I expand modal normativism, a theory of metaphysical modality, to give a normativist account of metaphysical explanation. According to modal normativism, basic modal claims do not have a descriptive function, but instead have the normative function of enabling language users to express semantic rules that govern the use of ordinary non-modal vocabulary. However, a worry for modal normativism is that it doesn’t keep up with all of the important and interesting metaphysics we can do by giving and evaluating metaphysical explanations. So, I advance modal normativism by arguing that metaphysical explanations also have a normative rather than descriptive function. In particular, non-causal explanatory claims have formal and semantic properties that make them expressively stricter than basic modal claims and so are better suited to express fine-grained aspects of semantic rules. A major payoff of my normativist account of metaphysical explanations is that it yields a plausible story about how we come to evaluate and know metaphysical explanations—we do this primarily by conceptual analysis. I also respond to a number of objections, including the objection that the epistemic payoffs of my view are not worth the metaphysical costs.

Keywords: grounding; explanation; modality; essence; real definition; normativism; quasi-realism; metaphysical laws

1. Introduction
Metaphysical explanations seem to concern non-causal, constitutive connections between things that are the case. For example, a metaphysical explanation of why a ball is red isn’t necessarily concerned with how the ball was causally manufactured but with what metaphysically makes it the case that the ball is red, e.g., that the ball is crimson rather than cerulean. According to modal normativism, basic modal claims, e.g., ‘necessarily, p’, ‘possibly, p’, etc., are not descriptive claims reporting on either real modal features or possible worlds. Instead, basic modal claims have a normative function in that they provide a useful way to express and endorse semantic rules governing the terms involved in those claims but while staying in the object language using rather than mentioning the relevant terms. The main reasons in favor of modal normativism are: (i) there is no need to eliminate or provide some sort of error theory for basic modal claims; (ii) but there is no need to posit possible worlds, primitive modal facts, or modal structure to explain what our modal claims are about or what makes them true; and (iii) our modal epistemology becomes very clear and straightforward since we come to know basic modal claims solely by conceptual analysis and straightforward empirical inquiry. In this paper, I will advance modal normativism beyond basic modal claims by developing and defending a normativist account of metaphysical explanation.

On the view I will develop and defend, metaphysical explanations do not give us a better understanding of a worldly metaphysical order. Instead, metaphysical explanations are conceptual explanations given in an object language using rather than mentioning the relevant concepts or terms. However, what makes my account a normativist account of metaphysical explanation, rather than a straightforward conceptualist account, is that metaphysical explanations are not attempts to describe concepts nor are explanatory claims made true by concept meanings or use. Instead, the focus isn’t on what explanations might assert but on

1 Thomasson (2007a, 2007b, 2009, 2013a, 2020b).
what they do.² And, on my normativist view, the function of metaphysical explanations is to coordinate and regulate the use of (non-explanatory) terms or concepts rather than to describe anything about either the world or our representations.³ In particular, metaphysical explanations express and endorse important features of semantic rules of use that cannot be adequately expressed using basic modal claims.

So, the function of the claim ‘the ball is red is because the ball is crimson’ is not to describe something about the way either representational or non-representational reality is non-causally structured, e.g., how REDNESS is substantially generated from CRIMSONNESS. Instead, the function of the claim is to express and endorse connections between the terms ‘crimson’ and ‘red’ that bear on their competent use—e.g., that one is conceptually entitled to apply ‘red’ once one is entitled to apply ‘crimson’ but not vice versa. In the end, metaphysical explanations regulate and coordinate proper concept use (i) by providing conceptual justification when a concept is actually used, and (ii) by providing concept users reasons to modify their own concept use in the future or correct the misuse of concepts by others. The primary kind of understanding gained from a metaphysical explanation is how to properly use concepts. However, metaphysical explanations also enable concept users to anticipate and predict how others will use the same concepts. Just as causal explanations are useful guides for navigating our non-representational lives, metaphysical explanations are useful guides for navigating our representational lives.⁴ Nonetheless, as I will explain, non-causal explanatory claims still count as true so long as a minimalist account of truth is adopted, and, insofar as metaphysical explanations are stated in an object language where expressions are used rather than mentioned, they are still about the world.

In outline: I will briefly review different ways to think about the form and content of metaphysical explanations (§2); then I will briefly explain modal normativism (§3); then I will give a general normativist strategy for metaphysical explanations (§4); then I will look at and respond to a number of objections (§5); finally, I will conclude by further explaining in what sense my account is still realist but take stock of the potential metaphysical costs of accepting my view (§6).

### 2. Metaphysical Explanations

Schaffer (2017) provides a general outline of metaphysical explanation as follows: metaphysical explanations are explanations in that they do not merely attempt to describe what is the case but explain why something is the case; they are metaphysical insofar as they seem to be about the non-causal “constitutive generation of a dependent outcome.”⁵ But the details on how to fully develop the more general thought vary considerably. Consider the following:

(1) The bicycle exists because of the existence of parts arranged bicycle-wise;
(2) These atoms are gold atoms because they each have atomic number 79.

On Schaffer’s more detailed account, metaphysical explanations are analogous to causal explanations—just as causal explanations involve claims about what causes what, metaphysical explanations involve real grounding claims about what grounds what, and this involves locating something in a network of metaphysical causation.⁶ So, why does a given bicycle exist? Because there are a sufficient number of parts arranged bicycle-wise and that is a sufficient metaphysical cause of the existence of the bicycle. Alternatively, one might think that in addition to, or rather than, real grounding claims, metaphysical explanations appeal to real definitions. For example, why are these atoms gold? Because these atoms have atomic number 79 and what it is to be a gold atom is to be an atom with atomic number 79.⁷

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² Cf. Ryle (1950) and Brandom (2008).
³ For simplicity, I will loosely move between talk of concepts, terms, and expressions of a language.
⁴ Cf. Hume (2008: §V), where causal inferences are supported by custom which “is the great guide of human life.” Miller and Norton (2017) argue that grounding is “(probably) in the head” and are inclined (but not committed) to think that their argument provides reasons not to posit grounding relations. I am sympathetic to this view. But I also think that even if we do not posit substantive grounding relations, we should not adopt an error theory or eliminate grounding talk or the practice of giving metaphysical explanations. Along with Dasgupta (2017: 76), I take metaphysical explanations to be customary. Thus, some story should be given for the function and practice of giving and evaluating metaphysical explanations.
⁵ Schaffer (2017: 303). See also Dasgupta (2017).
⁶ Schaffer (2016) and Wilson (2017). More generally, these approaches share some similarities with the account of scientific explanation put forward in Salmon (1984).
⁷ Kment (2014) and Dasgupta (2014b).
Additionally, Schaffer (2017) argues that a complete metaphysical explanation of some phenomenon will need to be informative and account for how that phenomenon is unified with similar phenomena. All of this, Schaffer argues, means that metaphysical explanations require *metaphysical laws*. Similarly, Kment argues:

"There is a far-reaching structural analogy between causation and grounding. Just as earlier states of the universe typically give rise to later ones by causing them, metaphysically more fundamental facts give rise to less fundamental ones by grounding them. Certain general metaphysical principles, which I will call "laws of metaphysics," play essentially the same role in grounding as natural laws do in causation."\(^8\)

So, it is possible that in addition to real definitions or real grounding claims, metaphysical explanations require metaphysical laws. Apparently, these laws may be underwritten by real metaphysical relations of some sort or they may merely reflect metaphysical regularities.\(^9\) Either way, metaphysical laws include general principles about natural kinds, mereological composition, set formation, etc.\(^10\)

At this point, an important terminological clarification needs to be made. If we wanted to be more technical, we could make a distinction between strict explanatory claims and non-explanatory claims. On this distinction, we would take strict explanatory claims to have the form ‘*q because p*’.\(^11\) Then we could distinguish non-explanatory claims as those that can be expressed without the term ‘because’.\(^12\) Non-explanatory claims might include straightforward empirical claims, e.g., claims regarding things like objects, mass, speed, color, shape, observable events, etc. But they might also include *distinctively metaphysical claims* regarding real definitions, composition, real constitution, metaphysical laws, real grounding, etc.\(^13\) Part of my overall argument is that strict non-causal explanatory claims of the form ‘*q because p*’ are not descriptive, i.e., they do not report on or track any worldly metaphysical facts; instead, they are normative in that they regulate and coordinate proper concept use. But this is not quite enough to give a robust account of metaphysical explanations for modal normativists. The reason is that some might be okay with my normativist reading of ‘because’ but think that the conceptual-normative connections expressed are still backed by worldly metaphysical facts, e.g., by worldly real grounding relations, real definitions, or metaphysical laws.\(^14\) And, as I will explain below, positing these worldly metaphysical facts does not sit well with the starting deflationary and methodological assumptions of modal normativism.

So, I am going to assume that what makes an explanation, i.e., an instance of ‘*q because p*’, a *metaphysical* explanation is that it ultimately appeals to some distinctively metaphysical claim (perhaps in addition to straightforward empirical claims). So, it might be that metaphysical explanations of *what* something is rely on real definitions. Or it might be that metaphysical explanations of *why* something is rely on real grounding claims.\(^15\) Furthermore, by "real grounding claims" I mean claims that seem to be about metaphysical causation, or what Dasgupta (2017) and Kovacs (2017) call "relations of production." Dasgupta thinks that the term ‘grounding’ should be associated with constitutive explanations rather than relations of production but acknowledges that this is a terminological choice. So, I am going to assume ‘*p grounds q*’ is distinct from ‘*q because p*’.\(^16\) Finally, it might be that all metaphysical explanations either explicitly or implicitly rely on metaphysical laws. Thus, I will assume that real definitions, real grounding claims, and metaphysical laws all fall into a family of important non-causal explanatory claims. My overall strategy, then, is to give an account

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\(^8\) Kment (2014: 5) and Schaffer (2017).

\(^9\) Sider (2011: 145).

\(^10\) Kment (2014: 159–173) and Dasgupta (2014: 567).

\(^11\) More accurately, the explanans is plural: *q because p, r, s, ...* See Dasgupta (2014a) and Raven (2015) for more on the sentential form of explanatory claims.

\(^12\) Dasgupta (2017).

\(^13\) Ibid.

\(^14\) Furthermore, Bennett (2018: 56–59) argues that what makes a relation a *building relation* is that it generates metaphysical explanations. So, on Bennett’s view claims about composition, realization, constitution, grounding, etc. all back metaphysical explanations. While beyond the scope of this paper, a suitably normativist account can be offered for all of Bennett’s building relations, e.g., see Thomasson (2013b) for a normativist account of real constitution.

\(^15\) Thanks to an anonymous reviewer for suggesting that this distinction be put in terms of what-explanations and why-explanations.

\(^16\) That is, I am assuming *separatism* in the sense discussed in Raven (2015) and Maurin (2019). Nonetheless, I think much of what I say about real grounding in §4.2.3 applies directly to constitutive explanation and could be adopted assuming monism about grounding and explanation.
of metaphysical explanation by giving a normativist characterization of metaphysical laws, real definitions, and real grounding claims.

In the end, there seem to be at least as many ways to characterize metaphysical explanation as there are ways to characterize scientific explanation: whether explanations must appeal to laws, or must appeal to relations of production, or can appeal to generalized identities, or appeal to some other unifying principles. However, I will remain relatively noncommital on whether there is a single best way to characterize metaphysical explanation for a normativist. This leaves room for those who accept modal normativism to develop their own preferred detailed account of metaphysical explanation. For example, though I will offer a normativist characterization of real grounding claims in §4.2.3, in the end the normativist might opt for eliminating all talk of relations of production and instead rely primarily on talk of real definitions, metaphysical laws, or even some suitably deflated notion of metaphysical (rather than physical) naturalness. So, my primary objective is to assume modal normativism and argue for characterizations of important non-causal explanatory claims that satisfy the deflationary and methodological aims of modal normativism.

The panoply of views on grounding and metaphysical explanation put forward over the past twenty years represents an important shift in metaphysics away from an emphasis on basic modality that dominated much of the 20th century. There is reason to think that metaphysics has moved from relying primarily on intensional resources—e.g., talk of supervenience, metaphysical necessity, possible worlds, counterfactuals, etc.—to relying heavily on hyperintensional resources—e.g., talk of grounding, real definitions, impossible worlds, counterpossibles, etc. However, even the use of mere intensional resources raises urgent questions about what sorts of metaphysical commitments we are required to make in order to accommodate our talk of, say, necessity and possible worlds, as well as epistemological questions about how we know these modal claims. The same important questions are raised when we start using hyperintensional resources such as real definitions and real grounding claims.

Let substantive claims about x be metaphysically on par with well-formed descriptive claims made in empirical inquiry (say claims made by journalists and scientists) yet cannot be known using only straightforward empirical methods and conceptual work. By “metaphysically on par” I mean that such substantive claims are descriptive insofar as their function in a theory is to reflect real, non-representational features or differences in the world rather than fitting into our theories as, say, pragmatic or instrumental claims. On a substantive reading, the distinctively metaphysical claims involved in metaphysical explanations (whether claims of metaphysical laws, real definitions, real grounding, metaphysical naturalness, etc.) are not just superficially analogous to the descriptive claims involved in scientific or causal explanations but are supposed to be metaphysically on par with these claims. Alternatively, on my view, these non-causal explanatory claims are not substantive but primarily instrumental insofar as they coordinate and regulate concept use. While I will not argue directly against substantive views of metaphysical explanation, I will argue that the benefits of not relying on substantive metaphysical assumptions outweigh potential costs.

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27 Kment’s (2014) account of metaphysical explanation is framed as a DN model of grounding. Wilch (2015) offers a DN account of metaphysical explanation. Schaffer (2017: 308), who offers a causal model in other work, expresses concern that DN accounts of metaphysical explanation cannot adequately account for the asymmetry of metaphysical explanation. Kovacs (2019) expresses skepticism towards the idea that metaphysical explanations are “backed” and instead gives an account in terms of unification. All of these approaches have merits and drawbacks, which I will not attempt to evaluate here.

28 My own preference is to be as pluralistic as possible about the form metaphysical explanations can take and what kinds of distinctively metaphysical claims they can appeal to.

29 See Nolan (2014). For a modal normativist account of non-trivial metaphysical impossibilities and counterpossibles see Locke (2019).

30 See Thomasson (2009) and Sider (2011: 187). Substantive claims about x are not necessarily ontologically committing but nonetheless are about non-representational reality (Sider 2011: 16). Alternatively, we might say: substantive features of x are ontologically on par with empirically tractable features of the world discovered by descriptive sciences yet cannot be discovered using only straightforward empirical methods and conceptual analysis. I return to this distinction in §6.

31 As an anonymous reviewer notes, it is a mistake to think philosophical issues surrounding scientific and causal explanation are any clearer. On the one hand, I agree that giving a proper philosophical account of scientific laws, nomic necessity, and scientific explanation comes with significant challenges. My own preference is to go with something along the lines of Hume (2008), Sellars (1958), Ryle (1950, 2000), and Brandon (2008). In fact, my own account can be seen as a generalization of these views on scientific explanation into metaphysics. On the other hand, I think that resolving disputes over particular causal explanatory claims, e.g., whether smoking causes cancer, are much easier to resolve than disputes over particular grounding explanatory claims, e.g., whether the nature of an ordinary object is grounded in its function, history, arrangement of parts, or material composition, especially if we treat metaphysical grounding and explanation as non-conceptual.

32 Schaffer (2009, 2016, 2017), Kment (2006, 2014), Sider (2011), Rosen (2015, 2017), Bennett (2018), Kovacs (2019) and many others seem to endorse either substantive claims or substantive features in general, as well as rely on these claims or features in their accounts of metaphysical explanation. Fine (2001, 2012) and Dasgupta (2014, 2017) seem to be less committal, though they seem to be committed to metaphysical explanations being non-conceptual.
This is an accomplishment with clear payoffs for modal normativism because it shows normativism can be expanded to accommodate hyperintensional metaphysics. But my view also provides a new way to think about metaphysical explanation that comes with epistemic advantages. Rather than thinking we need hyperintensional resources to better limit the structure of reality or divide logical space at substantive joints, on my view we need these resources because we need finer-grained tools for doing conceptual work. It follows that we come to evaluate and understand metaphysical explanations primarily through that conceptual work, and sometimes, also straightforward empirical inquiry. So, a major payoff of my normativist account is that it yields a straightforward story about how we come to know metaphysical explanations.\textsuperscript{23}

3. Modal Normativism

Modal normativism presupposes that competent use of modal and non-modal vocabulary is governed by semantic rules of use or consequences of those rules. These rules are stated in a metalanguage where the relevant terms are mentioned rather than used.\textsuperscript{24} Importantly, however, there are object language analogues of the rules where the relevant terms are used rather than mentioned. These object language analogues often utilize basic modal language and appear to state the existence, identity, and persistence conditions of the items to which the relevant terms pertain to refer. However, according to modal normativism, these basic modal claims

primarily serve the prescriptive function of expressing [but not describing] semantic rules for the terms used in them, or their consequences, while remaining in the object-language.\textsuperscript{25}

In many cases, the metalinguistic rules, e.g., “Apply ‘bachelor’ only if ‘unmarried’ applies,” are expressed in the object language using simple modal operators, e.g., “Necessarily, all bachelors are unmarried.” However, sometimes the rules are illustrated using counterfactuals, e.g., claims that illustrate the conditions under which an entity could or could not survive.\textsuperscript{26} Importantly, basic modal claims are neither about nor do they describe semantic rules. Basic modal claims are still about whatever the terms in the claim purport to refer to insofar as the claims are made in the object language using the relevant terms.\textsuperscript{27}

Why modal normativism? With respect to the metaphysics of modality, the advantages are that, since basic modal claims are not descriptive claims, there is no task of trying to find truthmakers for modal claims, or there is no trying to explain why, say, the existence of spatiotemporally and causally isolated possible worlds make any difference to what modal claims are true at the actual world, or there is no trying to explain how exactly sui generis modal properties connect with non-modal properties to metaphysically ensure that, e.g., actual samples of water must be H\textsubscript{2}O. Furthermore, modal normativism provides a clear and plausible story for how we come to know basic modal claims made in metaphysics: we come to know modal truths primarily through conceptual analysis and by making straightforward empirical discoveries.\textsuperscript{28}

For example, coming to know that water is necessarily H\textsubscript{2}O does not require that we have some insight into substantive modal properties of water. Suppose there is a rule for ‘water’, stated in a metalanguage, along the lines of

\begin{equation}
(3) \text{Apply ‘water’ to some sample of watery stuff iff that sample has chemical composition } C (\text{where } C \text{ is determined by the chemical composition of whatever sample was used in the actual baptism of the term ‘water’}).
\end{equation}

According to modal normativism, this rule, along with the straightforward empirical information that the chemical composition of the watery stuff in our environment is H\textsubscript{2}O, is expressed with the de re modal claim ‘Water is necessarily H\textsubscript{2}O.’ For the normativist, this is all that basic modal claims amount to.\textsuperscript{29}

\textsuperscript{23} However, in the final section I will address a worry that the epistemic advantages are not worth the metaphysical costs. Thanks to an anonymous reviewer for raising and encouraging me to address this worry more explicitly.

\textsuperscript{24} That is, if the rules of use are ever stated, or even stateable to begin with. Semantic rules of use are somewhat analogous to rules of grammar. Presumably whether or not an explicit formalization of every rule of grammar is provided, or is even possible, there are at least implicit norms that guide the proper construction of sentences.

\textsuperscript{25} Thomasson (2007b: 136).

\textsuperscript{26} Thomasson (2007a: 62).

\textsuperscript{27} Thomasson (2007b: 140).

\textsuperscript{28} One might object that metaphysical inquiry need not be confined to straightforward empirical inquiry and conceptual work but also can appeal to inference to the best explanation or theoretical virtues. See Thomasson (2014a: 2–3) for concerns with appealing to methods such as inference to best explanation or theoretical virtues to resolve metaphysical disputes.

\textsuperscript{29} Thomasson (2007b, 2013a, 2020b); see also Sidelle (1989).
4. Metaphysical Explanations for Modal Normativists

In §4.1, I will talk about the limitations of modal normativism and what exactly my normativist account of metaphysical explanation needs to accomplish. In §4.2, I will offer a normativist account of three kinds of non-causal explanatory claims: metaphysical laws, real definitions, and real grounding claims.

4.1. Essential needs

Unfortunately, there are good reasons to think that basic modal vocabulary is not enough to do all of the important and interesting metaphysics we might want to do. For example, Fine (1994) famously argues that essence cannot be reduced to modality. Consider:

(4) Necessarily, the set \{Socrates\} exists iff Socrates exists;
(5) The existence of Socrates is essential to the existence of the set \{Socrates\};
(6) The existence of the set \{Socrates\} is essential to the existence of Socrates.

Arguably, (4) and (5) are true, but (6) is false. These observations imply that essence cannot be reduced to modality, which appears to be too coarse grained to capture facts about essence. Similar arguments can be made regarding metaphysical explanation in general: it seems true that the set \{Socrates\} exists because Socrates exists, but it seems false that Socrates exists because the set \{Socrates\} exists. These judgments imply that basic modal claims are not sufficient tools to provide metaphysical explanations. Presumably, metaphysical explanations are interesting and important. So, in order to do interesting and important metaphysics, we need resources that go beyond basic modality.

Thus, I am going to assume that eliminativism about metaphysical explanation is not an option for the normativist. My task, then, is to provide an account of metaphysical explanation that does the following. First, my account should respect the explanatory judgments and observations reflected by consideration of, among other examples, the claim that the set \{Socrates\} exists because Socrates exists but not the other way around. Second, by my account, metaphysical explanations ought to come out intellectually interesting and important. Third, my account ought to explain how we can reliably know metaphysical explanations and how non-causal explanatory claims fit with descriptive claims made in straightforward empirical inquiry (say claims made by journalists and scientists). Finally, my account should be consistent with the starting deflationary and methodological assumptions of modal normativism: (a) my account should not entail that metaphysical explanations are substantive in the sense outlined above, e.g., my account should entail that all metaphysical explanations can be evaluated using only conceptual work and straightforward empirical inquiry; and (b) my account should explain the distinctively metaphysical vocabulary used in metaphysical explanations in terms of non-descriptive use and function (rather than, say, representationalist tools of correspondence or reference).

4.2. Explanation made easy

I am assuming that what makes an explanation metaphysical is that it ultimately appeals to distinctively metaphysical claims such as metaphysical laws, real definitions, or real grounding claims. I will argue that these claims play a regulatory role in discourse rather than a descriptive role. In this way, these claims are similar to their basic modal cousins discussed in §3. However, I will argue that, unlike basic modal claims, real definitions and real grounding claims have important semantic and formal properties that make them better suited for coordinating and regulating language or concept use. While each property here has been challenged in the literature, by many accounts: real definition expressions such as ‘...what it is to be...’ are

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30 What Miller and Norton (2017: 3060–3061) call “grounding judgments and observations”.
31 What Dasgupta (2017: 83–84) describes as the methodological and intellectual primitivity of constitutive explanation.
32 Importantly, none of this means that coming to an agreement on any particular metaphysical explanation, e.g. in what sense gender is socially constructed, is going to be superficially easy. Resolving these disputes will still take significant effort on my normativist account. Conceptual work is comparatively easier and more straightforward than “heavyweight” metaphysical theorizing but still challenging nonetheless.
33 My normativist account of metaphysical explanation builds on Gilbert Ryle’s account of the nomological ‘because’ (see Ryle 1950: 241–243, and Ryle 2000). On Ryle’s view, explanatory claims of the form ‘q because p’ are not descriptive claims, and in making these claims we are not just asserting an explanation but using what is normally expressed by important conditional claims, what Ryle calls “inference tickets.” On Ryle’s view, the function of inference tickets is to regulate the practice of making, giving, and evaluating inferences. On my view, the “inference tickets” are the distinctively metaphysical claims that make an explanation a metaphysical explanation rather than a nomological explanation.
hyperintensional and non-monotonic; real grounding expressions such as ‘...grounds...’ are hyperintensional, non-monotonic, asymmetric, irreflexive, and transitive.

However, on my view, the primary reason we need expressions with (at least some of) these formal properties is not that such properties are better reflections of the nature of reality, how reality is non-causally structured, or how one part of reality is non-diachronically generated from another. According to my normativist account, the reasons why non-causal explanatory expressions have these formal properties are that: (i) basic modal expressions lack these properties; and (ii) having expressions with these formal properties gives us finer-grained tools for regulating and coordinating the proper use of the terms or concepts involved in those distinctively metaphysical claims. I will argue for this view by developing a normativist characterization of metaphysical laws, real definitions, and real grounding claims in more detail, and then defend the more general view from a number of objections.

4.2.1. Rules of use and conceptual laws

On my normativist proposal, metaphysical explanations function to regulate and coordinate the use of metaphysically important terms and concepts. As such, metaphysical explanations need not be supported by generalizations over substantive features of reality as might be the case with Schaffer and Kment’s metaphysical laws. Instead, some metaphysical explanations involve conceptual truths that reflect metalinguistic conceptual laws, which are generalized norms that cover important features of concept use that bear on conceptual competency. These generalizations cover core semantic rules of use. However, the generalizations also cover features of concept use tied up with the history and function of a concept or term, which also bear on competent use. Let me explain.

According to modal normativism, the expressions of a (natural) language are governed by rules of use, or consequences of those rules. The rules governing the use for some expression ‘p’ at least include: (i) the actual application conditions for ‘p’, which are rules that state the conditions under which an expression is successfully applied; (ii) the actual co-application conditions for ‘p’, which are rules that state under what circumstances an expression may be successfully applied twice; and (iii) the actual conceptual entailment relations between ‘p’ and other expressions of the language, which state when the satisfaction of the application conditions for ‘p’ conceptually guarantees the satisfaction of the application conditions of other expressions of the language, e.g., ‘the ball is crimson’ conceptually entails ‘the ball is red’.

These conditions and relations bear on competent language use. All things being equal, someone who refuses to apply ‘red’ to something to which they have already applied ‘crimson’ demonstrates conceptual confusion and can be corrected by other language users. What accounts for an expression’s actual rules of use? One part of the picture is that rules are needed for determinate reference when the referent of an expression is established, e.g., in a ‘christening’ of the expression. Another part of the overall metalinguistic picture is historical: the rules reflect relatively stable patterns and regularities of use that occur over time, presumably patterns and regularities that are important to coordinating linguistic and non-linguistic practices. So, yet another important part of the picture is that our expressions and concepts serve important but varied functions.

Modal normativism rejects the idea that all expressions serve, or ought to serve, a purely descriptive function. Instead, modal normativism endorses a form of semantic functional pluralism where various expressions (e.g., mathematical, modal, mental, moral, empirical, etc.) all possibly have different roles to play in our linguistic (and other, e.g., social) practices, and no one role is better than another independently of what we are trying to use those expressions to do. For example, perhaps the function of mathematical terms is to simplify statements of the laws of nature rather than to track substantive mathematical objects and relations. Alternatively, ordinary object terms, e.g., ‘Socrates’, are used to track the location of macro-sized objects. Implicit knowledge of the different functions of the multitude of expressions found throughout the many fragments of a (natural) language (e.g., the mathematical, modal, mental, and empirical fragments) bears on counting as a competent user of those expressions. For example, an attempted use of terms

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34 See also Sider (2011: 145) who takes metaphysical laws to reflect non-conceptual regularities and involve “only the abstract and general notions of interest to metaphysics.”

35 Thomasson (2007a: 38–45), Thomasson (2014a: 89–94), and Thomasson (2020b).

36 Thomasson (2007a, 2009): For example, if we attempt to establish the referent of some name ‘Gorp’, whether the term refers to something that goes bump in the night, a piece of copper, a sum of simples, an event, an abstract object, etc. will be indeterminate unless there is first some intention or plan to use the term in one way rather than another.

37 Cf. Lewis (1969), Price (2011), Dutilh Novaes (2015), and Thomasson (2020a).

38 Thomasson (2007b, 2020a), Sellars (1958: 281–284), and Price (2011).
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I claim that, in addition to rules of use governing particular expressions, there are normatively significant patterns and regularities of use covering a broader fragment of a given language that generalize into conceptual laws. The conceptual laws would be stated, if at all, in a metalanguage mentioning rather than using the expressions of the relevant fragment. However, I claim that some conceptual laws have object language analogues in the form of metaphysical laws, which appear to be general principles covering things like sets, events, compositions, social kinds, natural kinds, etc.

To take one example, consider natural kinds. According to normativism, the basic modal claim

(7) Gold atoms necessarily have atomic number 79

functions to express and endorse a rule governing the use of ‘gold atom’:

(8) Apply ‘gold atom’ to $x$ if and only if ‘atomic number 79’ applies to $x$.

However, (8) is plausibly a consequence of a more general conceptual law that covers the use of some important domain of names, e.g., of natural kinds. For example, there may be a general law (stated in a metalanguage if at all) governing the use of a group of important sortal terms, $\Pi$, where every ‘$S$’ in $\Pi$ purportedly refers to some kind $K$ individuated by some property, $P_N$, with an important and interesting characteristic according to some theory of natural kinds, e.g., perhaps a property that plays an unifying role in scientific explanations, or one that permits strong inductive inferences, or a teleological property, etc.:

(9) For every sortal ‘$S$’ in $\Pi$ there is a predicate ‘$P_N$’ such that ‘$S$’ may be applied to $x$ iff $x$ satisfies ‘$P_N$’, where the extension of ‘$S$’ is non-empty iff the extension of ‘$P_N$’ is non-empty.

On my view, there is an object language analogue of this conceptual law that is stated in the form of a metaphysical law about natural kinds:

(10) For all natural kinds $K$, there is a property $P_N$ such that an individual $x$ belongs to $K$ iff $x$ exemplifies property $P_N$, where $P_N$ is necessary and sufficient for being a $K$.

Generalizing the basic normativist idea, the metaphysical laws are implicit definitions of the terms involved in the statements of those laws, e.g., ‘natural kind’, and so just are object language illustrations of the conceptual laws. So, while (9) is an example of a metalinguistic conceptual law, (10) is an object language conceptual truth, which can be appealed to in an object language metaphysical explanation, e.g., why some particular sample is gold, or even why gold is a natural kind but not gold-on-Earth.

Before proceeding, it is very important to stress that semantic rules and conceptual laws are not descriptive claims. So, nothing needs to make the rules and laws true. According to the sketch I’ve provided, the conceptual laws are broader norms that come about from significant regularities of use, e.g., from the functions that the relevant family of concepts or terms serve. The conceptual laws are more like general Humean customs and associations than linguistic or conceptual hypotheses.

4.2.2. Real definitions

According to modal normativism, claims of metaphysical necessity are object language expressions and endorsements of rules that govern the use of the terms involved or consequences of those rules. But this means that basic modal claims come with an expressive limitation. For example, suppose the following claim is true:

(11) Necessarily, if someone is a bachelor, then that person is unmarried and triangles are three-sided.

40 Hume (2008).

39 Importantly, (8) is a possible metalinguistic statement of a semantic rule but (7) is not about any rule or made true by any rule.
But it isn’t clear what effective rule of ‘bachelor’ this basic modal claim is expressing.\textsuperscript{41} Consider that I could hold strange views about geometry or be an eliminativist about general shape terms, and so would reject the modal claim involving triangles, yet still be perfectly competent with respect to my use of the term ‘bachelor’ and appropriately correct others when they try to apply ‘bachelor’ to married persons. Instead, the best explanation is that (11) is expressing a general consequence of some effective rule that governs ‘bachelor’, i.e., a general consequence of some actual constitutive rule.\textsuperscript{42}

What this means is that basic modal claims are not expressively strict enough to convey only the constitutive rules governing how specific terms and concepts ought to be used. However, expressions such as ‘...what it is to be...’ are arguably non-monotonic (even when adding necessities), and this semantic feature gives us more regulatory expressive power by allowing us to express constitutive rules only while remaining in the object language using the very terms being regulated. Consider:

(12) What it is to be a bachelor is to be unmarried;
(13) What it is to be a bachelor is to be unmarried and for triangles to be three-sided.

Arguably, (12) is true while (13) is false. On my view, rather than describing a worldly fact about essences or describing the substantive nature of whatever a real definition purports to be about, real definitions serve to endorse and express constitutive rules of use. This makes up for the expressive weakness of basic modal terms which allow us to express and endorse both constitutive rules and their consequences.

In addition, real definitions are hyperintensional insofar as they do not permit the substitution of intensionally equivalent expressions. For example, let an odd-even number be an odd number that is divisible by two without remainder. Odd-even numbers are metaphysically impossible.

(14) Gold atoms are necessarily distinct from odd-even numbers;
(15) For all $x$, never apply ‘gold atom’ and ‘odd-even number’ to $x$.

According to normativism about basic modal claims, (14) is an object language illustration of (15). Of course, it isn’t clear how effective (15) is in governing the proper use of ‘gold’ because ‘odd-even number’ does not apply to anything whatsoever. For example, a person’s use of the term ‘gold’ might trivially conform to (15) because their overall language use conforms to the more general rule: for all $x$, do not apply ‘odd-even number’. But such conformity isn’t significant evidence that the person counts as a competent user of the term ‘gold’, e.g. they still might try to apply ‘gold’ to samples of pyrite. So, while (7) and (14) are both true and both illustrate rules of language use, (7) seems to be a much better candidate illustration of how ‘gold’ is to be properly used. But, of course, (7) and (14) are both true claims stated using basic modal terms. So, (7) only has limited use.

Instead, the difference between the rules (8) and (15) is best expressed in the object language using claims seemingly about the real nature of gold. Consider that (16) is true while (17) is false:

(16) What it is to be a gold atom is to be an atom with atomic number 79;
(17) What it is to be a gold atom is to be distinct from odd-even numbers.\textsuperscript{43}

The reason that (16) is more illustrative of how to properly use ‘gold’ than (7) is that claims formed with ‘...what it is to be...’ do not always allow substitution of intensionally equivalent claims, and this semantic feature makes them expressly stricter than basic modal claims. So, non-monotonicity and hyperintensionality enable us to use ‘...what it is to be...’ to express the constitutive rules of use of a term while excluding consequential rules the term might also feature in. On my view, this is an important function of giving an object language metaphysical explanation of what something is.

\textsuperscript{41} We might say that a rule governing the use of a term is effective when it actually moves a person or community to conform their use of that term to the rule regardless of other possible collateral beliefs or linguistic plans (or actually moves a person or community to correct violations of the rule by others).

\textsuperscript{42} Compare Fine’s (1994) distinction between constitutive vs. consequential essences. More needs to be said, but the normativist can roughly take a rule governing ‘$p$’ to be constitutive in a given framework just in case the rule is effective with respect to ‘$p$’.

\textsuperscript{43} There is a sense in which gold not being identical to any number, though necessary, is a metaphysical accident relative to having 79 protons. Why? Consider that the following counterpossible seems true: if there were no numbers, then gold would still have 79 protons (assuming that ‘gold has 79 protons’ would then be distinct from ‘the number of protons had by gold is 79’).
Locke: Metaphysical Explanations for Modal Normativists

Why should the difference between (8) and (15) be sufficient enough to say that (8) but not (15) is a constitutive rule that needs a special device in the object language in order to be endorsed as such? For example, shouldn’t we say that (8) is an effective rule governing our use of ‘gold’, but not (15), because of some substantive metaphysical joint that determines the referent of ‘gold’? I will return to a related point in §5.3. For now, the normativist thinks that a better explanation is that (8), which is a rule stated in terms of gold’s empirically discovered physical properties, plays an effective role in coordinating how the relevant empirical terms are used because it is more helpful for forming empirically adequate explanations and making useful predictions. But rules preventing the use of ‘odd-even number’ play little to no role in such coordination. This metalinguistic and normative feature of the use of ‘gold’ is not adequately expressed using (7), but it is with (16).

4.2.3. Grounding claims

On my view, metaphysical explanations are conceptual explanations perhaps along with some relevant empirical facts. When someone demands a metaphysical (rather than causal) explanation for why Julie is a bachelor, a perfectly good explanation is that (a) Julie is unmarried and (b) what it is to be a bachelor is to be unmarried. So, in addition to a straightforward empirical fact about Julie, this explanation is appealing to a real definition, which expresses and endorses a constitutive rule that governs the use of ‘bachelor’. But when someone demands a metaphysical explanation for why the set {Socrates} exists, it isn’t clear that an explanation appealing to real definitions will be sufficient. The person could be interpreted as demanding an explanation of the metaphysical cause of the singleton set, e.g., how it was ontologically generated, rather than of the nature of the singleton. It isn’t clear that ‘…what it is to be…’ conveys any direction between the relata or a sense of metaphysical generation. However, real grounding claims, when taken as claims about relations of production, can convey the ideas of direction and generation. Here are other possible examples of real grounding claims:

(18) Facts about moral goodness are grounded by physical facts;
(19) Facts about moral goodness are grounded by facts about God’s will;
(20) The fragility of a crystal vase is grounded by the crystalline bonding of its molecules.

Talk of relations of production appears to be substantive, so compared to real definitions justifying the use of real grounding expressions might present a bigger challenge for normativism.

As implied in the Kment quote above, both causation and real grounding can be taken to come with an ordering between the relata—earlier events nomically cause later ones and more fundamental facts metaphysically cause less fundamental facts. When it comes to talk of metaphysical causation, fundamentality, or related notions of structure and metaphysical naturalness, the normativist is cautious. For example, for the normativist, talk of naturalness at best reflects the instrumental value of using some concepts, say the natural kind concept ‘lithium’, rather than others, say the concept ‘lithium on Earth’. I propose that, for the normativist, talk of metaphysical causation or ontological production functions to express relations of conceptual priority while remaining in the object language using rather than mentioning the relevant terms. I explain conceptual priority in terms of conceptual warrant and conceptual precedence. Since, on my view, metaphysical explanations just are conceptual explanations, the quality of a metaphysical explanation given in terms of real grounding claims depends on the actual conceptual priorities those claims reflect.

On my proposal, one can appropriately introduce ‘x grounds y’ whenever:

(i) the use of ‘y’ is conceptually warranted primarily by the use of ‘x’ (along with the relevant conceptual laws); and
(ii) ‘x’ conceptually precedes ‘y’; and
(iii) the relevant empirical conditions have been satisfied, if there are any.

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44 We could follow Rosen (2015) and assume that what it is to be x is to be y just in case y is in the nature of x and being x is metaphysically grounded in being y. Then ‘…what it is to be…’ claims will imply a direction between the relata. However, what I mean by ‘real definition’ is closer to a generalized identity. I take it there might be cases where x and y are mutually definable (i.e., that to be x just is to be y and vice versa) which will mean that neither x nor y grounds the other assuming that grounding is irreflexive. Furthermore, just as some identity claims are useful in scientific explanations, e.g., the Ideal Gas Law, it seems that some identity claims will be useful when giving metaphysical explanations. So, for now I’m just going to assume that real definitions and grounding are independent, which makes my task more challenging anyway. However, see Correia and Skiles’ (2019) development of generalized identity and its relationship with essence and grounding.

45 Thomasson (2020a).
Before elaborating, an important clarification is required. I am not offering (i)–(iii) as truth conditions for object language grounding claims or even as an object language account of the nature of grounding. That would potentially make object language grounding claims about concepts, which is not part of my view. What I am offering is a metalinguistic characterization of real grounding claims that accounts for the practice of making, accepting, and rejecting these claims. I will argue that my characterization still respects real grounding judgments and observations, as well as the interest and importance of real grounding claims, but without treating real grounding claims as epistemically and metaphysically on par with descriptive claims made in empirical inquiry.

The idea behind (i) is relatively straightforward. Consider the real grounding claim:

\[(21) \text{ The existence of the set } \{\text{Socrates}\} \text{ is grounded by the existence of Socrates.}\]

Part of what (21) normatively expresses is that the introduction and use of ‘the set {Socrates}’ is conceptually warranted by the satisfaction of the application conditions of ‘Socrates’, perhaps along with more general conceptual laws governing the introduction of set theoretic terms. Although the introduction and use of ‘the set {Socrates}’ is not conceptually warranted by the sole introduction and use of a geometric term such as ‘triangle’, supposing there are no constitutive conceptual entailments between claims strictly about triangles and claims strictly about the set {Socrates}, so it is not appropriate to introduce the claim ‘the existence of the set {Socrates} is grounded by the fact that triangles are three-sided.’ More can be said, but for now it is enough to note that conceptual warrant reflects the normative force of the conceptual entailment relations discussed in 4.2.1. More generally, conceptual warrant will be partly determined by the extent to which a given use of a concept promotes the goals and values of concept users, e.g., perhaps the goals of developing empirically adequate explanations and predictions, of developing unified and consistent theories, of the facilitation of ease and coordination in communication, or promoting shared ethical, political, and social values.

On the most basic interpretation, (ii) captures the idea that grounding claims are asymmetric, e.g., if ‘x grounds y’ is true, then ‘ygrounds x’ is false. For example, while (21) seems plausible enough, the following seems false:

\[(22) \text{ The existence of Socrates is grounded by existence of the set } \{\text{Socrates}\}.\]

On my view, this asymmetry in object language grounding claims does not reflect anything substantive about ontological generation or fundamentality. Instead, the object language asymmetry reflects a conceptual asymmetry between ‘the set {Socrates}’ and ‘Socrates’—namely, satisfaction of the application conditions for ‘Socrates’ are included in the application conditions for ‘the set {Socrates}’ as a constitutive prerequisite, but not vice versa.

More generally, conceptual precedence can capture general intuitions of ontological generation, e.g., when the existence of Ks is a sufficient metaphysical cause of the existence of Bs. Suppose the actual application conditions for ‘K’ make no mention of the existence of Bs. Further, suppose that the satisfaction of the actual application conditions for ‘K’ is all that is required to say that Ks exist. Next, suppose that the existence of Ks, perhaps in addition to some other more general conditions, form the application conditions of ‘B’, the satisfaction of which is sufficient to say that Bs exist. Then given that the application conditions for ‘K’ are satisfied, perhaps along with other conditions, we have all we need to now say (in the object language) that Bs exist and that the Bs have been ontologically generated by the existence of Ks. So, given that the application conditions of ‘Socrates’ are satisfied, the normativist can straightforwardly capture the observation that

\[\text{perhaps along with some other more general conditions, form the application conditions of ‘B’},\]

\[\text{the satisfaction of which is sufficient to say that Bs exist. Then given that the application conditions for ‘K’ are satisfied, perhaps along with other conditions, we have all we need to now say (in the object language) that Bs exist and that the Bs have been ontologically generated by the existence of Ks. So, given that the application conditions of ‘Socrates’ are satisfied, the normativist can straightforwardly capture the observation that}\]

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46 Perhaps a conceptual law endorsed by an object language conceptual truth, e.g.: for any possible range of entities found up to stage n, there is a set at stage n + 1 that contains all and only those entities just in case those entities exist. See Boolos (1983) and Schaffer (2017).

47 The details of conceptual entailment need to be worked out. But I assume that it requires more than truth preservation, is more fine-grained than logical entailment, and is supported by constitutive rules of use as well as features like concept history and function.

48 In particular, the effective conceptual entailment relations (see fn.41).

49 Alternatively, counterexamples to asymmetry and irreflexivity may prompt reformulating grounding claims. For example, ‘grounds’ may need to be stated as a four-place relation such as ‘e plus c is grounded in f plus c’ (cf. Jenkins 2011). On my account, ‘e’ and ‘f’ will be supported by empirically tractable facts and ‘c’ and ‘c’ will be supported by linguistic-conceptual truths or modes of presentation. Similarly, counterexamples to transitivity might mean that ‘grounds’ needs to be stated contrastively as ‘s rather than r is grounded in x rather than y’ (cf. Schaffer 2012).
the existence of Socrates ontologically generates the existence of the set \{Socrates\} but not the other way around.\(^{50}\)

To summarize, the reasons it is appropriate to introduce (21) but not (22) are conceptual reasons. First, the satisfaction of the application conditions for ‘Socrates’ conceptually warrants the introduction of ‘the set \{Socrates\}’.\(^{51}\) Second, ‘Socrates’ conceptually precedes ‘the set \{Socrates\}’ since the satisfaction of the application conditions for ‘Socrates’ is a constitutive prerequisite for the satisfaction of the application conditions of ‘the set \{Socrates\}’, but not the other way around.\(^{52}\) Like conceptual warrant, conceptual precedence reflects the conceptual entailment relations discussed in 4.2.1. Unlike conceptual warrant, conceptual precedence is limited primarily to asymmetric conceptual entailments. However, I will now argue that both conceptual precedence and warrant cover more than conceptual entailment relations but also cover other features of use that reflect conceptual priorities and are important to the proper use of the relevant concepts.

While there are conceptual regularities between expressions found throughout different fragments of a (natural) language, some rules governing the use of an expression relative to one fragment may take historical, functional, or theoretical priority over other rules governing the same expression relative to different fragments. For example, consider some natural language, e.g., ordinary English, that has both a fragment covering ordinary objects, e.g., a fragment including expressions that pick out persons, and a fragment that includes set theoretic expressions, e.g., a (consistent) set theory. Then, the terms ‘Socrates’ and ‘the set \{Socrates\}’ can formally be applied in all and only the same circumstances. Nonetheless, the original intended use of ‘Socrates’ arguably has both historical and functional priority over the term’s connection with the use of ‘the set \{Socrates\}’: long before the development of any set theory, people competently used the term ‘Socrates’ in order to talk about the teacher of Plato. This is because, all things considered, the primary function of ‘Socrates’ is not to help track abstract set-theoretic objects but to track a person across time and space. So, the rules governing the use of set theoretic terms do not effectively bear on the proper use of ‘Socrates’.\(^{53}\) This fact about conceptual history and function is reason to think that the rules governing ‘Socrates’ take conceptual priority over the rules governing ‘the set \{Socrates\}’ in ordinary English. So, it is not appropriate to introduce (22), which might incorrectly be taken to convey that the competent use of ordinary object terms first requires acquiring and competently using set theoretic terms.

The point about conceptual function is worth emphasizing because it shows one way the normativist can account for the interest and importance of disputes over metaphysical explanations. Dasgupta (2017) argues that if we take causal and metaphysical explanations seriously, then they must be intellectually primitive in that these explanations limn logical space in important and interesting ways.\(^{54}\) For example, causal explanations are arguably important because, in addition to dividing our logical space up in ways that are empirically adequate (i.e., fit with our data and observations), they help us predict and keep track of material phenomena, navigate our environments, materially instantiate our plans and intentions, etc. One might think that metaphysical explanations are important because they divide our logical space in ways that are metaphysically adequate, i.e., fit with real, non-representational differences in the world that cannot be discovered using only conceptual analysis and straightforward empirical inquiry. My view rejects this story of the interest and importance of metaphysical explanations since metaphysical explanations just are conceptual explanations. However, it would be very problematic for my account if it turned out that since (i)

50 This is assuming Thomasson’s (2014a) account of ‘exists’.
51 Conceptual warrant is not sufficient on its own, i.e., we also need conceptual precedence. There is a weak sense in which the successful introduction of ‘the set \{Socrates\}’ conceptually warrants the introduction of ‘Socrates’ since the introduction of ‘the set \{Socrates\}’ requires the satisfaction of the application conditions for ‘Socrates’. So, if I know the application conditions for ‘the set \{Socrates\}’ are fulfilled, it seems I am justified in assuming that the application conditions for ‘Socrates’ are fulfilled.
52 What about ‘the ball is red is grounded by the ball being crimson’? Surely, the applications conditions of ‘crimson’ are not included in the application conditions of ‘red’ as a constitutive prerequisite. But, arguably, that the application conditions of some determinate shade are satisfied is included as a constitutive perquisite. Regardless, conceptual precedence minimally requires effective one-way conceptual entailments, and there is such an entailment between ‘x is red’ and ‘x is crimson’. Furthermore, I am not committed to real grounding being the best way to account for determinate-determinable relations, which may need an alternative normativist characterization.
53 One reason for this is that a language minus set theoretic terms would be empirically and functionally similar enough to a language with set theoretic terms with respect to keeping track of Socrates though not sets (also see fn-41). In my manuscript “Conceptual and Linguistic Counterparts,” I clarify and argue for the claim that (homophonic) terms in one language have semantic counterparts in other languages (Locke 2020). On my view, semantic counterparts are picked out by similarity relations ranging over semantic features such as reference, patterns of use, modes of presentation, semantic type, function, history, etc. I then show how my view can be used to deflate debates over the nature of word meaning and can be applied in the context of conceptual analysis and engineering.
54 Dasgupta (2017: 83–84).
these explanations are conceptual or terminological, and (ii) conceptual and terminological disputes are neither important nor interesting, then (iii) metaphysical explanations fail to be intellectually primitive. My response is to reject (ii). To build on the points made above, I propose that metaphysical explanations are interesting and important because they help organize our concepts in ways that are conducive to successful empirical inquiry, but also in ways that are conducive to dividing logical space in a way that is normatively adequate in that metaphysical explanations help coordinate concept use in a way that helps us meet our shared ethical, social, and political goals and values. A large part of this response turns on conceptual function. Here are two examples.

First, building on Price (2011), on my view conceptual function is an important reason why non-reductionists about normativity, e.g., many ethical expressivists, will reject claims like (18), i.e., that moral goodness is grounded by physical properties. Assuming expressivism, even if the correct application of normative terms perfectly covaries with the correct application of some non-normative terms for physical properties across actual and hypothetical circumstances, the function of normative terms is not to track physical properties, e.g., pleasure or health, but to express, say, pro or con attitudes towards various actions or persons. So, that is one reason why the satisfaction of the application conditions for certain physical expressions will not conceptually warrant the introduction of moral terms, e.g., someone who plays the language game of ethics by using ethical terms to successfully track physical properties can be conceptually rebuked.

Second, consider a language in which ‘God exists’ and ‘God’s will is omnibenevolent’ are true. It might be that ‘is morally good’ and ‘is God’s will’ are applied in all and only the same circumstances (real or hypothetical). One way for the normativist to interpret the claim ‘moral goodness is not grounded in God’s will’ is that it conveys that theological language does not (or ought not) take conceptual priority over normative and evaluative language. That is, the real grounding claim conveys that normative and evaluative language is not (or ought not be) conceptually defined in terms of theological language. Perhaps this is because keeping them conceptually independent better helps us meet our collectively shared goals and values. Thus, even if it is ultimately a conceptual matter, whether to accept or reject (19) on my view has important and significant consequences, e.g., for what reasons and motivations are acceptable for proposing or enforcing certain social norms or laws.

In the end, object language questions about what grounds what reflect questions about conceptual priority. Questions about conceptual priority are essentially tied to questions about the function, genealogy, and the empirical or normative usefulness of a concept, and this certainly divides logical space in interesting and important ways. Thus, on my view, real grounding, and metaphysical explanation more generally, is intellectually primitive.

5. Objections
I have just argued that the function of metaphysical explanations is best characterized as expressing and endorsing important features of semantic rules of use, features that cannot be captured using basic modal claims, e.g., relations of conceptual priority between expressions or which rules are constitutive rather than consequential. This means that normativism can account for metaphysical explanations without taking these to involve substantive claims or positing the existence of substantive properties and relations. I will now defend my view from potential objections, which will also allow me to further elaborate on how my account respects explanatory observations and judgments while also respecting the central deflationary and methodological assumptions of modal normativism. In turn, I think that my account demystifies metaphysical explanations.

5.1. Metaphysical explanations are not normative
Thomasson (2007b, 2013a, 2020b) develops modal normativism from the observation that the deontic use of modal operators provides a useful way of stating the rules of a game in an indicative rather than an imperative form. For example, when communicating and reasoning about the rules of chess, the indicative modal claim ‘the pawn must never move backwards’ is more useful than the imperative claim ‘do not move the pawn backwards!’ because, for example, the former can more naturally be embedded in conditions.
Overall, a strong reason in favor of Thomasson’s view of metaphysical modality is that it fits into a unifying explanation of the function of deontic and alethic modal discourse—to convey norms.\(^60\) However, one might suspect that it’s difficult to see how metaphysical explanations, which appear to be descriptive, have any relevance to conveying norms. So, why should the modal normativist care about metaphysical explanations?

For my first response, I could perhaps concede some ground here. I can certainly grant that metaphysical laws, real definitions, and real grounding claims are not formally normative—they appear to be grammatically descriptive. But, on my view, all of these superficially descriptive claims are ultimately used to support conceptual laws, which are normative. This allows me to keep the idea that the primary function of non-causal explanatory claims is to regulate language and concept use though they are descriptive, but only as a matter of superficial grammar.

A more direct response is to note that many accounts of non-causal explanatory claims take these claims to have strict modal import. For example, many accept the following:

\[
\text{Necessarily, if } q \text{ because } p, \text{ then necessarily, if } p, \text{ then } q. \tag{61}
\]

According to modal normativism, claims of necessity are not descriptive but have normative force. So, the outer claim of strict necessity expresses and endorses a rule connecting the metaphysical use of ‘because’ with the inner metaphysical necessity which expresses and endorses a rule connecting ‘p’ and ‘q’. So, the proper use of the metaphysical ‘because’ is conceptually tied to the normative force of ‘necessarily.’ In addition, if we accept the outer strict necessity, then we can strictly derive modal claims, which are normative, solely from non-causal explanatory claims. Assuming that claims with normative force only strictly follow from other claims with normative force, this strict implication provides reason to think that non-causal explanatory claims must have normative force on their own despite appearing to be descriptive claims. This is an interesting result that implies the modal normativist should care about metaphysical explanations.

5.2. **Metaphysical laws, real definitions, and real grounding claims are necessary, rules are not**

One might worry that metaphysical explanations seem to be about the non-representational world, e.g., about gold, Socrates, sets, goodness, and the like, but on my view metaphysical explanations are about language or concepts, e.g. ‘gold’, ‘Socrates’, ‘sets’, ‘goodness’, etc. Furthermore, if metaphysical explanations were about linguistic or conceptual rules then they would be contingent since those rules are contingent. But the nature of gold and whether God’s will metaphysically causes moral goodness are necessary matters not contingent.

First, I am not arguing that claims of metaphysical laws, real definitions, and real grounding are in any way about terms or concepts or made true by our linguistic or conceptual conventions. On my view, these explanatory claims are stated in the object language where terms are used and not mentioned—so, in that sense these claims are about the world rather than language. These claims are not about the rules governing the use of the relevant terms since those rules would be stated in a metalanguage, if at all. So, metaphysical explanations are not descriptions of anything linguistic or conceptual on my view.

However, this doesn’t mean that metaphysical explanations are attempts to describe a world order. On my account, when someone asks, “Why does the set {Socrates} exist?,” and I respond, “Because Socrates exists (and the existence of the set {Socrates} is grounded by the existence of Socrates),” I might be characterized as doing (rather than saying) any of the following. First, I might be implicitly providing conceptual justification for how a concept has already been used, e.g., showing how the introduction of ‘the set {Socrates}’ was conceptually warranted. Second, I might be implicitly providing another concept user with a motivation to modify their own concept use in the future, perhaps because they are refusing to introduce ‘the set {Socrates}’ given the existence of Socrates. Third, I might be enabling concept users to anticipate and predict how others will use the same concepts, e.g., that we can predict competent concept users will introduce ‘the set {Socrates}’ given the existence of Socrates. So, while metaphysical explanations are made in the object language, and so are about the world and not about concepts, they nonetheless function to normatively guide concept use.

Perhaps the sense of “being about the world” on my view is too thin for those inclined towards substantive realism who think that a claim being “about” the world is tied up with how the claim is or is not made true by

\(^{60}\) Thomasson (2013a: 145)

\(^{61}\) See Fine (2012: 38) and Bennett (2018: 47–57) for defense; see Skiles (2015) for skepticism.
the relevant features of the world. So, the underlying worry is really that my view either gets the truth-makers behind metaphysical explanations wrong or these claims have no truth value at all. First, my view rejects the presupposition that either explanatory or non-explanatory claims need to be “made true” by anything. Instead, my view presupposes minimalism about truth. Minimalism about truth is the idea that an adequate theory of truth is provided by nothing more than a sufficient list of instances of the T-schema—‘p’ is true iff p—and some account of the function of the truth predicate, e.g. its role as a device of generalization. There is no need to further explain truth in terms of correspondence, coherence, verification, etc. So, metaphysical explanations are not made true by our linguistic conventions or intentions. Second, this also means I can say explanatory claims are true or false. For example, since the set (Socrates) exists because Socrates exists, I can say that the claim ‘Socrates does not exist because the set (Socrates) exists—it’s the other way around’ is true and is about Socrates and the set (Socrates). This is one reason that my view counts as realist, which I will further explain in §6.

Finally, metaphysical explanations are supposed to be metaphysically necessary. I agree and my view respects this observation insofar as it is not the case that the actual metaphysical laws, real definitions, or real grounding claims could have had different truth values had we adopted different conventions. Our intentions and linguistic conventions play a role in fixing the meaning constituting rules that guide our use of the terms that appear in metaphysical explanations, e.g., ‘Socrates’ and ‘the set (Socrates)’. But that our linguistic practices play a role in determining these rules is relatively uncontroversial and is in no way the same as claiming that our linguistic practices make any object language claims true such that metaphysical explanations covary with linguistic practices across possible worlds.

On my view, which assumes modal normativism, once the actual meaning constituting rules of a given expression are fixed by our linguistic practices, then the relevant object language analogues, i.e., the actual metaphysical necessities, metaphysical laws, real definitions, and real grounding claims, will be true at every possible world relative to the actual world, including possible worlds with no people, possible worlds with no language, or possible worlds inhabited by people that speak deviant languages. So, for example, our linguistic practices do not make (16), what it is to be a gold atom is to be an atom with atomic number 79, true. (16) is an object language claim, not a claim about linguistic practices. And while its meaning is fixed by our actual linguistic practices and empirical discoveries, once that meaning is fixed, (16) is true even at possible worlds where there are no people or possible worlds where ‘gold’ means the tail of a donkey (and so it would not be the case that gold is metaphysically made of fur at that world).

5.3. Some metaphysical explanations are not conceptual

Another worry is that the following real grounding claim is true, but we cannot know this claim through conceptual work:

(20) The fragility of a crystal vase is grounded by the crystalline bonding of its molecules.

I agree that we cannot know (20) through conceptual analysis alone, but this does not commit me to saying that (20) is a metaphysically substantive claim. Evaluating some explanatory claims will require straightforward empirical inquiry in addition to conceptual analysis. This involves two steps.

The first step involves straightforward conceptual work in determining:

(F-C) The fragility of an object is grounded by its categorical properties.

On my view, (F-C) is a conceptual truth supported by whatever (metalinguistic) conceptual laws cover the use of the relevant terms, e.g., ‘fragility’, ‘object’, ‘categorical’, and ‘property’. This truth functions to coordinate and enforce what counts as an acceptable use of language when offering empirically adequate explanations or predictions. For example, a conceptually complete and conceptually cogent explanation or prediction that a crystal vase will be destroyed when dropped requires appealing to claims about the categorical properties of a crystal vase. For the second step, we also need to empirically investigate what the relevant categorical features are, in this case the crystalline bonding of certain molecules. We get (20) by factoring

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62 Thanks to an anonymous referee for raising this concern.
63 See Horwich (1999).
64 See Sidelle (1989), Einheuser (2006), and Thomasson (2007b, 2014a, 2020b) for more thorough defenses against this kind of objection.
65 Fine (2001: 9–10) raises these kinds of concerns with semantic approaches to de re reductions.
66 This applies whether we read (F-C) as a real grounding claim or a becausal claim.
our empirically discovered facts into (F-C), which is a conceptual truth. So, on my view, we can know grounding claims primarily through conceptual analysis, as we come to know (F-C), and straightforward empirical inquiry, as we come to know (20).

An important reason to think that claims about real grounding and real definition are not substantive is that it isn’t clear what sort of discoveries inquirers made when they learned, e.g., the atomic number of gold, or the crystalline bonding of certain molecules, other than straightforward (though difficult) empirical discoveries. So, just what are the non-causal explanatory expressions ‘...what it is to be...' or ‘...grounded...' adding to the straightforward descriptive claims that reflect those empirical discoveries? On my view, rather than describing some metaphysically deep nature of gold or substantive metaphysical cause of the fragility of crystal, non-causal explanatory expressions are object language resources that reflect the normative priority of those discoveries in determining how we ought to use terms like ‘gold’ and ‘fragile’ in our theorizing and predicting.

Nonetheless, one might insist that there is a non-conceptual difference between (F-C) and

(F-G) The fragility of an object is grounded in the will of a Malebranchean God.

Suppose that (F-G) was once widely believed in a community of inquirers. The idea is that when inquirers eventually rejected (F-G) and accepted (F-C) they did so as a result of a substantive metaphysical discovery and not by doing conceptual work. My response is that there is reason to think that the meaning constitutive rules of ‘fragility’ in (F-G) are not the same as those governing ‘fragility’ in (F-C), and so the shift is conceptual. This can be seen by imagining how, say, an atheist of the community might have characterized the beliefs of her fellow Malebranchean inquirers, e.g., “Smith thinks that the vase is ‘fragile’ so you had better not say anything blasphemous lest the vase shatter”, where the use of scare quotes indicates a disagreement about meaning.

However, this doesn’t mean that we ought to characterize (F-G) and (F-C) as being completely unrelated claims. There may well be enough overlap in the use of ‘fragility’ within the community for disagreeing members to understand one another’s claims and to have some non-linguistic stake in resolving the issue one way or the other (cf. the case of moral terms discussed at the end of 4.2.3). Still, one might worry that this conceptual difference comes with a difference in metaphysical necessities and so a difference in metaphysical explanations, and this means that actual metaphysical explanations are not really necessary on my view after all. But this doesn’t follow. Since I am assuming modal normativism, metaphysical necessities and explanations reflect meaning constituting rules and priorities of the expressions in a given linguistic-conceptual framework. So, you can’t ask questions about what is really metaphysically necessary, or what really grounds what, independent of a linguistic-conceptual framework, i.e., without first considering the frame-level constitutive rules of use of the relevant terms.

More importantly, there is a cost that comes with taking the difference between (F-G) and (F-C), and metaphysical explanations more generally, to be substantive (in the sense explained in §2). Conceptual analysis and straightforward empirical inquiry are relatively well understood and relatively reliable sources of knowledge. However, if metaphysical explanations are substantive, then it isn’t clear how we can reliably know that they are true (or correct) insofar as it will be more difficult to rule out possibilities where we have adopted one set of explanatory beliefs but the substantive explanatory facts differ. So if conceptual analysis and straightforward empirical inquiry are not sufficient to evaluate and understand our metaphysical explanations because these are substantive, then we have good reason to worry that correct metaphysical explanations are outside of our cognitive reach. But in that case, we must either be skeptics about metaphysical explanation or we must accept that which of our metaphysical explanations are good is a matter of luck. So, either way the interest and importance of metaphysical explanations will be undermined if we take metaphysical laws, real definitions, and real grounding claims to describe real, non-causal features or differences in the world that cannot be grasped by doing only conceptual work and straightforward empirical inquiry.

67 Cf. Sidelle (1989: 13–16).
68 The idea being that the dispositions of thing to break are the result of God pushing and pulling levers of reality. Thanks to Dana Goswick for this thoughtful rejoinder and example.
69 However, this means my account of metaphysical explanation does leave room for a form of pluralism, which is briefly discussed below. See also Thomasson (2020b) and Dasgupta (2017). Thanks to an anonymous reviewer for pressing me to clarify.
70 Especially if our cognitive mechanisms are only causally responsive to our surroundings, see Warren (2017).
71 For more detailed arguments of this kind see Rayo (2015), Warren (2017), and Maurin (2019). Miller and Norton (2017) also touch on some of these concerns.
Alternatively, on my account, metaphysical explanations are not descriptive but instead are used to regulate and coordinate concept use. Instead of trying to express and endorse important features of the use of a given term or concept by ascending to a metalanguage, which may not be possible for a given term or concept to begin with, we express and endorse constitutive rules or conceptual priorities in the object language using the terms in metaphysical explanations. All that is meant by ‘real’ in “real definitions” and “real grounding” is that we are using, rather than mentioning, terms to illustrate or express finer-grained requirements of concept use. So, on my account, all it is to know that non-causal explanatory claims like (F-C) are true simply comes down to being a competent user of ‘fragility’, and in the case of (20) to also having the relevant empirical information.

6. Conclusion: (really) real metaphysical explanation on the cheap?
I have argued that metaphysical explanations are best characterized as object language tools for expressing and endorsing important patterns of concept use that cannot be captured using basic modal terms alone. For example, imagine a bicycle shop. In corner A there is a full pile of bicycle parts and in corner B there are bicycle parts arranged into a functioning bicycle form. Someone wants a non-causal explanation of why there is a bicycle in corner B but not corner A. I point to corner B and explain that is a bicycle because all of the bicycle parts are put together in a functional manner. Maybe I’d offer some additional clarification such as: all objects $O$ exist just in case there are parts arranged $O$-wise, or what it is to be a bicycle is to be bicycle parts arranged bicycle-wise, or bicycles are metaphysically caused by bicycle parts arranged bicycle-wise. Regardless, I am not attempting to describe some substantive or objective metaphysical order of the world. What I am doing is demonstrating something conceptual—that a description of what is going on in corner B but not corner A conceptually warrants the application of the term ‘bicycle’. I am also giving that person a reason to apply the term ‘bicycle’ in circumstances relevantly similar to corner B and a reason to refuse the application of the term to circumstances relevantly similar to corner A. This is the kind of understanding that is gained from metaphysical explanations on my view.

In addition to metaphysical explanations having a non-descriptive function, I argued they are evaluated on the basis of conceptual work and straightforward empirical inquiry alone. Thus, my account is consistent with the starting deflationary and methodological assumptions of modal normativism. Furthermore, I argued that metaphysical explanations are still intellectually interesting and important even if in the end they are conceptual explanations. Still, a fair question is in what sense I can say my view is realist rather than a form of irrealism such as non-cognitivism. If it is the latter, then one might still worry my view leaves out important observations and judgments about metaphysical explanations: namely that there are facts about what explains what and we have beliefs about what explains what. I offered a defense of my view from some of these of worries in §5.2, but I will further clarify the sense in which my view is realist and address an objection that nonetheless the metaphysical costs of my view are too high.

My view is not "realist" in the following senses. Let a strong substantial-realist about metaphysical explanations roughly hold that non-causal explanatory claims are (i) descriptive (ii) truth-evaluable, (iii) belief expressing, and that (iv) these claims in some way correspond to real ontic features of the world, e.g., they correspond to real, quantifiable grounding relations, or to real quantifiable properties of metaphysical naturality. Alternatively, a weak substantial-realist about metaphysical explanations will roughly hold that non-causal explanatory claims exemplify (i)–(iii), but (iv) these claims in some way correspond to real but non-ontic features of reality. I have not argued directly against these views, but I did motivate some worries that the epistemic costs of a substantive approach are high.

Given the expressive elements of my account, one might be inclined to say that I am arguing for a non-cognitivist account of metaphysical explanations. However, it is not correct to characterize my view that way. Let a non-cognitivist about metaphysical explanations hold that that non-causal explanatory claims are (i) not descriptive, (ii) not truth-evaluable, (iii) not belief expressing, and (iv) not fact-stating. With important qualifications, I disagree with (ii)–(iv). Again, on a suitably minimalist reading, ‘It is true that wholes are grounded in their parts’ and ‘It is a fact that wholes are grounded in their parts’ are perfectly acceptable on my view. I also think that ‘Some people believe that parts are grounded in wholes’ is true on a suitably

\[72\] For a possible example, see Schaffer (2009, 2017).
\[73\] For possible proponents of this view and clarification on non-ontic claims see Sider (2011: 90–96) and Finocchiaro (2019a, b).
\[74\] Thompson (2018: 43–44). I am leaving out fictionalist accounts of explanation, though Thompson gives a nice overview of what those options might look like.
minimalist reading. However, I wholeheartedly agree with (i) insofar as counting as descriptive implies anything more than the grammatical structure of a given claim.

I think it is better to say that I am arguing for a quasi-realist account of metaphysical explanations. So, accepting my view comes with three commitments: (a) that the distinctively metaphysical claims that make an explanation a metaphysical explanation are truth apt and suitably cognitive assuming a form of semantic and cognitive minimalism; (b) that these explanatory claims are not descriptively on par with straightforward empirical claims, i.e., they neither correspond to, nor describe, nor are made true by any features of the world; and (c) that instead these explanatory claims have a non-descriptive discursive function. I have not defended semantic or cognitive minimalism here. However, I have developed and defended the intelligibility of (b) and (c). Furthermore, in the previous section I argued that my view comes with epistemic advantages over substantalist views that make it worth taking seriously.

Some might agree that if metaphysical explanations could be assessed only on the basis of conceptual and straightforward empirical work, then normativism about metaphysical explanation would come with important epistemic advantages. However, some will still worry that my view comes at a significant metaphysical cost because it fails to capture all of the important joints of logical space. Perhaps my view captures important conceptual joints, which are needed to adequately capture important empirical and normative joints, but metaphysical explanations are supposed to help us figure out what is really metaphysically fundamental or adequately explain how reality hangs together. Thus, my view isn’t capturing all of the interesting and important joints. Furthermore, there might be a way to keep all of the metaphysical advantages of “real” realism on the cheap, i.e., without raising the epistemic challenges raised by substantalist realism.

Let a quiet-realist about metaphysical explanations roughly hold that non-causal explanatory claims are (i) descriptive, (ii) truth-evaluable, (iii) belief expressing, and (iv) fact-stating. However, we can have all of this without any minimalism and just by taking non-causal explanatory claims at face value. Even asking questions about whether non-causal explanatory claims fit with or covary with any substantive features of reality is in some sense misguided. And there simply are no significant theoretical disputes to be settled about what makes such explanatory claims true or what the belief content of such explanatory claims is. So, in order to make sense of metaphysical discourse about what non-causally explains what, there is no need to worry about taking on substantive metaphysical commitments or looking to alternative characterizations in terms of conceptual truths. Instead, we simply note that there are plenty of examples of non-causal explanatory claims in philosophical literature and everyday discourse. Then we look for convergence of belief on these claims where we can find it and take the seemingly important or general claims we converge on as explanatory platitudes. These platitudes alone, perhaps in addition to some formal clarifications, are all we need to understand metaphysical explanation in general and to evaluate particular explanations. Furthermore, just as we shouldn’t challenge serious mathematicians about the language they use to go about doing mathematics, we shouldn’t challenge serious metaphysicians about the language they use to go about doing serious metaphysics. So, we can have “real” realism on the cheap. I have two objections to this proposal and the motivating worry: (a) quiet-realism can only buy us metaphysical pluralism without collapsing into substantial-realism; and (b) the metaphysical costs of my view are not too high.

If we accept quiet-realism, then we ought to also accept a form of pluralism about either first-order metaphysical explanations or about how to characterize metaphysical explanation itself. Otherwise, quiet-realism will collapse into substantial-realism. Consider the following questions: Is it best to say that grounding is well-founded or not? Are bicycles grounded in the arrangements of their parts, their function, or simply the parts themselves? For any of these questions, suppose we accept quiet-realism but say non-representational reality somehow pulls on one answer rather than another. That is, if we were to form a consensus of belief towards one set of answers rather than another, the explanatory realities could be different from our explanatory platitudes and for non-conceptual reasons. Then, assuming all of the relevant options are conceptually

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75 See above for minimalism about truth. Minimalism about belief is more complicated, but roughly the idea is that an adequate theory of belief is exhausted by some belief-schema and some account of the function of belief talk, e.g., perhaps it expresses one’s intention to act on or assent to certain claims but not others rather than report on mental states. For more on semantic and cognitive minimalism see Byle (2000), Horwich (1999), and Price (2011: 115–117).
76 As an anonymous reviewer notes, one might also accuse the normativist of changing the subject. But I think Dasgupta (2017) convincingly shows that in order for a proposal to count as an account of metaphysical explanation, the proposal only needs to show how such explanations limn questions of intellectual interest and divide logical space along important joints, and argues that suitably minimal notions of metaphysical explanation can do just this. However, I think the lingering concern is how well a minimal proposal can do this, e.g., does it leave anything important out?
77 The quietist needn’t think that finding this convergence is easily accomplished, just possible.
consistent and empirically adequate, we seem to be treating metaphysical explanation in some substantive sense. After all, what could account for potential mistakes other than some substantive explanatory feature of reality that we happen to miss when we converge on the wrong set of platitudes? On the other hand, we might say instead that it doesn’t really matter what account of explanation we go with as long as we stick to the actual platitudes as much as possible while maintaining consistency of some sort. But then it seems that if we had actually collectively converged on a different set of platitudes, the explanatory truths would have reflected that alternative set of platitudes instead. But this kind of realism about metaphysical explanation is also a form of metaphysical pluralism. I’m not completely opposed to this kind of deflationary quiet-realism, and there is a sense in which my account is pluralist. But I think an important advantage of the normativist account I’ve put forward is that it provides an account of why we care about metaphysical explanations at all and what use they have to begin with.

Finally, the question of metaphysical cost is an important question, but that all depends on what questions and answers we take to have a high cost to begin with. Suppose the worry is that unless we provide a non-conceptual answer to substantive metaphysical questions—e.g., of how different metaphysical layers of reality are non-diachronically connected or what if anything is metaphysically fundamental—we lose a complete picture of reality. And that is too high a price to pay for epistemically safe metaphysics. My response is that the actual cost of not coming to a single or non-conceptual answer to these questions is not very high. The main reason for this is that attempts to settle on only one substantive answer to these questions often create even more intractable questions than the ones we start with.

For example, a metaphysical theory that keeps bicycles in its ontology, in addition to particles arranged bicycle-wise, seems to have a lot going for it. One way to do this is to say that both exist—it’s just that the collection of particles arranged bicycle-wise is more real than the bicycle or exists at a more fundamental level of reality than the bicycle. But Thomasson (2014b) argues that once we introduce substantive notions of real fundamentality and layers of reality, we will be pressured into trying to answer questions even more intractable and awkward than questions about whether bicycles exist. For example, we will then have to figure out exactly how many layers of reality there are and how exactly they (non-conceptually) differ yet hang together, or whether some bicycle is less real than the tires, frame, handles, chains, nuts, bolts, etc. that compose it, or whether those bicycles parts are less real than the molecules that compose them, or whether those molecules are less real than the particles that compose them, or whether our ontology bottoms out at all and it’s just gunk all the way down. Personally, I do not think that this means such questions are not interesting or that we should stop thinking about these issues. What I am arguing, though, is that the intractability and awkwardness of these questions is a reason to think that the cost isn’t too high if we don’t succeed in finding (non-conceptual) answers, especially if we start metaphysical inquiry from a suitably deflationary point. One way to see this is to compare it with the significant social and political costs of not doing metaphysics of gender, e.g., not figuring out whether gender is to be metaphysically explained in terms of social arrangements or some other complex pattern of human behavior. So, I think that the epistemic payoffs of my view are worth the metaphysical costs.

In the end, I have provided an account of metaphysical explanation for modal normativists, i.e., I have been arguing for the conditional, if modal normativism is the best account of metaphysical necessity, then this is what the overall approach to metaphysical explanation ought to look like. It is of course within anyone’s right to reject my account of metaphysical explanation, and so reject modal normativism. Alternatively, one might try to accept modal normativism but reject my account of metaphysical explanation. I agree that perhaps someone could accept some aspects of modal normativism but think that non-causal explanatory claims are substantive contrary to my arguments. For example, Sider (2011) adopts a form of conventionalism about modality while taking substantive questions about metaphysical fundamentality seriously. But in

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78 Unless the quiet-realist takes the platitudes to constitute the meanings of the terms involved. This can fix the explanatory truths across possibilities relative to the actual meaning constituting platitudes, which is like the defensive move I made in §5.2. But then quiet-realism starts to look more like the view I am offering.

79 It is pluralist in that there may be multiple metaphysical explanatory schemes that are empirically adequate and conceptually consistent, though there may be normative pragmatic considerations to favor one over others. To see how this might work in the metaphysics of gender see Díaz-León (2018).

80 Though following Thomasson (2009) one might try to argue that some of these questions are not semantically well-formed and so unanswerable, e.g., there is no way to ask if grounding is really well-founded since a meaningful answer will be presupposed by the frame-level rules of use for ‘ground’ we start with and so trivial.

81 See Yap (2010), Mikkola (2015), Díaz-León (2018), and Thomasson (2020a).

82 Though Thomasson (2020b) gives a forceful development and defense of modal normativism.
this paper, I have assumed all aspects of modal normativism, including its deflationary and methodological assumptions, which start at a place of skepticism and semantic caution regarding substantive metaphysical claims, including those about metaphysical fundamentality. Given those assumptions, I have argued that my account of metaphysical explanation for modal normativists best fits those assumptions while capturing the interest and importance of metaphysical explanations as well as important explanatory observations and judgments.  

Competing Interests
The author has no competing interests to declare.

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