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Semantic Rules, Modal Knowledge, and Analyticity

For *The Epistemology of Modality and Philosophical Methodology*,
D. Prelevic and A. Vaidya (Eds.), Routledge, forthcoming

Abstract
According to Amie Thomasson's Modal Normativism (MN), knowledge of metaphysical modality is to be explained in terms of a speaker's mastery of semantic rules, as opposed to one's epistemic grasp of independent modal facts. In this chapter, I outline (MN)'s account of modal knowledge (§1) and argue that more than semantic mastery is needed for knowledge of metaphysical modality. Specifically (§2), in reasoning aimed at gaining such knowledge, a competent speaker needs to further deploy essentialist principles and information. In response, normativists might contend that a competent speaker will only need to appeal to specific *independence counterfactuals*, on analogy with quasi-realism about morality. These conditionals fix the meaning of our terms at the actual world, independently of the particular context in which a statement is evaluated. However, I show that this strategy causes several problems for the account (§3). While those problems might perhaps be avoided by endorsing a certain picture of modal metaphysics (Modal Monism), such a picture involves notorious issues that normativists will have to address (§4). It is thus doubtful that (MN) can explain knowledge of metaphysical modality. Still, it may explain some modal knowledge without committing to Modal Monism. As I show (§5), semantic mastery may suffice for gaining knowledge of *logical-conceptual* modality or *analyticity*.

Keywords: modal knowledge; normativity; semantic rules; logical modality; metaphysical modality; essentialism; *a priori* knowledge; analyticity.

Introduction

Amie Thomasson (2007, 2018, 2020) has put forward an ambitious account of metaphysical modality, which she calls *Modal Normativism*—henceforth (MN). According to (MN), the function of metaphysical modal discourse isn't to describe modal facts or properties in the world (or in other possible worlds). Instead, in thinking and talking about what is metaphysically possible and necessary, what we are doing is expressing, applying, and renegotiating *semantic rules*. As a consequence, knowledge of metaphysical modality is to be explained in terms of our understanding and use of semantic rules—i.e., semantic mastery—rather than our epistemic grasp of some independent modal reality.

Here is an outline of the chapter. In §1, I present Thomasson's (MN). In §2, I aim to show, against (MN), that semantic mastery is not sufficient for gaining knowledge of metaphysical modality. For a competent subject could always wonder whether something is metaphysically possible (or necessary) only based on her mastery of the semantic rules (and possibly empirical information). In reasoning aimed at establishing what is metaphysically possible and necessary, a competent

subject further needs to rely on *essentialist* principles and information. In response (§3), modal normativists might deny that any such "extra" principle and information is needed for knowledge of metaphysical modality. Instead, on analogy with quasi-realism about morality, they might argue that a competent speaker will only need to appeal to specific *independence counterfactuals*. Those conditionals fix the meaning of our terms at the actual world, independently of the particular context in which a statement is evaluated. If such conditionals hold, a subject who masters the rules couldn't rationally wonder whether something is metaphysically possible (or necessary) while still counting as competent. However, in §3, I show that this strategy is problematic for (MN) in that it appeals to metasemantic principles that go beyond one's semantic competence. Additionally, the strategy raises a worry of vicious circularity and seems potentially question-begging. In §4, I explore a possible reply by modal normativists, which rests on identifying logical-conceptual modality with metaphysical modality at the level of worlds—a thesis known as "Modal Monism". But Modal Monism involves notorious problems, which the normativist will have to address. Lacking convincing reasons to think that Modal Monism is true, it is doubtful that semantic mastery alone (or aided by empirical information) can yield knowledge of metaphysical modality. Still, (MN) can account for some modal knowledge without committing to Modal Monism. As I show in §5, semantic mastery may suffice for gaining knowledge of *logical-conceptual* necessity or *analyticity*. I introduce Timothy Williamson's challenge to knowledge of analyticity (2007) and argue that normativists can successfully address it by adopting Paul Boghossian's recent reply (2020).

1. What is Modal Normativism?

Thomasson aims to explain knowledge of *metaphysical* modality, since this is the modality that is at stake within central debates in philosophy. While she doesn't explicitly characterize metaphysical modality or what counts as a metaphysical necessity or possibility, she offers a number of examples of metaphysical necessities (and derivatively, possibilities). Those include not just *a priori* analytic truths such as 'Necessarily, all bachelors are unmarried', but also traditional Kripkean *a posteriori* necessities, e.g. 'Necessarily seals are mammals', including *de re* ones, e.g. 'Water is necessarily H_2O' (see esp. 2020: Ch. 4).

Thomasson frames modal normativism as a main alternative to traditional *descriptivism*, according to which modal discourse is aimed at tracking or describing certain features of our world (or of other possible worlds), namely modal facts and properties that exist independently of us. For Thomasson, descriptivism is false. She argues that metaphysical modal discourse is distinctively *normative,* in that it "serves the function of expressing, teaching, conveying, or (re-)negotiating semantic rules (or their consequences) in particularly advantageous ways" (2018: 11. Also 2020: 64). Semantic rules include "application conditions", which concern the conditions under which a term is to be applied or refused; as well as "co-application conditions" namely rules dictating when

a name or sortal term may be applied again to one and the same entity (2007: 140).[1] On (MN), claims of metaphysical possibility and necessity should thus be understood as simply expressing our semantic rules, as opposed to tracking independent modal truth-makers. Take for example

(B) Necessarily, all bachelors are unmarried males

The descriptivist says that (B) describes the necessary *fact* about bachelors that they are unmarried males, or that bachelors (*qua* the kind, not the individuals independently of the kind) necessarily possess the *properties* of being males and unmarried. Such properties or facts make (B) true. By contrast, according to Thomasson, (B) is to be explained in terms of the rules for correctly applying the term 'bachelor'; particularly, the (metalinguistic) rule: 'Apply 'bachelor' only where 'unmarried male' applies'. By contrast with the metalinguistic rule, (B) explicitly states a necessity.

Still, giving an account of metaphysical modality in terms of semantic rules apparently doesn't prevent the normativist from talking of modal *truths, facts,* and *properties.* One will only need a few more steps to get to those from the relevant linguistic expressions. From (B), one can infer '<Necessarily, all bachelors are unmarried> is true' by applying the equivalence schema '<p> is true IFF p'. Furthermore, Thomasson holds that from true modal claims we can "trivially infer" that modal facts and properties exist. For example, (B) implies 'It is a fact that it is necessary that all bachelors are unmarried males'. And from a *de re* modal claim such as 'Water is necessarily H_2O' one may trivially infer 'Water has the modal property of being necessarily H_2O".

Thomasson's thesis is that once (MN) is in place we can explain knowledge of metaphysical modality in terms of semantic mastery.[2] More precisely, on (MN) the ability to use our terms appropriately is tantamount to *tacit* modal knowledge. For being able to correctly apply the semantic rules governing our terms shows that one at least *implicitly* knows what the rules *require* and *allow*; namely, as we might put it, what must be (necessity) and might be (possibility) in cases that fall under the scope of the relevant rules. On the other hand, speakers will have *explicit* modal knowledge when they "gain an explicit understanding of the rules" (2018: 15), which enables them in turn to articulate and communicate the rules. This goes beyond one's ability to correctly apply or refuse to apply our terms in relevant contexts. What is required for explicit modal knowledge is that a speaker can explicitly express the semantic rules themselves in the object language. In Thomasson's words, explicit modal knowledge is the ability to

[1] Note that (MN)'s vocabulary seems neutral between the level of language and the level of thought. Its main tenets are cashed out in terms of *semantic rules, concepts,* and *mastery*, as well as *linguistic rules* and *linguistic competence*. Accordingly, my terminology is also meant to be neutral between the two levels.
[2] Like Thomasson, I use "conceptual mastery" and "conceptual competence" interchangeably.

> mov[e] from mastering the rules for properly applying and refusing expressions (as a competent speaker), to being able to explicitly convey these rules (and what follows from them) in the object language and indicative mood. (2018: 15)

Importantly, *empirical information* will sometimes contribute to the acquisition of modal knowledge, in addition to one's conceptual mastery. On (MN), knowledge of empirical facts and empirical discoveries often contribute to knowing *derivative* modal facts. Consider for example,

> (W) Whatever microstructure the baptized sample has, water necessarily has that microstructure

For Thomasson, (W) is a "conceptual truth that we can know via conceptual analysis" (*a priori*). On the other hand, the fact that water necessarily has microstructure H_2O is a *derivative* modal fact that one may come to know via empirical investigation (2018: 16. Also 2020: 163-64).

2 Semantic Mastery *vs*. Metaphysical Modal Knowledge

Here is my main worry. Does (MN) succeed in explaining knowledge of metaphysical modality? Can one's mastery of semantic rules (possibly together with empirical information) yield knowledge of metaphysical possibility and necessity?[3]

A natural concern that one might have is that coming to know metaphysical modal truths requires investigating philosophical issues that seem to go beyond matters of semantic competence and linguistic practice. For instance, issues involving the nature of things or their essence, what sorts of grounding relationships things are involved in, the modal status of the laws of nature, and so on. How can knowledge of such issues solely derive from semantic mastery (and possibly empirical information)? Semantic mastery allows speakers to use words correctly. It may well enable them to formulate complex modal questions with great precision; but arguably it doesn't *per se* put one in a position to *answer* such questions.

Consider an example. Patty is a chemist who works on water quality around the world. She has mastered the application and co-application conditions for the term 'water' as well as the relevant empirical information about actual water, while also being a rigorous reasoner. Could Patty rationally wonder whether water is necessarily H_2O, or whether, say, it could have contained carbon instead?

Modal normativists would say no. Remember principle (W):

[3] A further problem that I won't pursue here is that requiring that one explicitly expresses the rules in order to gain modal knowledge seems to imply that there must be fixed rules for all cases. However, Wittgenstein's commentary on rule-following gives reason to think that this is wrong. Some concepts may not have fixed rules all the way out, yet one can have explicit modal knowledge. (Thanks to Anand Vaidya for raising this issue).

(W) Whatever microstructure the baptized sample has, water necessarily has that microstructure

According to (MN), Patty should know (W) solely from mastering the rules for the ingredient term, *a priori*. Then, by combining principle (W) with the other semantic rules as well as with what she empirically knows about water, she should be able to conclude that water couldn't have contained carbon. *Water is necessarily H_2O.*

One main difficulty with this approach is that it isn't clear what exactly in the semantic rules for 'microstructure', 'baptized sample', and 'water' would justify conclusions concerning the metaphysical necessity of a substance's microstructure. It isn't clear, in particular, what would compel a thinker to connect the rules for using those terms in such a way that she would infer principle (W). Which rule or combination of rules would Patty have to master in order to come to draw such a metaphysical conclusion? That's hard to say. But, without principle (W) and by only appealing to the rules for using 'water' and 'H_2O', Patty couldn't rule out the possibility that water might have contained carbon if the actual world had been different. She *could* wonder whether water is necessarily H_2O without counting as irrational, incompetent, or poorly informed for doing so. For such a scenario seems consistent with what the rules for using those terms strictly dictate.

I think that in order for Patty to come to know (W), she would need to rely on certain further assumptions. Specifically, she needs to deploy a general *essentialist bridge-principle*:

(E) If it is essential to *x* being F that it is G, then necessarily anything that is F is G

together with the information that

(C) Having chemical composition C is essential to being a certain kind of substance *s*

(E) and (C) are the additional premises that together would allow a competent speaker like Patty to rationally derive (W) from her semantic base. But these sorts of metaphysical principles seem also hardly reducible to the semantic rules for the correct application of our terms. How would Patty retrieve (E) and (C) from her semantic repertoire? In this case, too, it isn't clear how the rules for using the ingredient terms would dictate (given adequate translations) principles (E) and (C). It seems indeed consistent with those rules that the principles are false.

On the other hand, without the contribution of (E) and (C), it would seem that (W) was simply introduced in the language "by hand" or arbitrarily: for nothing in the rules for correctly using 'microstructure', 'baptized sample', and 'water' appears to indicate that a substance necessarily possesses its actual microstructure.

Note further that empirical information won't help fill the gap here between semantic knowledge and metaphysical modal knowledge, no matter how accurate that information is. Empirical information concerns how things actually are on Earth, but says nothing about other possible worlds—especially worlds where the laws of nature are quite different from our own.

But if Patty can't infer (E), (C), or (W) solely from her mastery of the ingredient terms, that means that solely based on her semantic competence she could legitimately wonder whether water is necessarily H_2O, or whether it could have contained carbon instead. Indeed, if she only relied on her mastery of semantic rules, she would likely have many other queries concerning metaphysical modality. She might wonder whether it is in virtue of the nature or essence of water that it cannot contain carbon. She might wonder whether the fact that something is a sample of water is grounded in its being H_2O. She might consider some distant possible world where the laws of nature are very different from our own: could there have been water in such a world, or perhaps something in its core properties is tied to the actual chemical and physical laws in such an intimate way that makes that scenario metaphysically impossible? Which semantic rules in Patty's repertoire could answer such questions? Again it's hard to say. The rules seem simply silent about these issues.

Crucially, as mentioned, we wouldn't take Patty's queries as an indication of some flaw in her semantic competence, relevant empirical knowledge, or reasoning. We'd still regard her as a perfectly competent speaker of English, who's also very knowledgeable about chemistry, and who reasonably wonders about such difficult issues. However, on (MN), we would be forced to conclude that Patty isn't a competent speaker of English or a good chemist after all. Or even that she's irrational.[4]

Perhaps the modal normativist might cook up some principles analogous to (W) containing the terms 'essence', 'grounding', 'natural laws' etc., which are devised to address each of those issues. But note that that won't be much progress. For an analogous challenge to the one I raised in the case of (W) arises; namely to show how the purported principles could themselves be derived solely from our semantic rules.

3 Independence Conditionals for Knowledge of Metaphysical Modality

I suggested that (MN) needs to integrate knowledge of essentialist or other metaphysical principles and information besides one's conceptual mastery (and possibly empirical information) in order

[4] My argument here is reminiscent of Moore's Open Question argument. Patty's rational wondering shows that more than conceptual mastery is needed for metaphysical modal knowledge. Analogously, Boghossian has recently argued against the thesis that knowledge of normative truths can be explained by understanding alone, by pointing out that a competent thinker can always doubt whether e.g. some candidate substantive characterization of a bad act-type is what actually plays the role indicated by an obvious definition of 'wrong'. That shows that more than conceptual mastery is needed for substantive moral knowledge. Notably, Boghossian's argument reaches the same conclusion as Moore's Open Question argument, but through a different route (See Boghossian and Williamson 2020: Ch. 7; Boghossian ms.).

to explain knowledge of metaphysical modality. The modal normativist might reply that the objection begs the question in favor of certain "heavy-weight" descriptivist metaphysics and against modal normativism. For the objection claims that notions such as *essence* or the nature of things, *grounding*, etc. escape the kind of semantic reduction (MN) proposes. But those notions might themselves have a plausible treatment on the normativist view.

However, modal normativists might also reply that they don't need to resort to any such notions at all. There is a different strategy to ensure that a rational, competent, and well-informed speaker won't have doubts concerning metaphysical modal matters such as whether water is necessarily H_2O. The strategy consists in addressing objections like the one involving chemist Patty in the same way as normativists address the traditional objection against *conventionalism.*

The objection against conventionalism denies that we can know metaphysical modal truths by extrapolating them from our semantic competence, since our linguistic conventions might have been different.[5] But normativists stress that on their view modality isn't contingent on the particular linguistic conventions we happened to adopt. On the contrary, they claim that they are entitled to accept specific *independence counterfactuals*, on analogy with quasi-realism about morality. Like quasi-realists, modal normativists also

> [...] accept that these moral/modal facts are—in a relevant and important sense—mind-independent. For both accept certain independence conditionals. The moral quasi-realist accepts, for example, that it would still be wrong to kick dogs for fun, even if it were the case that I (and others) approved of it. (2018: 20)

Analogously in the case of (MN),

> The modal normativist can tell a parallel story, entitling her to accept independence conditionals—accepting, for example, that it is necessary that seals are mammals, and that this would still be the case even in worlds in which there were no speakers or thinkers (and so in which we don't use the relevant terms) at all. (ivi)

The independence conditionals specify that certain truths hold independently of contingencies about how we use language and the semantic rules we have adopted. They fix the meaning of our terms at the actual world, independently of the particular context in which a statement is evaluated. In this way, they secure that the modal statements we derive from our semantic rules effectively range over all metaphysically possible worlds. The general form of an independence counterfactual is the following: *given that it is necessary that xs are F, then even if we didn't use terms A and B*

[5] The objection against conventionalism assumes that appealing to something contingent (i.e., a linguistic convention) to explain a metaphysical necessity fails because necessary truths are necessarily necessary, as per axiom S4 of modal logic. Although most philosophers hold that S4 is correct for metaphysical modality, some have denied that (e.g. Salmon 1989 and Vaidya 2008).

to refer to xs and F respectively, it would still be necessary that xs are F. Accordingly, it would still be the case that 'seals are mammals' is true in (i) worlds where there are no speakers or thinkers, as well as (ii) worlds where people use the terms 'seals' and 'mammals' differently—worlds, let's say, where those words pick out lizards and birds respectively.

This strategy should help the modal normativist explain how one could gain knowledge of metaphysical modality solely based on her semantic competence, since the conditionals entail that we should take our (actual) semantic rules to hold at all possible worlds. As Thomasson explains,

> When we evaluate a counterfactual conditional, we must evaluate its truth at another world, leaving its meaning fixed as the actual meaning at our world. For we want to know whether this same claim ("Necessarily, all seals are mammals"), with the same meaning, would be true at another world, in other circumstances or given other suppositions. (2020: 89)

Going back to chemist Patty, based on the independence counterfactuals she should conclude without hesitation that water is necessarily H_2O, likewise that it is necessary that seals are mammals (assuming she is also minimally knowledgeable in biology). Patty would know that (actual) semantic rules such as 'Apply 'water' only where 'H_2O' applies', or 'Apply 'seal' only where 'mammal' applies' are meant to hold at all possible worlds. Thus, she couldn't rationally wonder whether water is necessarily H_2O or necessarily seals are mammals given her semantic competence and empirical background—which blocks our original objection.

However, this reply raises several problems. Let us leave aside the issue of whether morality and modality are in fact relevantly similar, such that metaethical arguments can be successfully recast for the case of modality by simple analogy and go through as well.

There are three additional main problems. First, endorsing the independence counterfactuals requires accepting a *meta-rule* concerning how our semantic rules work at all possible worlds. This indicates that the conditionals carry a primitive or unexplained modal element, which raises a worry of vicious circularity. Second, the need to integrate the independence conditionals shows, against (MN)'s main tenet, that conceptual competence alone *isn't strictly sufficient* for knowing metaphysical modality. Third, it is not clear on what grounds one should accept such conditionals. On the contrary, the modal normativist doesn't seem to have good reasons to endorse them. That such conditionals hold is something normativists *assume*, rather than defending, which raises the worry that the view begs the question in their favor. Let us discuss these issues in turn.

3.1 The Threat of Circularity

As we saw, modal normativists may invoke suitable independence conditionals to ensure that a competent subject will reach the correct judgments concerning metaphysical necessity and

possibility in all sorts of counterfactual scenarios. These conditionals secure that the meaning of our words won't change in different contexts but will stay stable across all possible worlds. But then it appears that endorsing such conditionals entails in effect accepting a *second-order rule* concerning the scope of our own semantic rules. As I shall formulate it, the meta-rule establishes that

> (N) Actual semantic rules should be held fixed at all possible worlds, i.e. they should be taken to hold necessarily

If this is correct, (MN)'s account of knowledge of metaphysical modality turns out to involve an implicit modal element. A competent speaker would have to have some prior grasp on what 'necessarily' means in order to be able to apply the independence conditionals and reach the correct modal judgments.

To further elaborate, the problem is that in order for a subject to accept the independence counterfactuals, she would need to know not just what our semantic rules are and how to express them explicitly. But also that the rules should be kept fixed at all possible worlds. Otherwise, how could she conclude that rules such as, 'Apply 'water' only where 'H_2O' applies', or 'Apply 'seal' only where 'mammal' applies' are meant to regulate uses of 'water', and 'seal' at all possible worlds, not just in actual world contexts? Being able to formulate the independence counterfactuals thus requires applying meta-rule (N). But that means that some modal knowledge is presupposed by one's correct application of the semantic rules, rather than being derived from the rules like (MN) holds.

Thus, my first worry is that (MN)'s account of modal knowledge is threatened by vicious circularity. That a competent subject must have some prior knowledge of the concept of metaphysical necessity seems problematic, since on (MN) knowledge of metaphysical modality should be *derived from* the semantic rules, not *presupposed by* them.

Perhaps modal normativists can find some way to accommodate this issue and avoid circularity. But note that explaining how a subject could have such a concept of metaphysical necessity is no trivial task. Surely, she will translate the semantic rules into the corresponding explicit modal statements: 'Water is necessarily H_2O', and 'Necessarily, seals are mammals'. But, as mentioned, she might naturally take 'necessarily' to simply regulate correct linguistic usage, and so to express what the semantic rules dictate for all contexts of use that might *actually* occur, i.e., in our world. After all, we don't typically teach and learn a language by assessing whether our utterances would be true or false on Twin-Earth, or other sorts of possible worlds. In order for a subject to gain metaphysical modal knowledge from semantic mastery, she'll further need to understand 'necessarily' not simply as a 'must' regulating correct linguistic usage, but rather as the 'must' of metaphysical necessity, capturing what it is for something to be true 'absolutely' or 'no matter

what' or, in the usual terminology, 'at all possible worlds'. Understanding correctly the modal force of the statements translating the semantic rules is essential for gaining knowledge of metaphysical modality like (MN) holds. But that is substantive modal knowledge—knowledge regarding what metaphysical necessity captures—which is presupposed by the account not explained by it.

Lacking some grasp of the second-order rule (N), it would be rational for Patty to wonder whether water is necessarily H_2O, or could have contained carbon; or whether seals are necessarily mammals, or could have been birds. And so on.

Thus, modal normativists should address the following problem. Knowing the meta-rule that governs the modal behavior of semantic rules is required for knowing about metaphysical necessity and possibility; but knowing the rule itself involves prior modal knowledge.

3.2 Meta-rules Governing Semantic Rules

Let us assume that modal normativists can manage the circularity problem. Still, appealing to one's second-order knowledge of the independence counterfactuals shows, against (MN)'s main thesis, that semantic competence (and possibly empirical information) isn't strictly sufficient for knowledge of metaphysical modality. In addition, a subject would need to know meta-rule (N) governing our semantic rules, or otherwise grasp it, in order to formulate suitable independence counterfactuals and thereby reach the correct metaphysical modal judgments.

Importantly, rule (N) isn't itself something one can derive from one's concepts, since it is a rule concerning how to properly apply our semantic rules. Furthermore, it doesn't seem that (N) could be discovered empirically, either. What kind of empirical evidence could one possibly gather in support of a rule that establishes the validity of our semantic rules at all possible worlds?

So, the modal normativist should explain how to accommodate the need for such metasemantic knowledge within an account that purports to explain knowledge of metaphysical modality solely in terms of mastery of our semantic rules (and possibly empirical information).

3.3. The Justification of the Independence Conditionals

A final problem for (MN) that derives from introducing the independence counterfactuals is that it is not clear on what grounds one should accept such conditionals. While Thomasson stresses that "indeed it is crucial that the modal normativist be able to accept this kind of independence counterfactuals" as well as that she "can justifiedly accept independence conditionals to the effect that metaphysical modal truths aren't contingent on our adoption of certain linguistic rules" (2018: 20), we are not told on what grounds modal normativists have such an ability and what their justification for accepting such conditionals is.

We saw that the conditionals themselves rest on a meta-rule, (N), which states that our semantic rules should be taken to hold at all possible worlds or necessarily. But that only pushes the question back to what in turn justifies (N). Why are we entitled to reason on the assumption that our rules won't change across possible worlds?

Indeed, within the normativist framework it might seem *false* that the independence conditionals hold. Suppose that the actual world never contained any speakers or thinkers. Contrary to what (MN) claims, it would follow that, say, 'seals' and 'mammals' were never terms that came about to refer to seals and mammals, since there wouldn't have been any language or thoughts to start with. How could it still be true on (MN)'s account that 'Necessarily, seals are mammals'?

Note that the descriptivist has a significant advantage here. While she is happy to endorse the independence counterfactuals, she doesn't have a problem acknowledging the existence of modal facts and properties that are independent of any conceptualization and linguistic expression, and that support such conditionals. She can indeed justify endorsing the conditionals in a straightforward way, by simply appealing to what *being a certain (kind of) thing is*: it is just part of the nature or essence of seals that they are mammals, likewise it's part of the nature or essence of water that it is H_2O. That guarantees that 'Necessarily, seals are mammals' is true not just at worlds where individuals use those terms differently; but even assuming there never had been any individuals to start with. On this view, modal facts and properties have nothing to do with the rules for using our terms, beyond the simple fact that our terms are inter alia aimed to correctly track and express such facts and properties.

As we know, modal normativists explicitly reject descriptivism. So they owe us an explanation as to what justifies endorsing the independence conditionals. If, on the other hand, those conditionals are simply *assumed* to hold, that seems just arbitrary. The worry is that (MN) would be begging the question in its favor. Although the theory should *demonstrate* that the modal normativist can legitimately integrate such conditionals for reaching correct judgments about metaphysical modality, it rather *presupposes* that this is the case.

4. A Possible Way-Out: Modal Monism

I have argued that semantic competence is not sufficient for knowledge of metaphysical modality. In particular, essentialist principles and information should be integrated in a successful account of how we know about metaphysical necessity and possibility. On the other hand, attempting to solve the problem by appealing to independence conditionals that fix the meaning of our terms at the actual world generates a host of other problems. It raises a worry of vicious circularity; it shows that semantic competence isn't strictly sufficient for knowledge of metaphysical modality; and, finally, it requires further justification, on pain of being question-begging.

However, the modal normativist might contend that those criticisms miss the point of the normativist account. She might insist that one doesn't need any "extra" essentialist or other metaphysical knowledge on top of one's conceptual competence in order to reach correct judgments of metaphysical modality. Likewise, one doesn't need to integrate any second-order knowledge or meta-rules. Instead, one could formulate the relevant independence conditionals by simply mastering the rules themselves. It should be part of one's ability to master the rules that 'Necessarily, all seals are mammals' derives from rules that should be taken to hold at all possible worlds, i.e. necessarily. Perhaps all there is to metaphysical necessity is fully captured by the explicit modal translation of the semantic rules.

Put otherwise, the modal normativist might deny that there is a *distinctive concept of metaphysical necessity*, which is different in particular from *logical-conceptual necessity*. This is a familiar distinction in the modal metaphysics literature. Metaphysical modality concerns possibilities and necessities that roughly depend on the nature or identity of things and the laws of metaphysics (i.e., essentialist principles, relations of grounding, ontological dependence and laws of mereology, and so on). Logical-conceptual modality, on the other hand, concerns the possibilities and necessities that depend on the meaning of our terms or the rules for applying our concepts, while also respecting the laws of logic and the truth-preserving patterns of inference. Based on this distinction, we could recast our interpretation of (MN) in the following way. The object-language translations of the semantic rules strictly express matters of *logical-conceptual* necessity; whereas, the meta-rule underlying the independence conditionals ensures that those statements are also *metaphysically* necessary. But modal normativists might deny that there is a genuine distinction between logical-conceptual vs. metaphysical modality. They might instead side with those philosophers who hold that at the level of worlds or propositions the two modalities coincide—a thesis that's called "Modal Monism" (Chalmers 2010: ch. 6; Kment 2017). By identifying logical-conceptual modality and metaphysical modality in this way, monists deny that there are two different and irreducible kinds of modality or sources of necessity.

So, how do they deal with the usual modal distinctions? On the one hand, it is widely acknowledged that propositions may be logically-conceptually possible though not metaphysically possible. For example, it is logically-conceptually possible that water isn't H_2O (that doesn't imply a contradiction), although it is metaphysically impossible. On the other hand, logical-conceptual necessities might not be metaphysically necessary. To illustrate, we could slightly adapt Gareth Evans' "Julius" case (1979). If the name 'Julius' refers rigidly to the person who is in fact the inventor of the zip, then 'Julius (if he exists) invented the zip' is logically-conceptually necessary. But it's also metaphysically contingent, since Julius could have become a car dealer, say, rather than an inventor.

To account for those data, Monists introduce a distinction at the level of meaning or content: sentences may have different associated descriptions or express two different propositions having different modal status, necessary *vs.* contingent. That's the core thesis of *two-dimensional semantics*. For example, in David Chalmers' two-dimensional framework (2010), 'Water is H_2O' is *secondarily necessary* but *primarily contingent*; whereas, 'Julius (if he exists) invented the zip' is *primarily necessary* but *secondarily contingent*. Monists hold that all the data can be explained by a single notion of modality coupled with semantic distinctions. At the level of modal metaphysics, they maintain that logical-conceptual possibilities (and necessities) are *also* metaphysical possibilities (and necessities). (See e.g. Chalmers 2010: ch. 6).

If Modal Monism is true, no extra component besides conceptual mastery and rigorous reasoning (and sometimes empirical information) is needed for gaining knowledge of metaphysical modality. If we can gain knowledge of logical-conceptual necessity from opportunely translating the rules, we *eo ipso* gain knowledge of metaphysical necessity—which is (MN)'s desired outcome.

But accepting Modal Monism comes with its own costs. I shall mention two main issues Monists must face. First, while Monism simplifies the modal metaphysics, it requires that we endorse a complex semantic theory, i.e., two-dimensionalism, which many find highly controversial. (For example, it is doubtful that two-dimensionalism can provide a plausible analysis of names and natural kind terms. For discussion: Schroeter 2021). Additionally, accepting Monism typically involves endorsing the view that what a possible world could look like is a matter of the descriptive content of our expressions. But language can hardly be the general source of the modal status of propositions, as Kripke's cases of the necessary *a posteriori* have long shown. (For discussion: Chalmers 2010: ch.6; Soames 2002; Vaidya 2008; Mallozzi 2018).

Modal Monism might offer some insight into the modal metaphysics underlying (MN)'s account of knowledge of metaphysical modality. So, the modal normativist might want to clarify if she is in fact committed to such a view. If that's the case, however, she would have to further explain how the account addresses Modal Monism's notorious problems.

5. Modal Normativism and Knowledge of Analyticity

In this final section I aim to show how (MN) might still explain *some* modal knowledge, without committing to Modal Monism. Suppose Modal Dualism is true (i.e., roughly the thesis that there is a genuine distinction between logical-conceptual vs. metaphysical modality). Modal normativists can at least explain how semantic mastery alone may suffice to gain knowledge of *logical-conceptual* modality. For on this view translating the semantic rules into the object language will strictly express matters of logical-conceptual necessity, and so a competent, rational thinker will be able to gain at least some modal knowledge by simply mastering the rules.

Let us define the *analytic truths* as those sentences that may be known to be true solely through grasp of their meaning (this is what Boghossian 1996 calls "epistemic analyticity")[6]. Knowledge of logical-conceptual necessity might then be taken to coincide with knowledge of analyticity thus defined.

The thesis that semantic competence is sufficient for knowledge of analyticity might perhaps strike one as trivial. It's not. Indeed, knowledge of analyticity has been extensively criticized by Williamson (2007: ch. 4). In what follows, I outline Williamson's challenge against knowledge of analyticity and how it might affect (MN). While Thomasson's own reply to Williamson (2015: 7.3) stresses the differences between their respective views and appeals to normative notions that the opponent might find unsatisfying, I show that (MN) can still successfully answer Williamson's challenge on his own (descriptive) terms, as originally formulated. I do so by adapting Boghossian's recent reply to Williamson (Boghossian and Williamson 2020). I conclude that (MN) can still explain knowledge of analyticity or logical-conceptual modality.

As Williamson characterizes it, epistemological analyticity is such that *one's understanding of a sentence guarantees that one assents to the sentence* (2007: 73). For example, 'Every vixen is a female fox', is an analytic sentence in this sense since necessarily, whoever understands it assents to it. On the other hand, failure to assent to sentence *s* shows that one doesn't understand *s*.

Against epistemological analyticity, Williamson has raised the problem of "Competent Dissent" (as Boghossian labeled it). Williamson argues that a fully competent native speaker of English might not assent to an elementary logical truth such as 'Every vixen is a vixen*'*, while still understanding it. There might be various reasons for this. One might have somehow developed the conviction that vixens do not exist, while also holding that universal quantification is existentially committing. Or one might believe that there are borderline cases, such that it is neither true nor false that 'Every vixen is a vixen' (2007: 86-88). Indeed, the subjects in Williamson's Competent Dissent scenarios are often *experts* in relevant fields—such as in the case of the distinguished logician Vann McGee, who has famously argued against modus ponens, thus refusing to assent to modus ponens while certainly understanding it (92). A further example involves philosophical expertise. Take for example sentence (KB): '*It is necessary that whoever knows p believes p*'.

[6] For Boghossian, an analytic sentence may be known to be true solely through grasp of its meaning, "provided that grasp of its meaning alone suffices for justified belief in its truth" (1996: 363). As he explains, epistemic analyticity should be sharply distinguished from traditional *metaphysical* analyticity, according to which an analytic sentence is true purely by virtue of its meaning. Quine's criticism of analyticity (targeting more precisely those *truths that can be converted into logical truths by substitution of synonyms for synonyms,* or "Frege-analyticity", 366) should be understood for Boghossian as undermining the metaphysical notion, whereas the epistemological notion can be preserved. Note that there are additional conceptions of analyticity. In Kant's original definition, an analytic truth is one in which *the predicate is already (covertly) contained in the subject* (e.g., in the case of 'All bachelors are unmarried' the predicate 'unmarried' makes explicit what was already contained in the subject 'bachelor'). Yet another notion—I shall call it "essentialist analyticity"—takes analytic truths to *hold in virtue of the identity or essence of the concepts* (Fine 2005). Whether there might be additional notions, and whether they may all be interconnected, are interesting issues that I set aside here.

Williamson remarks that "many philosophers, [and] native speakers of English, have denied [KB]. They are not usually or plausibly accused of failing to understand the words 'know' or 'believe'" (168). Additionally—we will see the significance of this point shortly—according to Williamson the subjects in question might not just refuse to assent to a certain sentence *s,* but even *lose the disposition* to assent to *s* while allegedly retaining full understanding of *s.* Williamson draws a provoking general conclusion to the question of "what is epistemically available simply on the basis of linguistic and conceptual competence. To a first approximation, the answer is: nothing" (77).

According to (MN), a subject may come to know modal truths solely based on her ability to correctly use and convey the semantic rules for our terms and what follows from them. Assuming, as it is plausible, that being able to use and express the semantic rules entails grasping their meaning, then the modal truths we may come to know on (MN) are (epistemic) analytic truths.

But then (MN)'s account of modal knowledge (*qua* restricted to logical-conceptual necessity or analyticity) is also open to Williamson's Competent Dissent problem. Assuming that understanding a sentence is a matter of normal semantic competence, possessing the relevant competence is all that is required for assenting to an analytic sentence. (MN) is concerned with *knowledge* not assent, as we have seen. But since knowledge is a stronger notion than assent, (MN)'s account should entail that mastering our semantic rules suffices for assenting to analytic truths. So for example, on (MN) someone who masters the semantic rules for 'vixen' (and the other ingredient terms), should assent to analytic truth (or logical-conceptual necessity):

(V) Necessarily, all vixens are female foxes

In a Williamsonian spirit, one could argue that a competent speaker might not assent to (V), while mastering the rules for the ingredient terms and thus perfectly understanding (V).

Thomasson is aware of the challenge and maintains that modal normativists can easily avoid it. What they need isn't the (descriptive) claim that semantic competence entails a *disposition to assent*; but rather the (normative) claim that semantic competence entails that one *ought to assent* to the relevant sentences and can be rebuked if one refuses. Semantic competence entitles one to the relevant conclusions (2015: 238-239). Additionally, a competent subject who deviates from the normal practice might have revisionary goals: she might be aiming to renegotiate the relevant semantic rules (243).

But Williamson will likely find this normativist strategy unsatisfying. As he put it elsewhere, "if one ought to reason in some way, should not something deeper explain why one ought to reason in that way?" (2003: 291) What's missing from the normativist story is an explanation of the entitlements in question and of our obligation to reason according to the relevant rules. Unless the

normativist can integrate her account with that kind of justification, Williamson's original challenge is still open.

Fortunately, there is a response to the Competent Dissent problem that preserves Williamson's non-normative set up in terms of one's (disposition to) assent, which can be fruitfully adopted by (MN). Boghossian (in Boghossian and Williamson 2020) points out that in certain cases assenting to a sentence *s* is in fact *constitutive* of one's understanding *s*—for example, in the case of logical constants, or of traditional analytic truths. In such cases, one is justified in assenting to *s* based on understanding, according to Boghossian, *because* assenting plays such a constitutive role for understanding. Thereby, in cases where a competent subject refuses to assent to *s,* she will at least retain the *disposition* to assent to *s* if she does still understand *s.* Boghossian takes up the example of *conjunction*:

> A natural description of Williamson's expert, who develops theoretical misgivings about [conjunction-elimination, CE] is that she retains the disposition to assent to instances of CE [e.g., 'If Mary ate the apple and the pear, then Mary ate the apple'], but refuses to act on that disposition as a result of the sophisticated misgivings. As we may put it, she may continue to find CE *primitively* compelling, even as she now finds it *derivatively* uncompelling. (190)

We saw that Williamson denies that competent speakers, indeed experts, need to retain even any disposition to assent. For him, they might well lose it altogether. However, Boghossian distinguishes two ways in which one might lose such a disposition and end up thinking that *s* is no longer plausible: (a) *all things considered* vs. (b) *independently of any consideration.* Williamson's Competent Dissent scenarios are not really counterexamples to epistemological analyticity because they are instances of (a) not (b). So they strictly miss the target.

To elaborate, in Williamson's scenarios experts reach their dissident conclusions based on lots of theoretical considerations, namely all things considered (a). That means that they lose their disposition to assent to *s* not solely based on their linguistic competence (or "primitively"), but in virtue of further considerations stemming from their expertise (or "derivatively"). In order to have a genuine counterexample to epistemological analyticity, the speaker should lose her disposition independently of any contribution from further considerations (b), while somehow still retaining full understanding of *s.* But cases of the latter sort are quite implausible. As Boghossian points out, we might legitimately doubt that a subject who loses her disposition to assent to, say, conjunction-elimination for no particular reason would still count as understanding '*and*' (217). Boghossian's reply can in effect be cast as a dilemma for Williamson. Once it is clear that a counterexample to epistemological analyticity should involve one's losing her disposition to assent to *s* primitively or independently of any considerations, while also retaining her understanding of *s*, Williamson's candidate cases either (i) don't work (because they fail to satisfy the independence requirement),

or (ii) are utterly implausible (because it is not clear that they satisfy the latter requirement that the subject still understands *s*).

For similar reasons, I think that (MN)'s account of modal knowledge (again, as restricted to knowledge of analyticity or logical-conceptual necessity) is also safe from Williamson's criticism. For speakers might well gain knowledge of analytic truths by rigorous reasoning solely based on their semantic competence. A competent speaker who loses her disposition to assent to (B) or (V) solely on that basis (or primitively), while still retaining normal reasoning capacities, no longer appears to understand those truths—somehow, she would have lost her mastery of the basic semantic rules for the ingredient terms.[7]

In conclusion, although (MN)'s account of modal knowledge faces several problems as an account of knowledge of *metaphysical* modality, it may still successfully explain knowledge of *logical-conceptual* modality or analyticity, while being safe from the sorts of criticisms raised by Williamson's Competent Dissent problem.[8]

[7] The strategy should be welcomed by normativists, as Thomasson seems open to the possibility of treating basic norms regarding acceptance (and rejection) as "constitutive norms for thought" (2015: 240, fn. 8).

[8] Many thanks to Paul Boghossian, Theodore Locke, Amie Thomasson, and Anand Vaidya for helpful comments on an earlier draft.

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