

The richness and strangeness of higher-order metaphysics

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Abstract. Unlike first-order logic, higher-order logic permits quantification into syntactic positions other than name position, such as predicate position and sentence position. The contemporary movement called ‘higher-order metaphysics’ is based on higher-order logic. But there is significant confusion about how higher-order metaphysics relates to existing questions in metaphysics, which in turn clouds our understanding of the merits and demerits of higher-order metaphysical theories. Building on work done by Lukas Skiba, I use the notion of conceptual engineering to offer clarification, with the aim of helping us appreciate the full richness and strangeness of theories in higher-order metaphysics.

I

Introduction. An important contemporary movement in philosophy is called ‘higher-order metaphysics’. The movement has that name because it uses higher-order logic: logic that (unlike first-order logic) permits quantification into syntactic positions other than name position, such as predicate position and sentence position.

For example, start with the sentence Cb of predicate calculus. This sentence is made of a predicate C meaning ‘is a city’ and a name for Barcelona, b. Replace the name with a variable, x , bind the variable with a quantifier, $\exists x$, and we deduce $\exists x Cx$, which we may gloss in English as ‘There is a city’. Because the variable stands in the syntactic position previously held by the name, this is first-order quantification. In higher-order logic we can replace the *predicate* with a bound variable, leaving the name unchanged, to infer $\exists X Xb$; or we can replace the *whole sentence* with a variable, and bind that: $\exists p p$. These are examples of quantification into predicate and sentence position respectively.

Higher-order logic is usually developed in the framework of type theory. This provides a formal theory of syntax which defines infinitely many different syntactic categories. But to keep the level of technicality as low as possible I will

focus on the sorts of higher-order quantification just mentioned. Similarly, I will leave out lambda abstraction.

As well as introducing new uses for $\exists$, higher-order metaphysicians introduce new uses for the identity symbol $=$. In higher-order metaphysics, this can be flanked by expressions of any syntactic category. The simplest way of defining these uses is as indiscernibility at the next syntactic level up (Bacon 2024a: 93). Thus $p = q$ is defined to mean $\forall O(Op \leftrightarrow Oq)$ (where O takes the syntactic place of a monadic sentential operator). And $F = G$ is defined to mean $\forall U(UF \leftrightarrow UG)$ (where U takes the syntactic place of a monadic second-order predicate, that is, something that turns a monadic first-order predicate into a sentence). (For other definitions, see Bacon and Dorr 2024: 114 and Fritz 2023: 37–8.) However, other higher-order metaphysicians think that these definitions need restricting, given the phenomenon of opacity (see e.g. Correia and Skiles 2019: 645, and, for sympathetic discussion, Caie, Goodman and Lederman 2020). Similarly, the inference rules governing higher-order quantifiers are also a matter of debate (see e.g. Bacon, Hawthorne and Uzquiano 2016, Skiba 2021a, Frugé 2025).

Higher-order metaphysicians do not just offer a new notation, but a distinctive interpretation of it. Higher-order generalizations are not to be understood objectually. Neither are they to be understood substitutionally. Instead, higher-order metaphysicians stipulate that their uses of higher-order quantification are *sui generis*: not definable in terms of first-order quantification. Echoing Jones (2018: 810) say that $\forall x$ (unrestricted first-order quantifier!), x is an *object*. In this sense of ‘object’, tables (if any) are objects – and properties (if any) are objects too. First-order quantifications are generalizations over objects. Because higher-order quantifications are *sui generis*, they are not generalizations over objects.

Higher-order metaphysics therefore extends our expressive power relative to first-order logic. Since natural languages contain little higher-order quantification, and tend to favour generalizations over objects, higher-order metaphysics extends our expressive power relative to natural languages as well. The movement offers not just new notation, but new ideology. (See Dorr 2023 for an alternative view, which I will set aside here, on which higher-order claims have natural language synonyms.)

It will be helpful to have a couple of representative examples of higher-order theories. First, Fritz's (2023) account of (what he calls) 'the individuation of propositions' (7) is the claim $\forall p \forall q (p = q \leftrightarrow \Box(p \leftrightarrow q))$, where the operator $\Box$ expresses metaphysical necessity. Second, Frugé (2025) offers what he regards as an improved form of realism about properties. Its central claims are instances of the schema $\exists X(X = F)$. For example, if N means *is negatively charged*, then Frugé claims: $\exists X(X = N)$. (I could also have used as examples higher-order work on possible worlds – e.g. Fritz 2023, Deasy 2025 – and on facts – e.g. Skiba 2025. For brevity I will focus on higher-order theories about properties and propositions. But that is an imperfect way to put it, as part of what is at issue is what these theories are about.)

The new ideology offered by higher-order metaphysics is exciting: perhaps these resources can help us to solve new problems; and perhaps they can be used to state new problems – and help to solve those. But the novelty is also a source of difficulty. Part of the difficulty is about exposition. In any philosophy that uses sentences of formal languages, it is usual to show mercy to the reader by glossing them in natural language, and ignoring or downplaying any difference in meaning. But it is central to higher-order metaphysics that we will often be unable to do this, because the point of using higher-order logical languages is to say things we could not already say. Another part of the difficulty is about coherence: if we cannot provide natural-language synonyms for what we say, how can we be sure that we are making sense? That is a good question to ask; here I will simply assume there is a good answer. (See Liggins 2024: 115–119 for discussion and references.)

There are plenty of precedents for higher-order metaphysics, most notably in the work of A. N. Prior (e.g. Prior 1971). What is new is its thematization in the form of conferences, books, and so on. (Skiba 2021b and Fritz and Jones 2024 provide valuable overviews of higher-order metaphysics.) The time is ripe for some clarification, because the novelty and excitement are accompanied by confusion about how higher-order metaphysics relates to existing questions in analytic metaphysics. That clouds our understanding of the merits and demerits of higher-order metaphysical theories. This paper builds on work done by Lukas Skiba: I will draw on his insight that higher-order metaphysics is a form of conceptual engineering, to help us understand and appreciate it better.

II

Tensions. The confusion emerges through three tensions within the higher-order metaphysics literature.

Revolution versus continuity. Higher-order metaphysicians promised new ideology to open up new problems. But rather than containing new expressions, higher-order writings are full of familiar ones such as ‘property’, ‘proposition’, ‘identity’, ‘individuation’.

For example, Fritz 2023 seems to offer a puzzling mix of continuity and discontinuity. Fritz introduces ‘a formal language to which allows us to formally regiment talk of entities like propositions, properties, and relations’ (7). But the formal language is meant to improve on existing uses of words such as ‘proposition’ and ‘property’ as well, so when these words are used to gloss expressions of the formal language they are given ‘a special technical sense’ (30); ‘the present use of these words may therefore likely come apart from their ordinary use’ (31) (I assume ‘ordinary use’ means ‘ordinary use in philosophy’). It is reasonable to ask: are we still talking about the same things, or have we changed the subject? If the latter, in what sense is this a language for regimenting talk of propositions and properties?

High ontology versus low ontology. ‘An entity is of type α just in case it is a value of a type α variable’ (Button and Trueman 2024: 246); ‘propositions are familiar entities of type t' ’ (Jones 2019: 172). Statements such as these can give the impression that higher-order metaphysicians posit such things as higher-order entities. For Skiba (2021b: 2), higher-order metaphysics involves a ‘paradigm-shift ... of great importance for many fundamental questions in metaphysics, since it comes with a drastic shift in perspective on the structure of reality’: higher-order metaphysicians reject the view that reality consists solely of objects (‘entities of type e' ’), replacing it with the view that reality comes in layers corresponding to different syntactic categories. Understood in this way, the approach makes space for new theories about the nature of, for instance, properties or propositions: instead of taking them to be objects, we can place them at another layer of reality. (There would be some parallel with a shift from actualism to Lewisian modal realism, or from non-Meinongianism to Meinongianism: each gives ontologists new locations to place entities, either in the merely possible or in the real-but-nonexistent.) Jones (2018) argues that higher-order metaphysics establishes the existence of properties and gives

insight into their nature (see also Skiba 2021a); Frugé (2025) argues that it provides a new and better theory about their instantiation. For McCarthy (2026: 359) ‘it is far from clear that higher-order logic is ontologically innocent’; McCarthy worries that higher-order logic invokes ‘a host of abstruse higher-order entities’.

In contrast, while Trueman (forthcoming) concedes that higher-order metaphysics can seem to offer ‘a grand speculative metaphysic of previously unimagined entities’, he urges that this is a misunderstanding. Some authors have argued that higher-order metaphysics is actually good news for the view that there are no properties (Liggins 2021, Trueman 2021: 123–147, Button and Trueman 2024; see also Fritz and Jones 2024: 11–12 and Van Cleve 1994). The idea of higher-order metaphysics as a low ontology project echoes Prior, who perceived a trade-off between ontology and ‘parts of speech’ (e.g. Prior 1971: 32).

Importance versus unimportance. Higher-order metaphysicians claim that the new questions opened up by higher-order metaphysics are deep and important. For example: higher-order languages ‘allow us to formulate deep questions about the structure of reality using only logical vocabulary’ (Goodman 2024: 73) and are powerful ‘for formulating important claims in metaphysics, and as a framework for investigating those questions’ (Bacon 2024a: xv; see also Dorr 2016: 84).

On the other hand, Sider (forthcoming) sees higher-order ideology as dispensable, hinting that we shouldn’t ‘stay up nights wondering whether, for instance, $p = (p \ \& \ p)$, for all p .’ For Hofweber (2022), engaging in higher-order metaphysics leads us to ‘ask bad questions’, to neglect better questions, and to speak a language ‘where good parts of it are devoid of meaning’. If enough people joined in with the movement, we would risk losing the ‘much of the value and significance’ of metaphysics (Hofweber 2022: 46). Anecdotally, there are plenty of metaphysicians who ignore higher-order metaphysics because they have not been persuaded of its importance.

III

Conceptual Engineering. We therefore need to clarify to what extent higher-order metaphysics is continuous with previous metaphysical inquiry, what its implications are for ontology, and how much importance we should give it. The notion of conceptual engineering promises to help with all three tasks.

Like higher-order metaphysics, conceptual engineering is an old phenomenon that has only recently been thematized. It is ‘the process of assessing and improving our representational devices’ (Cappelen 2018: 3). Here I will assume that representational devices include concepts, words, and symbols.

Skiba 2026 shows that higher-order metaphysics is a conceptual engineering project. For Skiba, higher-order metaphysicians engineer analogues of familiar concepts such as property, proposition and identity. (He also discusses the more ambitious project of broadening those familiar concepts so that they cover both the original concepts and their higher-order analogues. I will set that project aside.) Although Skiba does not put it quite like this, higher-order metaphysicians are conceptual engineers because they add to our ideology: they modify our representational devices by adding to the stock of concepts we use in philosophy. They also modify the use of existing symbols such as $\exists$ and $=$, or introduce new symbols.

Higher-order metaphysicians also modify our representational devices by modifying the use of natural language expressions. When reading out higher-order sentences, higher-order metaphysicians often follow the convention of pronouncing these as if they were first-order. Quantification into predicate position is treated as first-order quantification over properties, and quantification into sentence position is treated as first-order quantification over propositions. For example, $\exists X Xb$ might be read ‘There is a property Barcelona has’, and $\exists p p$ might be read ‘Some proposition is true’ (Goodman 2024: 90–1 provides the fullest statement of the convention). The convention is also used in writing. For instance, a claim involving quantification into predicate position would be restated and discussed as if it were a claim about properties.

Higher-order metaphysicians are clear that this is not what these natural language sentences usually mean: after all, part of the very idea of higher-order metaphysics is that higher-order sentences often mean something that cannot be expressed in natural language. When presenting work in higher-order metaphysics, the point of uttering these English sentences is just to bring the relevant higher-order sentences to mind (see e.g. Goodman 2024: 90, Bacon 2024a: 50).

So higher-order metaphysicians engineer not just concepts and symbols, but natural language expressions too: when used to present and discuss higher-

order claims, ‘property’, ‘proposition’ and ‘identity’ all take on special meanings – as do ‘there is’, ‘some’, ‘exists’ and ‘is identical to’.

There is an important difference between the higher-order metaphysicians’ conceptual engineering and more familiar examples. Classic cases of conceptual engineering involve swapping one predicate for another, or changing the meaning of an existing predicate: for example, swapping the unscientific predicate ‘fish’ for the scientific one ‘Piscis’, or updating the meaning of ‘parent’ to include adoptive parents. In the case of higher-order metaphysics, though, we often swap a predicate for something that belongs to a different syntactic category.

For example, the English words ‘property’ and ‘proposition’ are predicates; we can use them to describe objects, and we can ask what is in their extension. (More strictly, they are count nouns that should be formalized as predicates. The difference does not matter here.) Higher-order metaphysicians introduce different uses of these words. When they use ‘Some proposition is true’ to mean $\exists p p$, they are no longer using ‘proposition’ to describe an object, but instead, to indicate that they intend to quantify into sentence position; and when they use ‘There is a property Barcelona has’ to mean $\exists X Xb$, they are no longer using ‘property’ to describe an object, but instead, to indicate that they intend to quantify into predicate position (see Goodman 2024: 90). So the conceptual engineering involved in higher-order metaphysics goes beyond adjusting the extension of a predicate, or swapping one predicate for another.

IV

Topic Continuity. Conceptual engineering projects face the objection that, rather than addressing the subject at hand, they change the subject. This is often known as the problem of ‘topic continuity’, with Strawson’s (1963) critique of Carnap cited as a pioneering example. Skiba (2026: 123) is surely right to say that higher-order metaphysics faces this objection too, and to call for further work on this point. Here goes.

First of all: what precisely is the problem? Belleri (2025) shows that the notion of ‘subject’ (or ‘subject matter’) is too flexible to provide a solid objection. When asked whether the subject has been changed, or whether we have switched to a different topic, the answer can simply be “Yes and no: it depends on how finely you individuate subject matters”.

Inspired by Haslanger's (2000: 34) statement that 'Revisionary projects are in danger of providing answers to questions that weren't being asked', Cappelen (2018: 101–2) offers an alternative version of the objection. It has the merit of not mentioning the notion of topic, but the drawback of only applying to representational devices used in a context of inquiry – a drawback that is not a problem here. This version of the objection alleges that conceptual engineering is problematic because the changes to our representational devices are leading us to engage with new questions instead of old ones, which means that questions we wanted answering to are not getting answers. Call this 'redirection of inquiry'.

For this version of the objection to have any chance of working, we need to be able to identify cases where changes to representational devices lead us to neglect old questions. I want to propose a way of doing so, and use it to show that higher-order metaphysics involves redirection of inquiry into the existence and nature of properties and propositions.

Suppose we start by trying to answer 'Is it the case that j ?' and through conceptual engineering switch to answering 'Is it the case that k ?'. My thought is that if finding the answer to the new question does not automatically answer the old question, then more inquiry is needed to answer the old question – so then we have two distinct inquiries and thus a redirection of inquiry.

Sometimes whether finding the answer to the new question automatically answers the old one depends on what the answer to the new question is. To see this, suppose we switch from investigating whether Alex is a psychiatrist (j) to whether Alex is a doctor (k). If it turns out that Alex is not a doctor, then we automatically have an answer to the first question, because we know that if Alex is not a doctor then Alex is not a psychiatrist. But if it turns out that Alex *is* a doctor, that still leaves open whether or not Alex is a psychiatrist; further inquiry is needed. (This example illustrates that finding the answer to the new question can help answer the old one without taking us all the way to the answer. For this reason, I prefer my term 'redirection of inquiry' to Cappelen's (2018: 101–2) 'discontinuity of inquiry'.)

Suppose we find out that the correct answer to 'Is it the case that j ?' is 'Yes'. We need no more inquiry just in case either (i) we already know that if j then k , or (ii) we already know that if j then not- k (where the 'if ... then's are material conditionals). For if we know either of those conditionals, we can trivially work

out the answer to the new question from the answer to the old: no more research is needed, just an instant's thought; and if we know neither of those conditionals, we need further inquiry to work out whether or not k . Similarly, if the correct answer to 'Is it the case that j ?' is 'No', then we need no further inquiry just in case either (i) we already know that if not- j then k , or (ii) we already know that if not- j then not- k .

Now let me apply this criterion to examples of higher-order metaphysical theories.

First, let j be the first-order claim $\forall x \forall y (Px \wedge Py \rightarrow (x = y \leftrightarrow Exy))$ ('Propositions are identical just in case they are necessarily equivalent') and let k be Fritz's claim $\forall p \forall q (p = q \leftrightarrow \Box(p \leftrightarrow q))$. Both claims are controversial, but what is important here is that we do not know how they are related. They are logically independent, and it has never been shown how the two relate truth-functionally. (If k were a first-order claim about propositions, then it would entail j – but k involves *sui generis* higher-order quantification, not first-order quantification.) There are no arguments from one claim to the other, or to the negation of the other. So if you switch from investigating whether j to investigating whether k , my condition is met and we have redirection of inquiry.

Second, let j be the first-order claim $\exists x(x = n)$ ('The property of being negatively charged exists'), and let k be Frugé's claim $\exists X(X = N)$. The same goes for this pair: each is controversial, and it is unknown how they relate, except that they are logically independent. So, again, we have redirection of inquiry.

There is an argument from k to the negation of j . Frugé (2025: 334) suggests that once we make claims such as k , claims such as j are redundant. But before asserting their redundancy, Frugé does not consider all the roles objects that are properties might play. In particular, he does not consider whether we need properties to be referents of apparent singular terms such as 'redness'. (Jones 2018: 809, 814 makes a similar point in the context of his own higher-order approach to the properties debate. See Skiba 2021a for an example of a higher-order theory of universals which also posits some properties – tropes – as objects.)

I am using the topic continuity objection as a lens through which to see higher-order theories more sharply. I do not claim it is a successful objection. The objection assumes that redirection of inquiry is a bad thing. But sometimes it is desirable for an inquiry to neglect the questions that were originally asked

and switch to new questions. Or perhaps we should pursue both the new and the old questions (as Dorr 2023: 374 n. 4 suggests in the present case).

V

Implications for the Three Tensions. The topic continuity objection has implications for the three tensions reported in §II.

Revolution versus continuity. Owing to the pronunciation convention, familiar expressions such as ‘property’, ‘proposition’ and ‘identity’ take on a new meaning in higher-order metaphysics. ‘Property’ and ‘proposition’ are used not to talk about sorts of object, but to indicate the syntactic position of a variable; ‘is’ and ‘identity’ no longer mean the familiar relation that each object bears to itself. Moreover, the topic continuity objection shows us that, even when higher-order metaphysicians might appear to be asking traditional questions about the existence and individuation of properties and propositions, they are really asking new questions, not asking the old questions in new ways. There is continuity in spelling, but not in inquiry.

High ontology versus low ontology. ‘The ontology of a theory is a question of what the assertions say or imply that there is’ (Quine 1951: 14). To say or imply that $\exists x(x=n)$ is to be ontologically committed to the property of being negatively charged. The previous section’s discussion of Frugé’s view therefore shows that his view is not ontologically committed to the property of being negatively charged. Neither does it say or imply the nonexistence of the property. It is simply neutral on that question. (‘Ontological commitment’ is yet another expression that has been conceptually engineered by higher-order metaphysicians: see Jones 2024. I have not used the term in a conceptually engineered sense here.)

This is a more general phenomenon. Consider the higher-order existential generalization $\exists p p$. This does not entail the ontological claim $\exists x Px$ (‘There is a proposition’); neither does it entail its negation. The higher-order claim is simply neutral on the first-order claim. More generally, what are called ‘higher-order theories of properties and propositions’ have no direct relevance for the existence of properties and propositions. They are neither ‘high ontology’ nor ‘low ontology’ theories.

In just the same way, higher-order theories about ‘the individuation of properties and propositions’, such as Fritz’s, have no implications for the individuation of properties and propositions.

Although higher-order theories are neutral on ontological matters, the new ideological resources higher-order provides are useful to ontological debate. In the properties debate, they supply new ways to respond to arguments for the existence of properties (Liggins 2021, Button and Trueman 2024). For example, the strongest version of the ‘one over many’ argument for properties challenges us to account for Moorean facts of sameness of type where the type is not specified, such as the fact that Mo and Bo have something in common (see Lewis 1983: 355). Once higher-order resources are available, we can argue that the fact to be accounted for is not the first-order fact that $\exists x(\text{Bo has } x \text{ and Mo has } x)$, which is indeed ontologically committed to something other than Bo and Mo, but the second-order fact that $\exists X(\text{Bo } X \text{ and Mo } X)$, which lacks any such commitment (Liggins 2021: 10030–31). In this sense, higher-order metaphysics is good news for ‘low ontology’ theories.

Importance versus unimportance. Does higher-order metaphysics open up deep and important questions? I am not here to trash higher-order metaphysics, or even the part of it I have been examining here. What the topic continuity objection reveals is that the new questions addressed by Fritz and Frugé are distinct from traditional ontological questions about the existence and individuation of properties and propositions, and so they do not inherit depth or importance from them. Those who regard the traditional ontological questions as deep and important are not thereby obliged to see these new questions as deep and important.

I suspect that there is a good case for their depth and importance to be made, and I hope this paper will cause it to be made fully. Let me sketch out what seems to me a plausible way for it to go.

Bacon (2024b) argues compellingly that higher-order quantification is better than first-order quantification for regimenting claims about the relative strength of modalities, articulating the idea of naturalness, and stating metaethical naturalism. Purely first-order formulations, he shows, bring in irrelevant complexities. And we will see in the next section how quantification into sentence position helps to provide an account of propositional attitudes which has several attractions. So there are several areas of philosophy in which higher-

order resources are useful. But what does this mean for 'higher-order theories of properties and propositions'? Higher-order theories of modalities, naturalness, metaethical naturalism, propositional attitudes, and so on draw on claims such as those made by Fritz and Frugé: using the pronunciation convention for a moment, we can say that these theories make assumptions about the existence and individuation of higher-order properties and propositions. Moreover, these assumptions are indispensable to those theories. Therein lies their importance.

VI

Appreciating higher-order metaphysics. The confusions I have been addressing cloud our understanding of the merits and demerits of higher-order metaphysical theories. Trying to convey or discuss these theories in natural language risks doing so as well, because natural languages are most at home talking and generalising about objects, and the merits of higher-order metaphysical theories will not be properly appreciated if we assimilate them to first-order theories.

Higher-order theories are ontologically economical. For instance, we have just seen that $\exists X(X = N)$ does not imply the existence of the property of being negatively charged. Indeed, it is logically consistent with the claim that there are no properties whatsoever. So it lacks ontological commitment to properties. In that respect, it is economical. Similar remarks could be made about other higher-order theories, such as higher-order theories of propositions.

Questions about identity conditions have been much discussed in metaphysics: what does it take for two objects to be identical? In this context, identity is symbolised using $=$, which is used to make a sentence out of two names. Here the sign functions as a first-order predicate. In this sense, identity is a first-order notion. In higher-order metaphysics, $=$ is used differently: it appears between expressions belonging to syntactic categories other than that of names: expressions that are not in the business of picking out objects. So here it means something other than identity (if we stick to the pre-existing sense of 'identity' and do not employ the pronunciation convention).

That does not mean that these claims are wrong or useless: it just means that they do not contribute to traditional debates about identity conditions. That is what we should expect if they are not committed to the objects in question, because if you are not committed to F s, you have no need to state the identity

conditions for *F*s. So in a higher-order setting, problems about identity conditions go away. This is another benefit.

Arguably, problems about identity itself go away too. I mentioned at the start that there is a debate about how to define ‘higher-order identity’. Animating this debate seems to be the conviction that there is a pre-theoretical notion of higher-order identity to which a definition of ‘higher-order identity’ needs to be true. But I see no reason to think this. In the first-order case, there is a multitude of pre-theoretical judgements about identity which we should aim to accommodate in our theories. When it comes to higher-order identity, though, I see no reason to think this. Consequently, I see no point in debating whether opacity means we should restrict our definitions of higher-order identity. From my perspective, we just have different (for example) sentential connectives, defined in different ways. The question “Which of these is the correct definition of identity?” is not a good question, because identity is a first-order notion. ‘Higher-order identity’ is analogous to identity, but there can be multiple analogues of identity at any particular syntactic level.

Finally, let me point out some advantages of higher-order theories of propositional attitudes. I will use belief as an example. Contrast a first-order theory with a higher-order theory.

On the first-order theory, when you believe something, there is you and there is the proposition you believe – and the two are connected by the relation of belief. The fact that someone believes something would thus be stated using a dyadic first-order predication; generalizations about belief, such as ‘There is something Alex and Bo both believe’, would be made using quantification into name position: $\exists x (Bax \wedge Bbx)$.

On a higher-order theory, the possession of a belief is better stated using a ‘prenective’: an expression that forms a sentence out of a name for a believer and a *sentence* (see e.g. Trueman 2018, Jones 2019). Generalizations about belief, such as ‘There is something Alex and Bo both believe’, would be made using quantification into sentence position: $\exists p (Bap \wedge Bbp)$.

The first-order view is committed to the existence of propositions. But the higher-order one is not. So questions about the nature and identity conditions of propositions do not arise for the higher-order view. Because it is extremely hard to answer those questions, this is a significant advantage.

Another interesting difference concerns counting. On the first-order view, believing is a matter of being related to propositions. So there is a perfectly good question to be answered: how many propositions do you believe? (Maybe the vagueness of ‘belief’ gets in the way of that, but if we precisify, we have a perfectly good question.)

On the higher-order view, ‘things’ that are believed are not objects, so they do not stand in the relation of identity. But counting is to be analysed in terms of identity: for example, ‘There to be at least two *F*s’ is to be analysed as ‘There is an *F* and a distinct *F* such that each *F* is identical to one of those’. This means that on the higher-order view, questions about how many beliefs one has simply do not arise – and the same for other attitudes.

This is significant, because a paradox raised by Prior (1961: 17) concerns the number of beliefs (or other attitudes) one has. A higher-order theory of propositional attitudes promises to be helpful here.

In short, higher-order metaphysics supplies ontologically economical theories, offers to make some thorny questions go away, and might help with Prior’s paradox too.

VII

Conclusion. Higher-order metaphysics is a revolutionary project. But it might be good news for people defending low ontology views in first-order ontology. And it might provide new and improved theories of many phenomena. So, in response to Sider: perhaps sleepless nights spent pondering whether $p = (p \ \& \ p)$ are worth it, if they lead us to improved theories in the philosophy of mind, and other areas of philosophy.

Since we are so used to speaking and thinking in terms of objects, it is understandable that we are tempted to underestimate the unfamiliarity of higher-order theories. These theories talk about ‘things’ that aren’t identical to anything; can’t be counted; do not have names; could not be given them. Indeed, higher-order theories talk about ‘things’ that – in the usual sense of ‘exist’ – don’t exist. To do these theories full justice, we need to recognize their richness and strangeness. The clarifications offered in this paper are meant to help with that recognition.

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