation. Again, how that goes in proper syntactic theory is left open by all this, but it is an outline of an approach that could be filled in in several ways.

If this were so, then 'four' in 'The number of moons of Jupiter is four' is not referential. Its semantic function is to modify a noun, but it appears syntactically away from the noun for the focus effect. But reference is also a semantic function, and one that is incompatible with modifying a noun. Here it is important to distinguish two levels of semantic description. One is semantic function. This concerns what a phrase aims to do semantically. Here a phrase has one function, or at least one primary function on a particular use. It doesn't make sense to hold that a phrase aims to modify a noun, and also to modify a verb and also to refer to a dog. Those are different functions, and you can have at most one of them, at least as a basic non-derivative function. Thus if the function of phrase is to modify a noun, then it isn't to refer to an object. That so far is just talk of semantic function. There is also another level of semantic description, which is to be distinguished from semantic function. It concerns what in linguists' lingo is often called 'denotation', but which doesn't mean what many philosophers mean by denotation. It instead means what semantic value a phrase gets assigned in a background compositional semantics. So, when someone says that 'four' denotes a function from this to that, or 'four' denotes a higher-type object or the like, then they are talking about semantic values.

Semantic values are a rather different level of description of a phrase than semantic function. To bring up a standard example to illustrate the difference: Richard Montague in [Montague, 1974] assigned proper names sets of properties as their semantic values, which allows for a more uniform treatment of noun phrases in a compositional semantics. But that doesn't mean that Montague proposed that 'Sue' refers to a set of properties, nor that Sue is a set of properties. 'Sue' still has the semantic function to refer to Sue, and that way 'Sue' makes a contribution to the truth conditions, which in turn can be captured by assigning 'Sue' the set of Sue's properties as its semantic value.

But those are different things. Similarly, all phrases get semantic values in standard compositional semantic theories, but only a few have the function of reference. 'Very' has a semantic value, and thus denotes some higher-type object, some function from functions to functions of some kind, but it doesn't aim to refer to that higher-type object.

All this also applies to 'four'. When it occurs in 'Jupiter has four moons' it modifies a noun. That is its semantic function. If its occurrence in 'The number of moons is four' is the result of displacement for the purpose of achieving focus, then this does not affect its semantic function. It still does not aim to refer, but it aims to modify a noun. But it appears away from that noun it hopes to modify in the syntax of the sentence to achieve focus. This account of why the focus effect occurs in one, but only one, of our pair of Jupiter sentences is thus in tension with the claim that 'four' refers in 'The number of moons of Jupiter is four'. And if it doesn't refer in these uses then something else must be going on in the easy arguments than Thomasson's proposal.

The only real way out of this, it seems to me at least, is to hold that reference is ubiquitous, and that all phrases aim to refer. In fact, on this line in its most natural development, the only primary semantic function is reference, and all other functions are derivative on it. So, 'very' does aim to refer, likely some higher-type object, and it intensifies an adjective, say, via what kind of object it refers to: it refers to something that when applied to whatever the adjective refers to leads to the desired result. On this 'it's all reference' line one could try to recover the diversity of semantic functions we naturally attribute to various phrases via the kind of entity these different phrases refer to. But this 'it's all reference' line has a famous problem: it is unclear how a bunch of referring expressions lined up next to each other give rise to truth-conditions and propositional content. It is just as if every sentence is of the form 'Mary Fred Josef Sue'. Now, even if 'Josef' in that sentence refers to some higher-type thing, why does a string of names lead to truth-conditions and propositional content, no matter what they refer to? Maybe this problem can be solved, and then maybe it is fine to hold that 'four' refers anyways, even when it has the function to modify a noun, since the function of reference is primary, and the function of modifying a noun derivative on what it refers to. But this is certainly a small minority view, one whose rejection goes back also to at least Frege and likely much further. I personally find it hopeless, and I suspect Thomasson does not like it either. And if we leave it aside, then we face the issue that displacement does not affect primary semantic function and thus does not lead to reference.

The view I outlined above involving displacement as an explanation of focus is the one I think is the right one. But there are other options. One alternative is to hold that 'The number of moons is four' is a specificational sentence which in turn is a question-in-disguise. For a discussion, for or against, see [Schlenker, 2003], [Brogaard, 2007], [Moltmann, 2013], [Felka, 2014], [Snyder, 2017], [Schwartzkopff, 2022], and others. I think of this as an alternative, since on the most natural way of spelling it out, nothing is displaced, it is only that certain things are omitted. But the question-in-disguise view can also be seen as broadly congenial to the view outlined above, since it aims to give an explanation of the focus effect in terms of syntax. But be that as it may, it wouldn't help Thomasson in her use of easy arguments, since on the natural way of formulating this proposal, 'four' does not refer either in 'the number of moons of Jupiter is four'. On a common way to spell out that question-in-disguise proposal, it goes something like this: The sentence involves a question in disguise, in that sentence we identify the question and the answer, and we strike out a bunch of the syntactic material to get the resulting sentence:
(5) [What the number of moons of Jupiter is] is [Jupiter has four moons]

Much can be and has been said about this proposal, but as spelled out, 'four' is still modifying a noun, except that we don't articulate that noun in the sentence. So, 'four' is not referential in this use. Its semantic function is to modify a noun, not to refer.

All of these issues deserve much more detailed discussion, of course. My main point is simply this: there are features of actual uses of 'The number of moons is four' which speak against the use of this sentence in the easy arguments and against Thomasson's use of these arguments in her easy ontology. The fact that we have a focus effect in this sentence speaks against the number word in it being referential. There are promising accounts to explain this focus effect which are in conflict with the number word being referential, and thus with 'four' referring to a number in this sentence. None of these issues are settled, of course, and there is an ongoing debate about them. But I have argued that Thomasson is mistaken in holding that she can accept accounts of the source of the focus effect and the role of the sentence in ordinary communication and hold that in addition the number word refers in this sentence. These two are in tension. That there is a tension doesn't mean that in the end they can't be combined. But it is unclear how, and I think fair to say that it hasn't been done yet.

All this gives rise to the question about what to do with the quantifier inference. For Thomasson's easy ontology approach it is clear: the quantifier ranges over a domain of things which exist and which are the ontology of the world. And one of those things is the number four. But if 'four' does not refer, how could the quantifier inference be valid? I would like to postpone this issue for now, although I will revisit it below, if only briefly.

What is more directly relevant instead is if Thomasson can hold onto easy ontology, and with it the validity of the easy arguments and the referentiality of number words in them, and simply not take on board the views on focus and displacement (or questions-in-disguise) outlined above. If those two are in tension, Thomasson should be free to reject the account of the use of these number sentences, and hold onto the account of the easiness of ontology. But this seems to me to be difficult, since something like this view on the actual use of number sentences will be necessary to explain what needs to be explained about our reaction to the easy arguments. I would like to turn to that next.

## 4 Conceptual and other language-based connections

Easy arguments are puzzling, even if they are valid, since on the one hand they are compelling and forceful, but on the other hand the debate over the issue they are apparently resolving persists. We need to explain why: why are they forceful, and why does the issue not seem to go away? Thomasson can explain their force via conceptual connections, and the resilience of the issue they apparently resolve via an entitlement account of conceptual connections. In a nutshell, there are conceptual connections which entitle us to draw these inferences, but that doesn't mean that everyone draws them and accepts them as settling the ontological question, as they should. But as I argued above, this doesn't fully resolve the issue, since if we stress the entitlement part tied to conceptual connections, and downplay the disposition to follow the entitlements, then we loose a bit of the explanation of the force of the argument: being entitled doesn't explain why we do it, and if we know that we are entitled, then it doesn't explain why we continue to debate the issue. It looks like conceptual connections aren't really properly suited to explain what needs to be explained here.

Conceptual connections, as I understand the term here, and I think as Thomasson understands it as well, is a connection that arises from an aspect of the meaning of a particular concept which is
available somehow to competent possessors of the concept, or at the linguistic level, to competent speaks of the language. For Thomasson, application conditions are connected to meaning and content, and are mastered, or at least appreciated, by competent speakers. This is how we get from simples being arranged table-wise to there being a table, according to Thomasson.

But how does this go for Jupiter having four moons to the number of moons of Jupiter being four? Which concept is it that makes this connection a conceptual equivalence? It is tempting to think of this as a schema - there being $n$ Fs iff the number of Fs is $n$ — but this way we leave out what the relevant concept is. Is it $n$ ? Or each instance: one, two, three, etc..? And is it a separate conceptual connection each time, or a general one? All this is simply left open so. But what is clear is that the connection between the two sentences is a special one and not just any old equivalence, assuming it is an equivalence. Here I agree with Thomasson that the relevant biconditionals are in a sense not substantial. Let's consider what we can call the Frege-biconditional:
(6) Jupiter has four moons iff the number of moons of Jupiter is four.

Thomasson holds that it is a conceptual truth, and that the truth of (6) should be apparent to all those who have the relevant concepts, at least in the sense that their concept possession entitles them to assent to it. But that seems to me to be the wrong way to think of the connection and why it is insubstantial. Let me illustrate another way in which equivalences can be insubstantial and apparent to competent users of a language without being a conceptual truth. And to do that I can reuse an example from above, which we can call the Mary-biconditonal:
(7) Mary entered quietly iff quietly Mary entered.

In this particular case of adverb prefixing, the truth conditions are not affected, and so the two sides are equivalent. ${ }^{5}$ Is the Mary-biconditional a conceptual truth? From which concepts does this conceptual connection arise? It seems both sides involve the same concepts just arranged in a different order. It seems strange to me to say that concept possession of the individual concepts

[^4]involved entitles one to assert to (7), since it is just the same concepts on both sides. But, of course, not any arrangement of the same concepts entitles one to assent to the corresponding biconditional.

What does explain our assent to the biconditional and our recognition that both sides are equivalent is not something tied to the possession of some individual concepts, but our competence with the underlying linguistic structures which put these concepts together. It is my basic linguistic competence that leads to the proper understanding that moving the adverb out front doesn't affect the truth conditions in this case, but does lead to a focus effect. It is my basic competence with syntax and its relation to focus that gives me this insight. Thus my recognition of the truth of the biconditional (7) is derivative not on conceptual connections, but on syntactic competence.

Essentially the same holds for the Frege-biconditonal (6), or so it seems to me, and so is natural to hold on anything like the displacement explanation of the focus effect outlined above. It is not a conceptual connection based on the concept of number, but a broadly syntactic connection based on displacement and focus. But the situation is not quite as simple as with (7), since the relating sentences are more complex, and more surely needs to be said here how this is supposed to go in detail.

Still, the point remains that the equivalence of these sentences in (6) can be explained in a broadly insubstantial way: it is not our insight into the nature of numbers or anything like it, that makes clear to us that this equivalence holds. After all, who has such insights? Instead it is something tied to our basic competence with our language. But contrary to Thomasson, I don't think it is tied to our grasp of the contents or meanings of certain concepts. It is not that application conditions augment the meanings of these expressions in such a way that it makes clear to us competent speakers that (6) is correct. Rather it is our basic competence with the syntax of our language and its relation to focus, possibly augmented with that number determines concern how many things there are, or something similar. Both of these approaches make the equivalence insubstantial, in the suggestive sense of the term, but they do so in different ways. Both of them hold that our insight into the truth of the Frege-biconditional is not derivative on an insight into the nature of numbers or necessary connections between different things, but derivative on something tied to our competence with our own language. We can thus call a linguistic truth one that is insubstantial, in the intuitive sense, and based on facts about language. Among those can be conceptual or analytic truths, which are based on facts tied to the contents of the relevant
concepts or expressions, and syntactic truths, which are tied to facts about syntax. So understood, conceptual truths and syntactic truths are both similar in that they are insubstantial and linguistic truths. But they are also importantly different.

Now, the difference in the way in which the inferences can be insubstantial makes a difference in explaining what needs to be explained about the easy arguments. As outlined above, I feel that relying on conceptual connections alone is not going to settle this issue, since either that connection is tight, and thus leaves open why the debate persists, or it is loose, and then leaves open why the inference is so widely seen as trivial. 'Tight' and 'loose' can here be understood in different ways, with the normative, entitlement conception of conceptual truths being on the loose side, on a natural way of understanding it.

The syntactic competence understanding of the inference form 'Jupiter has four moons' to 'The number of moons of Jupiter is four' is a tight one, and it would explain why we widely accept it. But why is the issue tied to ontology still not resolved? That is connected to the next step: the quantifier inference. I would now like to briefly look at Thomasson's account of that step, and why an alternative might do better.

## 5 Conceptual connections and quantifiers

On Thomasson's account that quantifier step is in essence no different than the first step in the easy argument, which nominalizes the number word: It involves a conceptual connection, the fulfillment of some application conditions, and thus an entitlement to draw that inference. This gives rise to the same problem as above: if it merely is entitlement with no disposition, then why do we generally draw this inference? And if it is more than that, then why does the debate persist?

I would like to add, in agreement with Thomasson as I understand her, that it seems to me that make a separation between quantification and existence to solve this problem is pointless. So, one could try to hold that the quantifier inference is indeed trivial and that there being numbers is indeed trivially true. But the ontological question is not about there being numbers, but there existing numbers. Here one could hold either that quantifiers range over non-existent objects or that quantifiers are ontologically neutral, as claimed by [Azzouni, 2004] and [Bueno and Cumpa, 2020]. But this strikes me as a red herring, among other things that should be critically said about it, since the puzzle arises simply with the use of quantifiers alone, without talking about existence at all.

On the one hand it seems to be trivial that there are numbers, and it apparently trivially follows from Jupiter having four moons, but on the other hand, it seems substantial whether there are such things as numbers which arithmetic aims to describe and which are either somewhere or nowhere, and which turn arithmetic into a descriptive discipline of a domain of numbers. Some more colorful language might be necessary to really get the sense of a more substantial question going, but this is how the puzzle is commonly motivated, and I think successfully so. And this way the motivation goes without the use of talk of existence. For Thomasson, this can make no difference: both the quantified statement and the corresponding existence statements can have the same status: both can be easy, and easily established with easy arguments. Thus focusing on existence seems to get us nowhere new, and I think that is correct. See also [Thomasson, 2021].

But there are other options as well. In particular, those who hold that number words in 'The number of moons is four' do not refer, for some reason or other, will naturally be inclined to hold that quantifiers do not only interact with referential expressions. I have defended such a view of quantification elsewhere, which in essence holds that quantifiers are semantically underspecified and have two readings: one is inferential, which interacts with anything that it is syntactically permitted to, and one is about a domain of entities, which many take to be the standard and only use of quantifiers. Thomasson discusses this underspecification line in chapter 9 of [Thomasson, 2015] and she is less pleased with it than with the focus construction move discussed above. Thomasson holds that this underspecification view is too dependent on some examples I used that involved fictional names and intentional transitive verbs. I won't aim to defend myself against these charges now, in part because I have since given a more detailed motivation for the underspecification view that aims to be independent of the use of fictional names and intentional transitive verbs. See chapter 3 of [Hofweber, 2016]. What I would like to discuss instead is how the underspecification view can explain what needs to be explained about our reaction to easy argument, something I argued above Thomasson's view can't adequately explain.

The puzzle about easy arguments is in part that the arguments are compelling, they imply that there are numbers, yet the ontological debate persists. One attempt to explain this is one of the options of how to react to the easy arguments mentioned above: accept the arguments, and accept them as trivial, but hold that the question that ontology is trying to answer is not answered by what these arguments conclude. This could be done in more than one way. One way is to
hold that this question wasn't the question whether there are numbers, but the question whether numbers are fundamental, a line taken, for example by Jonathan Schaffer in [Schaffer, 2009]. But this does not seem to me to address the real issue. True enough, the question whether numbers are fundamental is a further question, in whatever sense of fundamental one might rely on, but the puzzle doesn't seem to be just about what is fundamental, it's about what there is. On the one hand it is trivial that there are numbers, and I can give several examples of them, on the other hand it seems substantial whether there are numbers, whether there are such things as numbers that mathematics aims to describe. This puzzle seems to me to be real. And if so, then it is natural to continue to ask whether there are numbers, even after the easy arguments are pointed out and taken as compelling.

The underspecification view has an easy way to explain this. 'there are numbers' has two readings. One reading is the inferential reading outlined above, and described in detail in chapter 3 of [Hofweber, 2016]. Relying on this reading of the quantifier, it is trivial to establish that there are numbers, and the easy arguments succeed in doing this. But that is not the only reading quantifiers have. On the other, domain conditions reading it is not trivial that there are numbers. And it is this reading that we rely on when we ask ontological questions: the questions we ask when we wonder whether there are such things as numbers that mathematics aims to describe. On the one hand it is trivial that there are numbers, but on the other hand it is a substantial question. And the reason for this is that what is trivial is expressed using one reading of the quantifier, and what is substantial is expressed using another.

But this distinction of two readings alone does not explain everything that needs to be explained. The problem remains why not everyone realized that there are these two readings, and that this is what is going on in the original puzzle and with it how it should be resolved. We are all competent users of our language, but there being two readings of quantified statements is not generally accepted. It thus gives rise to the challenge of explaining why that is, and why the debate about how substantial it is that there are numbers continues. After all, our syntactic competence is supposed to make clear to use that the inference from Jupiter having four moons to their number being four is a valid inference. So, why does our competence with our language not give us insights into there being numerous readings of quantifier statements if there really are such readings?

And here there is a real difference. It is not generally true that there being multiple readings
of sentences is apparent to competent speakers. This is often a linguistic discovery. Once the readings are discovered, they can be triggered in competent speakers with proper setup. But this going successfully is not required for linguistic competence. To give an extreme example, there is a debate about how many readings certain sentences with reciprocal expressions like 'each other' have:
(8) The philosophers sat next to each other.

What the answer is is not obvious, as sitting next to each other can be understood in numerous ways, which can be seen as numerous readings of that phrase: all lined up in a row, in pairs possibly with linguists in between, in a circle, etc.. See [Kim and Peters, 1995] and [Dalrymple et al., 1998].

If there are multiple readings of 'there are numbers,' then this can explain why the debate persists, even though the easy arguments are valid. They show that there are numbers on one reading, leaving open the other one. Furthermore, there being multiple readings can also explain why the debate about the status of easy arguments persists. Linguistic competence does not require the explicit recognition of which readings there are, nor of how many there are. Recognizing that there are multiple readings of quantifiers is not required by linguist competence, and thus we can explain why the debate continues. The syntactic connection view explains why the first step of the argument is valid and compelling, the inferential quantifier reading explains why the second step is valid and compelling, the underspecification view explains why the debate persists, and the elusiveness of how many readings a phrase has explains why all this is not simply accepted.

This combination of views thus can explain what needs to be explained: why we react the way we do when faced with the easy arguments. But Thomasson's view, I argued above, cannot explain this. On her view we should either not find the trivial inferences as compelling as we do, or else we should not continue to argue about ontology. Of course, Thomasson would suggest the second, but the fact that this has not happened is what needs to be explained, and the underspecification view does better here than the conceptual connections view. Or so it seems to me.

## 6 Conclusion

There is a temptation to address Thomasson's easy ontology too much as a purely metaphysical proposal. It is that, of course, but it is more than that. It is also a proposal about natural language,
about speakers of natural language, and about people reasoning about ontology and what there is. Too much on the large literature on Thomasson's proposal seems to me to focus on the metaphysics and also on the general picture in the philosophy of language tying application conditions to content. But not enough has been said about ordinary assertions and ordinary thinkers when exposed to the easy arguments. I tried to make the case in this paper that Thomasson's view is problematic in this regard, and that an alternative view does better. Of course, I already believed that the alternative view is correct, so I am surely biased in its favor. Still, the reasons given in favor of it strike me as good ones, so I hope the case I tried to make can stand on its merits. Others will surely disagree, as they probably should, to pursue their preferred approach further. Thomasson has since [Thomasson, 2015] developed her approach into a larger neo-Carnapian program, in which the easy arguments are only one part among many. Still, the easy arguments are and remain central, and controversial. There is a lot of disagreement about what to make of the easy arguments and Thomasson's easy ontology, but I hope we can all agree about the significance of these issues for ontology and metaphysics, and about the significance of the relevant issues in the philosophy of language tied to understanding the individual steps in the easy arguments, what they show, and why we find them compelling.

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[^0]:    ${ }^{1}$ I will rely on Thomasson's presentation of her view in [Thomasson, 2015]. There are also numerous later papers by Thomasson discussing objections and clarifying her view, but as far as I can tell the view remains the same.

[^1]:    ${ }^{2} \mathrm{~A}$ broadly congenial, but different, line is taken in [Schiffer, 2003].

[^2]:    ${ }^{3}$ You can find the details in the first half of [Hofweber, 2016].

[^3]:    ${ }^{4}$ This line differs from Yablo's more recent position concerning subject matter spelled out in [Yablo, 2014].

[^4]:    ${ }^{5}$ To be clear, there can be cases where the truth-conditions are affected by a focus construction, namely when it involves focus sensitive expressions, for example 'only'. 'Only Mary entered quietly' and 'only quietly Mary entered' can be understood as differing in truth-conditions. And this general phenomenon of focus sensitive expressions can be illustrated with more natural examples, but I won't pursue this now, since it isn't relevant for our example in the main text.

