

## What Is Absolute Modality?

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### Introduction

Talk of “absolute” modality is widespread in contemporary modal metaphysics and epistemology.

Lewis wonders whether it is “absolutely impossible for one particle to be both positively and negatively charged” (1986: 114), as he investigates the idea that “absolutely every way that a world could possibly be is a way that some world is” (86).

Similarly, Van Inwagen remarks that

When we, who are interested in questions of modal epistemology, ask whether transparent iron is possible, we are, of course, interested in “absolute possibility,” and not, like the working condensed-matter physicist, only in what is possible given the actual laws of nature (1998: 80).

And according to Rosen, “A universe in which  $2 + 3 = 6$  is like a world of married bachelors: an absolute impossibility” (2002: 286).

The sort of modality here at stake is *metaphysical modality*. Traditionally, that’s regarded as the chief kind of modality in philosophy, as modal premises and conclusions in central philosophical arguments notably feature claims of metaphysical possibility and necessity. Think of Descartes’ argument for mind-body dualism, which hinges on the apparent possibility of the existence of the mind without the body; or Anselm’s argument for the existence of God, which is aimed at establishing that God necessarily exists. These are examples of allegedly “absolute” metaphysical modal claims. Importantly, metaphysical possibility and necessity appear to have special significance in philosophy at least partly because they are “absolute” (e.g. Clarke-Doane 2019; Nolan 2011). But what does this mean more precisely?

While examples might give us some intuitive grip on this notion, it’s not easy to pin down what it means exactly for certain possibilities and necessities to be “absolute” and why having this trait should be so philosophically valuable. It doesn’t help that the expression is often paraphrased by means of metaphors (e.g., the “broadest”, the “strongest” modality), or even used as if it were self-explanatory—perhaps because of its evocative power.

In this paper I argue that talk of metaphysical modality as “absolute” is ambiguous, as it appears to be wanting to convey multiple ideas. Metaphysical possibility is supposedly completely *unrestricted* or *unqualified*; it’s the most inclusive kind of possibility, which encompasses all sorts of non-actual scenarios. Metaphysical necessity holds *no matter what*, as

Leibniz put it, or is the *strongest* kind of necessity. Metaphysically necessary truths are *unconditional* (they don't depend on anything) and *exceptionless*. Moreover, metaphysical modality is thought to be absolute in the sense that it's *real* or genuine and the most objective modality: metaphysical possibility and necessity capture ways things could and must have *really* been.

As we disentangle these ideas, certain talk of metaphysical modality *qua* "absolute" turns out to be misguided. Metaphysical possibility isn't completely unrestricted or most inclusive compared to the other modalities, but there are substantive restrictions or qualifications on what counts as genuinely metaphysically possible. Metaphysical necessity, like all kinds of necessities, is relative to or conditional upon a specific framework of reference.

On the other hand, questioning that metaphysical modality is absolute in this sense won't compromise its philosophical significance. For metaphysical possibility and necessity capture nonetheless how things could and must have *really* been most generally. Metaphysical modality deals with *reality* and the *nature of things*. That's the chief interest of metaphysics. Arguments against the alleged absoluteness of metaphysical modality may not thereby undermine its philosophical significance (*pace* Clarke-Doane 2017; 2019).

While nothing is lost by dropping the expression "absolute modality" altogether, I'm not urging that we do so. My suggestion going forward is rather that we make an effort to clarify what the special significance of metaphysical possibility and necessity is, while discarding misguided connotations. In this light, this paper offers a sort of conceptual tidying-up.

## 1. Two Senses of 'Absolute' Modality

There have been attempts at unpacking the notion of absolute modality further. A widespread view is that the absolute modalities are, as Hale and Hoffman put it, "notions of what is *unconditionally, or unrestrictedly, necessary or possible*" (2011: 2). Van Inwagen holds that absolute possibility is possible "without qualification" or "*tout court*"; and so does Mackie (2006). Hale (2013) claims that absolute necessity is distinctively "non-relative" compared to other kinds of necessity. This supposedly captures "what holds true absolutely unconditionally, or come what may" (100) and can be expressed by an "absolutely unrestricted" quantifier (99). Field (1989), Williamson (2013; 2016), Berto and Jago (2019), and Vetter (forthcoming) similarly hold that metaphysical necessity is absolute in the sense that it's "unrestricted".<sup>1</sup> For Williamson, this means more precisely that metaphysical modality is the "maximal objective" modality (2016). For Rosen, it means that "If P is metaphysically necessary, it is necessary in every real sense. If P is really possible in any sense, then it's possible in the metaphysical sense" (2006: 16). Lowe (2012) as well as Nolan (2011), hold that metaphysical necessity is absolute in

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<sup>1</sup> For Berto and Jago (2019), the mainstream view is that there are three kinds of absolute modality *qua* unrestricted modality: metaphysical, logical, and mathematical necessity. We'll see that some of the criticisms against the idea that metaphysical necessity is absolute also apply to logical necessity. We can predict that similar considerations apply, *mutatis mutandis*, to mathematical necessity.

the sense that it's "the strongest" necessity; Stalnaker (2003) says it's necessity "in the widest sense". And according to Lewis, if something is absolutely necessary "in no sense at all is it possible that [it] might fail" (180). Interestingly, Kripke (1980), who's usually credited with having revived substantive debates on modal metaphysics in contemporary analytic philosophy, never uses the expression "absolute", though he speaks of metaphysical necessity as necessity "in the highest degree" and "*tout-court*".

Overall, talk of metaphysical modality as "absolute" seems to convey two main theses. First, (i) absolute as opposed to merely relative modal notions are thought to be *completely unrestricted* or *unqualified*. Metaphysical possibility is supposedly the most inclusive kind of possibility; it's what's possible "*tout-court*", or "*simpliciter*". Metaphysical necessity is correspondingly necessity "come what may", or "no matter what". It holds unconditionally or isn't relative to anything; it's the strongest, or exceptionless necessity.

Second, there's the closely related but distinct thesis that (ii) metaphysical modality as absolute modality is *real* or *genuine* and *most objective*. Metaphysical possibility and necessity distinctively capture what could have and must have *really* been the case most generally. Although those characterizations are often blurred together in philosophical talk, they are independent of one another and should be kept distinct. I shall argue that while (ii) articulates the central feature of metaphysical modality, (i) is strictly false.

Here is an outline of the rest of the paper. In §2 and §3, I clarify what's problematic about thesis (i). I first look at a formal account of absolute necessity and argue that metaphysical necessity doesn't qualify, as it is relative to a specific framework (§2). Next, I introduce some informal characterizations of both absolute possibility and necessity and argue again that metaphysical modality doesn't qualify, as it's restricted and qualified in substantive ways. Modal expressions in general are highly context-sensitive (§3.1); the real modalities must satisfy specific requirements (§3.2). Additionally, logical possibility is more inclusive or less restricted than metaphysical possibility (§3.3). But is logical modality *real*? In §4, I outline some answers and how they may match two different metaphysical frameworks, modal monism vs. dualism. In §5, I clarify that modal pluralism *per se* doesn't undermine the thesis that metaphysical modality is absolute, by drawing an analogy with logical pluralism. In §6, I propose that metaphysical modality is special in that it's *real* or *most objective* modality—namely, thesis (ii). Metaphysical necessity and possibility are tied to the nature of things or their essences, which I argue have special explanatory powers for how things are. As we come to see essence as the source of real, most objective modality and explanation, we can appreciate what's philosophically valuable about metaphysical modality.

## 2. Non-relative Necessity

A main idea that talk of absolute modality conveys is that absolute modal notions are supposedly *non-relative*; they hold *unconditionally* and *unrestrictedly*. That's thesis (i). But metaphysical necessity hardly qualifies as absolute in this sense. A helpful way to see why is by

looking at a formal conception of absolute necessity that's prominent in contemporary literature.

Modality seems distinctively *pluralistic*: there are many kinds of necessity and possibility (logical, physical, metaphysical, etc.), which differ significantly from one another. On the other hand, the various modalities also seem to have much in common—perhaps simply in virtue of being *kinds of* modality. Thus, several philosophers, including Fine (2005) and Hale (1996; 2013), have been tempted to think that the various modalities aren't incommensurable after all; but that there is some fundamental or most basic modality in terms of which the others can be understood. A given kind of necessary truth could be defined as necessary (in this most basic or fundamental sense) *relative to* or conditional upon a certain body of truths. Whereas, the most basic, fundamental necessity will be *non-relative* or unconditional and might be thought of in this sense as “absolute”.<sup>2</sup>

Let's spell this out a bit more. One strategy to individuate a most basic or fundamental modality involves *relativizing* the different kinds of necessity. According to the relativization strategy, a given truth  $p$  is  $\Phi$ -necessary if it is *logically necessary relative to* the  $\Phi$ -truths:

$$\Box_{\Phi} p = \Box (\Phi \supset p)$$

where “ $\Box$ ” stands for logical necessity. Equivalently, for any type of necessity  $\Phi$ ,  $p$  is  $\Phi$ -necessary iff  $p$  follows from the  $\Phi$ -truths. So for example, something is e.g. physically necessary if it follows from the fundamental truths of physics, or conceptually necessary if it follows from the basic conceptual truths. And so on. Relativization seems powerful in that it captures the intuitive idea that, given some set  $\Phi$  of truths, it *must be true* that *if  $\Phi$ , then  $p$* . A proposition is thus necessary in a given sense if it's logically necessary conditional upon or relative to a given set of basic truths. Following Sider (2011), we might think of those basic truths as “modal axioms”.<sup>3</sup> According to this strategy, any kind of necessity can be defined in terms of a certain body of (non-modal) truths or axioms plus logical necessity (Fine 2005).<sup>4</sup>

By contrast, if something is *absolutely* necessary it won't be relative to anything but will follow from any truth. Absolute necessity is necessity such that no matter which set of truths  $\Phi$  one

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<sup>2</sup> That's a view Fine (2005) labels “modal monism”—although he defends modal *pluralism*. He believes that *natural*, *metaphysical*, and *normative* necessity are incommensurable and irreducible. Note also that Fine, differently from Hale, doesn't call the most basic necessity “absolute”.

<sup>3</sup> Importantly, Sider uses the relativization strategy within a deflationist “Humean” framework, where there's no “joint-carving” or natural fact about what's necessary/possible, but reality is instead fundamentally *amodal*. Particularly, for Sider, “modal axioms are simply certain chosen true sentences”, which we select more or less arbitrarily based on our interests (2011: 271). But note that the relativization strategy need not entail deflationism about necessity or the thesis that basic modal truths are interest-relative.

<sup>4</sup> The relativization strategy doesn't obviously amount to a *reduction* of the various kinds of necessity to logical necessity. We can use logical necessity to better understand or define the other modalities, without thereby aiming to eliminate or reduce the latter to the former. See Leech (2016) for a convincing argument to this effect.

considers,  $p$  is necessary relative to  $\Phi$ . Hale (2013) describes absolute necessity in effect as a “limit case” of relativization, since  $p$  in this case is necessary relative to every set of truths  $\Phi$ :

$$\Box_A p = \forall \Phi \Box (\Phi \supset p)$$

where “ $\Box_A$ ” stands for absolute necessity and “ $\Box$ ” for logical necessity. Assuming, as it’s widely acknowledged, that logical truths are implied by every proposition, absolute necessity can be taken in effect to coincide with *logical* necessity.<sup>5</sup> That’s also Rumfitt’s (2010) view. He stresses that logical necessity is absolute or “true no matter what is supposed to be the case” and further proposes that it’s connected to a corresponding absolute notion of *consequence* as “applicable no matter what is supposed to be the case” (43). Rumfitt here follows McFetridge, who claims that logical necessity is absolute in the sense that we are prepared to deploy a logically necessary proposition as a premise in reasoning over the unrestricted range, from any supposition whatsoever (1990: 153–154).

The relevant point for our purposes is that according to these formal accounts, absolute necessity is *logical* necessity, not metaphysical necessity. Logical necessity is considered absolute because apparently it isn’t relative to or conditional upon any particular truths. In this sense, it’s taken to be the most fundamental modality, the one in terms of which all the other types of necessity can be defined.

Indeed, it’s easy to see that it’s implausible that *metaphysical* modality qualifies as absolute in this sense. Assume that  $p$  is some metaphysically necessary truth, e.g., *Saul Kripke isn’t Rudolf Carnap’s son*. There seem to be many sets of  $\Phi$ -truths such that  $p$  doesn’t follow from  $\Phi$ . If  $\Phi$  = the logical axioms, for example,  $\Phi$  obviously doesn’t entail  $p$ . One needs to build “extra” truths into  $\Phi$  for the relevant entailment to go through—namely the metaphysical laws; particularly, an essentialist principle about individual origin. Metaphysically necessary truths don’t just follow from any truth and so aren’t absolute in that sense.

Furthermore, it seems that we might easily define metaphysical necessity in terms of logical necessity plus a relevant set of truths, just like the relativization strategy predicts. Metaphysically necessary truths could be understood as logically necessary relative to or conditional upon the basic metaphysical truths or metaphysical axioms. Metaphysical necessities are those that logically follow from such truths. Thus, metaphysical necessity isn’t absolute in the sense of being non-relative or holding completely unconditionally.<sup>6</sup>

Against the relativization strategy itself, it might be objected that logical necessity doesn’t qualify as absolute, either. One might question that the logical truths are implied by every proposition—i.e., that for any  $\Phi$ ,  $p$  follows from  $\Phi$ , where  $p$  is a logical truth. A relevance logician, for example, would stress that it does matter what the propositions in question are.

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<sup>5</sup> Hale (2013: 102). For further discussion, see Lowe (1998), and Shalkowski (2004).

<sup>6</sup> A more complex sort of relativization strategy for metaphysical modality implements a double-indexing semantics for modal languages, which includes pragmatic considerations: see Hellie, Murray, and Wilson (2020).

More broadly, the relativization strategy hinges on a classical understanding of consequence, such that it seems correct to say that, e.g., the laws of physics entail that it's physically necessary that bodies on earth accelerate at a rate of 9.8 m/s; or that the essentialist principles entail that it's metaphysically necessary that Saul Kripke isn't Rudolf Carnap's son. A given  $\Phi$ -necessity  $p$  follows from the set of  $\Phi$ -truths, where "following from" expresses classical logical consequence. But one might contend that it's not uncontroversial that there is one single genuine consequence relation. Logical pluralists hold that there isn't one true logic, which often translates into the claim that there are many equally good logics. Specifically, some hold that there is more than one correct relation of logical consequence.<sup>7</sup> Thus, one might question on pluralistic grounds that the relation between a given set of truths  $\Phi$  and some  $\Phi$ -necessity  $p$  is the relation of classical logical consequence for just any  $\Phi$ . If that's correct, logical necessity won't have the privileged status that the relativization strategy grants it. It won't obviously be the most basic or fundamental necessity in terms of which all the other kinds of necessity can be defined. It would instead be on a par, so to say, with possible different conceptions of necessity that come from non-classical systems, and be usefully applied in certain cases but not others. If logical pluralism is true, logical necessity might not qualify as absolute in sense (i).

The issue of whether logical necessity is absolute (in the sense of being non-relative or unconditional compared to the other kinds of necessity) appears to be tied to the key question in the philosophy of logic of whether there is one single genuine consequence relation.

### 3.1 Unrestricted Modality - Context-sensitivity

Turning to more informal characterizations of metaphysical modality *qua* absolute, it's often remarked that metaphysical modality is totally "unrestricted" compared to the other modalities.<sup>8</sup> Metaphysical possibility is "the broadest" or "most inclusive" possibility. If a truth  $p$  is absolutely possible,  $p$  may be true at any world or throughout modal space, completely unrestrictedly. Metaphysical necessity, in turn, is "the strongest" or "exceptionless" necessity. If a truth  $p$  is absolutely necessary,  $p$  just can't fail to hold. It's true at all worlds throughout modal space, again completely unrestrictedly. But is metaphysical modality absolute in this sense?

First, characterizing absolute modality in this way may clash with a structural feature of modal expressions generally considered, namely that they are highly *context-sensitive*. Talk of something as "possible" or "necessary" implicitly or explicitly refers to specific ways in which things have such a modal status. It could be, say, physical, or chemical, or conceptual, or

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<sup>7</sup> See e.g. Beall and Restall (2000; 2006). Restall (2002) aptly distinguishes this sort of pluralism concerning logical consequence or validity from a different, "Carnapian" pluralism that targets instead the meaning of logical connectives and quantifiers. For some helpful overview of logical pluralism: Cook (2010); Priest (2006: ch. 12); and Russell (2019).

<sup>8</sup> This contrast is explicitly drawn for example by Berto and Jago: "Other [non-absolute] modal notions...are naturally understood as *restricted* forms of necessity or possibility. Something can count as *R*-necessary, for some relativized modal notion *R*, even if it fails to hold at some possible world or other" (2019: 14-15).

epistemic, etc. possibility or necessity that's at stake. Any given modal statement  $p$  might or might not be true depending on the context of reference—namely depending on the sense in which  $p$  is claimed to be possible (or necessary). That requires that we specify what kinds of possibilities and necessities we are referring to in a given context in order to assess them correctly—which means *restricting* or *qualifying* the space of possibilities. When we engage in modal reasoning, we routinely rule out (explicitly or implicitly) certain kinds of worlds or possibilities while focusing on others. We do so in order to successfully single out the relevant kind of modality and determine the truth-value of modal statements. Formally, one needs to clarify what sorts of worlds are included in a model, since the truth-value of a sentence we consider may vary as those vary.

Focusing on necessity in particular, we can distinguish two ways in which necessary truths may be absolute *qua* exceptionless: *locally* vs. *globally* exceptionless. For any kind of necessity  $\Phi$  and any  $\Phi$ -necessity  $p$ ,  $p$  is locally exceptionless *just in virtue of being necessary*. For example, physical necessity holds at all those worlds that share a certain nomological profile or, more precisely, where the same laws of physics hold. Understood locally, namely with respect to the set of worlds having the same physical laws, physical necessity is thus “absolute” or exceptionless (barring miracles). But *any* kind of necessity is absolute in this sense. Being locally exceptionless is in effect a trivial property of necessity. We might say, that's just *what being necessary is*: namely, not possibly otherwise.<sup>9</sup> There's nothing special about logical, physical, or metaphysical necessity from this perspective. They are all absolute in a local sense. Being exceptionless isn't really a distinctive feature of metaphysical necessity as opposed to the other kinds of necessity.

Of course that's not what philosophers mean when they claim that metaphysical necessity is absolute. Many locally absolute necessary truths won't be exceptionless when considered *globally*; namely “from without” or with respect to the allegedly unrestricted framework. It isn't necessary that, say, bodies on earth accelerate at a rate of 9.8 m/s, if our model ranges over the logically possible worlds. At some such worlds, that may be false. For a necessary truth to be absolute in this sense it would have to be true at just any world in every model or across any context of reference. Metaphysical necessity should be *globally* exceptionless, namely a kind of truth that's just inviolable—in Hale's words, “what holds true absolutely unconditionally” (2013: 100).

Similarly, one might insist that when we talk about metaphysical *possibility* as “absolute” what we have in mind is *just all* possible worlds, completely unrestrictedly or without qualification; or all possibilities taken primitively.

In response, it's unclear what possibility and necessity claims exactly express when their modal component is left completely unqualified. Speaking of something as just “possible” or “necessary” leaves open different interpretations, which call for disambiguation in order to determine their truth-value. Adding that those claims should hold “unrestrictedly” or “globally” clearly won't help. It's, say, a conceptual possibility, although not a physical possibility, that

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<sup>9</sup> Kment analogously points out that necessity claims are “both absolute and context-dependent” (2014: 57).

space shuttles travel faster than light. It's metaphysically necessary, although not logically necessary, that Saul Kripke isn't Rudolf Carnap's son. Context-sensitivity is in effect a structural feature of modal expressions and claims of metaphysical possibility and necessity aren't different in this respect. Among others, Kment has recently stressed the context-sensitivity of necessity claims in particular and distinguished between "invariantist" and "contextualist" analyses of such statements. According to invariantists, the truth-conditions of necessity claims do not vary across contexts, but the statements themselves may not be strictly true (for they never range over *all* worlds). However, they may be "acceptable" or close enough to the truth, where the context determines how close that needs to be. Contextualists, on the other hand, hold that the truth-conditions of necessity claims themselves are context-dependent (2014: §3.1). Similarly, Sider conjectures that "there is no such contextually constant outer modality. Even the outer  $\Box$  and  $\Diamond$  vary contextually" (2011: 334).<sup>10</sup>

A suggestion that might be worth exploring is that completely unqualified or unrestricted modal statements may just fail to refer. Arguably, if the concept of absolute modality is meant to capture a completely unqualified or unrestricted modality, then although meaningful, it's empty. Hartry Field once confessed to being attracted to a view that "reject[s] the whole notion of 'absolute' necessity as unintelligible" (1989: 237, fn. 9). I'm suggesting instead that the notion is intelligible, although it fails to refer. A way to think of it is in terms of some "ur-concept" or "abstract core" meaning underlying all the various senses of "possibility" and "necessity". If so, then contextual clues would supplement this abstract core and help produce a more precise concept.

### 3.2 Unrestricted Modality - With Restrictions

An additional reason to question thesis (i) (i.e., that metaphysical modality is absolute *qua* completely unrestricted or unqualified) comes from a familiar way of characterizing metaphysical modality. Philosophers often do so by *restricting* the relevant space of worlds or narrowing down our focus to certain kinds of modalities having specific features, namely the family of the so-called *real* or *objective* modalities. A core feature of the real modalities is that they are *alethic*, i.e. they respect the T axiom of modal logic,  $\Box p \rightarrow p$ . Non-alethic modalities, such as deontic modality (which has broadly to do with obligations and permissions), do not obey the T axiom. Additionally, although the epistemic modalities respect the T axiom because of factivity (if I know that *p*, then *p* is true), they are usually ruled out "by hand" *qua* non-alethic and non-objective, since they are thought to be dependent on the epistemic subject.

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<sup>10</sup> Importantly, rejecting completely unrestricted possibility doesn't entail endorsing deflationism about modality Sider-style. Kment's view, for example, is far from any such implication, and so is my own, as we will see.



Arguably, being alethic is a necessary not a sufficient condition for being *real*<sup>11</sup>—where the list of the real modalities usually includes natural, practical, mathematical, and metaphysical modality. (Whether logical modality is also real is an open issue: see §4). Being real or “genuine” modality seems to depend on some further key feature. Some have proposed for example that metaphysical modality, especially by contrast with epistemic modality, is the *most inclusive*, or *fundamental*, or *permanent* real modality; or the one satisfying specific *counterfactual conditions*, or else providing some specific type of *explanation* (for discussion: Glazier 2017). Clarke-Doane provocatively describes metaphysical modality as the one possessing “something *uniquely metaphysically significant*”—which however is hard to identify (2017: 2). I’ll go back to the issue of what makes metaphysical modality real or genuine modality.

Here I just wish to stress that it’s misguided to deem such a modality “absolute” in the sense of completely unrestricted or unqualified, when such explicit requirements are in place. Additionally, the metaphysically possible worlds are those in which specific *metaphysical laws* or principles hold, including the necessity of identity, the necessity of origin, the necessity of fundamental kind and of constitution, perhaps also certain principles of individual essentialism; as well as specific mereological laws and grounding principles capturing metaphysical dependence. It may be somewhat open to discussion which laws or principles hold at the metaphysically possible worlds—i.e., what “makes” a given world genuinely metaphysically possible. But those are substantive conditions that must be satisfied by any such world, which indicates that there’s something amiss in the idea of metaphysical possibility as completely unrestricted or unqualified. It would be more appropriate to picture the metaphysically possible worlds as occupying a specific, *restricted* region of modal space instead.

### 3.3 Unrestricted Modality vs. Logical Modality

One might push back on the considerations from the previous sections as follows. Even granted that the metaphysically possible worlds satisfy precise requirements or metaphysical constraints, *if* the metaphysically possible worlds exhaust in fact all the worlds there are, metaphysical possibility is *de facto* unrestricted or the broadest kind of possibility. Correspondingly, there won’t be genuine alternatives to the metaphysical laws; no possible circumstance in which any such truth might fail to hold. Metaphysical necessity won’t be just locally exceptionless but globally exceptionless. From this perspective, although metaphysical modality is strictly speaking relative to or conditional upon a certain framework (the metaphysical laws), it’s nonetheless *de facto* unrestricted. Metaphysical possibility is the broadest or most inclusive possibility; metaphysical necessity is globally exceptionless or the

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<sup>11</sup> One might doubt that satisfying the T axiom is even a *necessary* condition for being real. Take the *normative* truths. Although deontological necessity doesn’t satisfy the T axiom, if moral realism is true, certain moral truths are necessary in an “absolute” sense. They will be substantive (plausibly, synthetic *a priori*) and thus *real*.

strongest necessity. Talk of metaphysical modality as “absolute” in the sense of (i) might still be legitimate.

In response, note first that not all constraints that bind metaphysical possibility also bind *logical* possibility, which may indicate that metaphysical possibility isn’t the broadest type of possibility after all. It’s logically possible that, say, Saul Kripke is Rudolf Carnap’s son, although it’s metaphysically impossible. Logical possibility is less restricted or qualified than metaphysical possibility; the space of logically possible worlds is broader than the space of metaphysically possible worlds. Accordingly, at some such worlds one might witness some violation of the metaphysical laws—call them “metaphysical miracles”—some failures of the necessity of origins, or of the necessity of fundamental kind, say. Although we might feel that any violation of such principles is simply incoherent, the principles set restrictions on possibility and necessity that may not obviously coincide with those of logical modality. Worlds instantiating violations of the metaphysical laws may be logically possible while metaphysically impossible, so that metaphysical necessity isn’t globally exceptionless and metaphysical possibility isn’t the broadest or unrestricted possibility. In a similar vein, Clarke-Doane has remarked that logical possibility, while distinct from epistemic and deontic notions, is still “dramatically more inclusive” than metaphysical possibility (2019: 4). Clarke-Doane takes this to show that the notion of metaphysical modality is not suited to capture *how the world could have been different in the most inclusive sense*.

Should this indicate that *logical* modality is absolute instead? But logical modality isn’t completely unrestricted or unqualified, either. There are substantive constraints on what counts as logically possible, namely respecting specific logical laws and truth-preserving patterns of inference. Additionally, the debates over logical pluralism suggest that there might be multiple alternative notions of what’s logically possible, so that some scenarios will be excluded under one reading but not another. One should first clarify what exactly “logical possibility” is meant to capture. A natural answer is, what’s possible according to the laws of classical logic; logical possibilities are constrained by such laws and the classically truth-preserving patterns of inference. But some would rule out as logically impossible only something that violates the law of noncontradiction. On this view, worlds in which, say, instances of the excluded middle fail but noncontradiction holds—an intuitionistic framework—still count as logically possible (Berto and Jago 2019: 32). Others would use an even less restricted notion of logical possibility. For a dialetheist, for example, although whenever it is true that  $\Box A$  it is true that  $\sim\Diamond\sim A$ , it may nevertheless be true that  $\Diamond\sim A$ , since  $A$  may be a true contradiction (Hale 2013: 110).

Importantly, one doesn’t need to buy into logical pluralism to acknowledge that (classical) logical modality is restricted or qualified in substantive ways—that’s something the monist and pluralist alike should grant. Logical monists will agree that there are precise conditions on what counts as logically possible. Like all modalities, logical possibility isn’t completely unrestricted or unqualified; so it isn’t absolute in that sense. (Similarly, Clarke-Doane 2019 gives a detailed argument that no notion of logical possibility is *unconditional*, where the case doesn’t turn on logical pluralism, either). What a logical monist might still try to show is that there is some

loosest, minimally restricted notion of possibility, which correctly uniquely captures what's logically possible. If so, logical modality will be *de facto* unrestricted, and so absolute in that sense. But it's hard to see how such an argument might go. As Clarke-Doane neatly put it, "the notion of absolute possibility is *indefinitely extensible*...Whenever we successfully lasso only possible worlds, we realize that we could always have included more" (2017: 284. See also Mortensen 1989).

To take stock: metaphysical possibility isn't absolute in the sense of unrestricted or the broadest type of possibility, because logical possibility is even less restricted or more inclusive. In turn, it's doubtful that logical modality qualifies as absolute in this sense, either. Not only it's itself restricted in specific ways; but there may be multiple, equally legitimate notions of what counts as logically possible.

#### 4. Is Logical Modality *Real*? *Monism vs. Dualism*

We saw that logical possibility is broader or less restricted than metaphysical possibility, which undermines thesis (i). But one might object that this claim crucially depends on logical modality being *real* (or otherwise ontologically on a par with metaphysical modality). That's controversial.

Logical modality might not be a real type of modality. Logical necessity and possibility might be said to only make sense as applied to uninterpreted sentences that can vary in which propositions they express. Logical truths have a special "form"—they display specific structural features—which guarantees that any replacement of its instances is also a logical truth simply in virtue of that form, or independently of the particular content it may express. By contrast, the real modalities apply to propositions, which are thought to be the meanings of sentences and the bearers of truth-values. While the real modalities capture how things are and their modal profiles, logical necessity doesn't have any special tie to how the world is; logical possibility only captures coherent ways for the world to be. Those hypotheses need only be consistent with the basic logical laws—most importantly the principle of noncontradiction—but may not reflect genuine ways things might have been. Logical modality is independent, as it were, of how the world is.

Thus understood, logical possibility will likely be accessible purely *a priori*. What's broadly logically possible may coincide with what's *epistemically possible*—where an epistemic possibility is a logically coherent hypothesis that one cannot rule out solely based on *a priori* reasoning. As one gains more empirical information about the world, previously open epistemic possibilities may turn out to be metaphysically impossible. Edgington (2004) for example suggests that we should identify "broadly logical" necessity (which need not coincide with formal logical necessity) with being knowable *a priori* (given idealized rationality). For her, logical necessity is an epistemic, and so non-real or non-objective, modal notion. One could virtually draw a line within modal space between what's epistemically possible vs. metaphysically possible (following Kripke's 1980 seminal distinction between epistemic vs.

metaphysical possibility). This is a view of modal metaphysics known as “modal dualism”. Dualists hold a dichotomy between metaphysically possible worlds vs. so-called *epistemic scenarios*. The latter are merely (ideally) coherent *a priori* possibilities; while the former are constrained by metaphysical necessity, which is thought to have its source in the nature of things. Worlds instantiating what I called “metaphysical miracles” are mere epistemic scenarios. They are qualitatively different from the metaphysically possible worlds and by definition lie outside the space of metaphysical possibility. Hence, dualists hold that scenarios don’t instantiate “extra” genuine alternatives to what’s metaphysically necessary.

If dualism is true, the friend of absolute modality might contend that the metaphysically possible worlds in effect exhaust all the worlds there are. Scenarios don’t constitute genuine alternatives to how things actually are; hence, metaphysical possibility is *de facto* unrestricted or the broadest type of possibility; metaphysical necessity is globally exceptionless. Metaphysical modality is absolute in the sense of (i).

While I endorse modal dualism, I reject this implication. Epistemic scenarios should be seen as further, qualitatively different types of possibilities. For they supplement the representational resources of standard possible worlds and help us account for the variety of modal claims that pervade our thought and language. No matter how lacking o “unreal”, this role grants them a place within modal space. By surrounding the space of the metaphysically possible worlds, the space of epistemic scenarios delimits the boundaries of metaphysical possibility. Even if logical modality isn’t a real type of modality, it doesn’t follow that metaphysical possibility is unrestricted or the broadest possibility, or that metaphysical necessity is globally exceptionless.

Additionally, note that if logical modality were real, dualism would seem unmotivated. The logically possible worlds would have to be somehow ontologically on a par with the metaphysically possible worlds—they wouldn’t be mere scenarios but represent genuine ways things might have been. We couldn’t really draw a line between qualitatively different types of worlds or possibilities. Indeed, treating logical modality as real may best suit a *monistic* framework. That goes by *identifying* logical possibility with metaphysical possibility at the level of worlds (e.g. along the lines of Chalmers 2010: ch.6). If the logically possible worlds (or epistemic scenarios)=the metaphysically possible worlds, there may not be any extra possibilities; no further region in modal space. A *Metaphysical Plenitude* thesis would hold, for which any *a priori* (ideally) coherent hypothesis or epistemic possibility is *eo ipso* a metaphysical possibility (cf. Chalmers 2006: 82 ff.). By identifying (broadly) logical modality and metaphysical modality in this way, monists deny that there are two different and irreducible kinds of modality or sources of necessity. Monists may maintain that metaphysical possibility is unrestricted or most inclusive, and metaphysical necessity is globally exceptionless. For there aren’t extra worlds (or epistemic scenarios) besides the metaphysically possible worlds.

While it simplifies the modal metaphysics, monism requires one to endorse a complex semantic theory, *two-dimensionalism* (e.g. Chalmers 2006; Jackson 1998).<sup>12</sup> As we saw, propositions may

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<sup>12</sup> The following discussion of modal monism is partly drawn from my “Semantic Rules, Modal Knowledge, and Analyticity” (forthcoming).

be logically possible (provided they don't imply a contradiction) though not metaphysically possible. Conversely, one could make the case that certain *a priori* necessities might not be metaphysically necessary. Take Gareth Evans' "Julius" case. 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 *a priori* or epistemically necessary. But it's also metaphysically contingent, since Julius could have become an opera singer, say, rather than an inventor. To account for those data within a monistic framework, two-dimensionalists hold that sentences may have different associated descriptions, or express two different propositions having different modal status, necessary vs. contingent. In Chalmers' framework, for example, 'Water is H<sub>2</sub>O' is *secondarily necessary* but *primarily contingent*. Whereas our example, 'Julius (if he exists) invented the zip', will come out *primarily necessary* but *secondarily contingent*. Monists maintain that all the data can be explained by one single modal notion, such that logical possibilities (and necessities) are *eo ipso* metaphysical possibilities (and necessities); but that must be paired with accepting that expressions have two dimensions of meaning or content.

Many find two-dimensionalism unappealing. Some have pointed out for example that it can hardly provide a plausible analysis of names and natural kind terms (for discussion: Schroeter 2021). Also, it requires endorsing a kind of modal deflationism, for it implies that what a possible world could look like is a matter of the descriptive content of our expressions (in various forms, this claim is at the heart of accounts such as Chalmers', Jackson's, and Cameron's). 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: Cameron 2009; Chalmers 2010: ch.6; Soames 2002; Vaidya 2008; Mallozzi 2018).

An alternative, non-deflationist sort of modal monism is outlined (but also ultimately rejected) by Fine (2005). Its core tenet is that we may *define* the different types of necessary truths in terms of a single underlying notion of necessity. By contrast with the two-dimensionalist version, this need not involve any *identification* between different types of possibility at the level of worlds. Epistemic and metaphysical modality must be rather kept well distinct, as epistemic necessity isn't even a "genuine form of necessity" for Fine (237: fn. 4). Furthermore, even if Fine conceded that we may somehow identify the various modalities at the level of worlds, there's no commitment to the deflationist thesis that modality is a matter of meaning or descriptive content. On the contrary, the monism Fine discusses seems distinctively "realist" in that it treats metaphysical necessity as "the one that obtains in virtue of the identity of things (broadly conceived)" (236). One might thus pursue this sort of monism by assuming that metaphysical necessity is the broadest necessity, and then defining the other kinds of necessity (logical, mathematical, conceptual, etc.) via *restriction* from it, *qua narrower* types or *species* of metaphysical necessity.<sup>13</sup> The resulting picture of modal space has the metaphysical necessities hold at all worlds, although we can still distinguish narrower types of necessity by identifying the different kinds of entities (logical, mathematical, conceptual, etc.) in virtue of which those necessary truths obtain.

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<sup>13</sup> The other main strategy for pursuing this sort of monism, as we saw, is *relativization* (§2). The most fundamental type of necessity in that case is logical necessity.

This “realist” type of monism is more promising than two-dimensionalist monism. But it’s doubtful that it has the resources to define all types of necessity in terms of metaphysical necessity. Fine himself defends modal *pluralism*. He argues that some types of modality are irreducible to metaphysical necessity and should rather constitute further primitive modal notions. (Indeed, since epistemic modality is excluded *ex hypothesi* as unreal, one might doubt that this is a monistic framework at all). Additionally, logical modality is divorced from epistemic modality and treated as *real*. Logical necessity is supposedly grounded in, or obtains in virtue of, the nature or essence of the logical entities (similarly, Hale 2013: 115). But that’s also controversial. Even those sympathetic to essentialism might question that abstracta like numbers and sets have real essences like concrete objects.

Finally, endorsing modal monism (of either sorts) might not guarantee that metaphysical modality is completely unrestricted for another reason. There might be further worlds in modal space, the *logically impossible* worlds, such that metaphysical necessity isn’t globally exceptionless. The view is controversial, though many have stressed its theoretical advantages. By representing various sorts of logical impossibilities, such worlds help us deal with a number of problems of hyperintensionality that affect accounts of meaning, knowledge, and counterfactual thinking (namely problems that are generated by necessarily equivalent contents and the attempt of distinguishing between them. See Berto and Jago 2019: ch. 1 for an overview). By definition or their very nature impossible worlds do not represent real possibilities. One might think of such entities as “like-scenarios” and expand the space of epistemic scenarios proper so as to include points that represent various sorts of logical impossibilities—the epistemically *impossible* scenarios. Of course, on such a view, no possibility would be truly unrestricted, no necessity would be globally exceptionless. As Nolan put it, “if the issue is what truths are true *in any world whatever*, the answer is ‘none’” (2011: 316).

## 5. Trivial Pluralism?

A main point that has emerged from the previous discussion is that modality is pluralistic and modal notions are always restricted or qualified, which seems to undermine the alleged absoluteness of metaphysical modality. But is it really the case? Granted that there are many ways in which things may be possible and necessary and that each modality is restricted and qualified accordingly, one such modality might still be privileged within such a plurality. Certain truths may have some unique, “absolute” character—some special “glow”, to borrow Sider’s words—which makes them stand out among all others.

Note that just assuming this isn’t the case might involve a kind of fallacy that’s familiar from metaethics. One might incorrectly take the fact that different cultures have different moral codes (an empirical claim) to entail that there’s no universal moral truth (a normative claim). But moral pluralism doesn’t entail moral relativism. Likewise, insisting that modality is pluralistic as a way to reject that metaphysical modality is absolute might indicate that one is missing the point. Plurality *per se* doesn’t undermine absoluteness.

We might draw a different parallel with the philosophy of logic. Eklund (2020) has distinguished different kinds of logical pluralism, and pointed out that some of them are just *trivial*. For example, it seems trivially correct that *there are different notions of validity* (a position Eklund labels “Mapping pluralism”), as well as that *different notions of validity are best suited for different purposes* (“Purpose pluralism”). What’s more interesting, he stresses, is whether given some particular purpose, perhaps a canonical purpose, the different notions of validity serve that purpose *equally well* (that’s what he calls “Goodness pluralism”). Similarly, Priest (2005) has distinguished between “pure” and “applied” logics and pointed out that, as a matter of fact, *there are many pure logics* (where each is a math structure with a proof-theory, a model-theory, etc.) There is no question of rivalry at that level. The crucial question of whether one such logic is the “right” one arises only when one is looking to apply a particular pure logic to some end. As Priest puts it, “If one is asking about pure logics, then, pluralism is uncontentiously correct. Plurality is an issue of substance only if one is asking about applied logics” (195).

Analogously in the case of modality, modal pluralism understood as the claim that there are many kinds of modality might be deemed trivial. Likewise, it may be deemed trivial that depending on the context (like roughly depending on the *purpose* in the case of logic and validity), different notions of possibility/necessity might be correct but not others. As noticed, modal statements need to be disambiguated in order to determine what kind of modality is at stake in a context and what their truth-value is. The interesting question is whether, granted such a plurality and the various ways possibility and necessity may be restricted, there is still one privileged, “absolute” modality.

In the case of logic, that special status would belong to the one logic or notion of validity that’s right for some canonical purpose: say, capturing the way we actually reason in the vernacular (Priest 2005).

What about modality? Once we’ve clarified the context-sensitivity of modal expressions and the substantive restrictions that each type of possibility and necessity claim involves, we can discard thesis (i). But granted that no modality is non-relative, completely unrestricted, unqualified, and globally exceptionless, what’s the remaining sense in which metaphysical modality may still be “special” compared to the other modalities?

## **6. Real Modality - Metaphysical Grounds**

My view is that metaphysical modality is especially valuable in that it captures what could and must have *really* been the case most generally. That’s thesis (ii) and the other main idea that talk of metaphysical modality as “absolute” conveys. Metaphysical possibility is genuine possibility; metaphysical necessity is rooted in reality. That’s the special “glow” of metaphysical modality.

We saw that the real modalities are non-epistemic and non-deontic and satisfy the T axiom; they include nomological, practical, and mathematical modality, perhaps also logical modality, besides metaphysical modality. Clarke-Doane is right in remarking that

maybe metaphysical possibility is the most inclusive notion of “real” possibility in the sense of being the most inclusive alethic, non-epistemic, non-deontic notion which satisfies some more *overtly metaphysical condition* (2019: 6. *My emphasis*).

Such a condition, Clarke-Doane suggests, might be “the concrete worlds of Lewis”, or Vetter’s *dispositions*, or Fine’s notion of being “grounded in the nature of things” (ivi).

Similarly, Haze wonders whether

this overtly metaphysical element could be a prior notion of *ground*, or *essence*, or *nature*, which we could use to characterise the metaphysical modal notions. It could be a notion of metaphysical laws, which constrains the possibilities... Or it could simply be a *primitive distinction* between metaphysical possibilities and impossibilities (forthcoming: 158).

Let me first make clear that characterizing metaphysical modality as “real” doesn’t entail any commitment to Lewisian modal realism. Rather, as Hale and Hoffman put it, it’s about “accepting modal propositions as objectively true or false and at least sometimes within our ken” (2011: 7). The ontology of possible worlds is a separate issue. Second, there’s also no requirement that what’s real should be identified with what’s *fundamental* or the most basic constituents of reality (as suggested e.g. by Dorr 2005 and Sider 2011). In investigating the real modal profile of things, the target isn’t quite what might and must have existed in the most fundamental sense, but rather what might and must have been the case most generally. The metaphysics of fundamentality is also a separate issue.

Now for the positive view, I believe that there actually is an “overtly metaphysical condition” for metaphysical modality. My suggestion is that it’s fruitful to think of it broadly in terms of the *nature of things*. That should suit well such diverse accounts as Lewis’ realism, Vetter’s dispositionalism, Fine’s essentialism, and Williamson’s naturalism—to mention some. These are all non-primitivist accounts of metaphysical modality, which also share the view that metaphysical modality is non-epistemic, non deontic, alethic, and—in a sense—most inclusive. Those theories should all welcome the idea that metaphysical modality tracks ways the world might and must have really been most generally, and that this can be explained in terms of its being uniquely tied to the nature of things.

But we can say more. The framework can be further spelled out by identifying specific *essentialist* principles, which bring together Fine and Kripke’s views of modal metaphysics. Metaphysical necessity has its source in the essence or identity of all things (Fine 1994). Distinctively metaphysical necessary truths depend on essential features of things such as fundamental kind, substance composition, and individual origins (Kripke 1980). Along those lines, genuinely possible worlds can be thought of as bound by specific principles—they have a



“form”, in Wittgenstein’s words—namely a combination of a certain logical structure and the essentialist laws. That form distinguishes genuine alternative ways our world could be from all sorts of “alien” scenarios. Appealing to the essence or nature of things thus gives us a powerful explanatory framework for metaphysical necessity. Additionally, essences further explain why things actually are in a certain way. We can look at the essence of a given kind to explain why all members of that kind typically share many properties and behaviors; we can look at the essence of a given individual to explain why she has certain features not others throughout her life. This explanatory power has a crucial epistemic role as it appears to guide ordinary as well as scientific counterfactual thinking. Discovering ways in which things must and might have really been is thus a matter of investigating essence and illuminating the explanatory relationships it brings about. Accordingly, elsewhere I have labeled essences “superexplanatory” (Mallozzi 2018; 2021. See also Godman, Mallozzi, and Papineau 2020).

Going back to thesis (ii), what seems correct in deeming metaphysical modality “absolute” is that it’s “real” or “genuine” modality in the most general sense. That’s what’s most valuable about metaphysical modality. Among the chief features of metaphysics itself as a subject of philosophical inquiry are its *concern with the nature of things* and its *generality* (Fine 2011). The distinctive connection that metaphysical modality bears to reality is thus its special, philosophically valuable trait.

One might naturally wonder why isn’t *nomological* modality also absolute on this characterization.<sup>14</sup> Indeed, echoing Kripke (1980: 99) this is an issue I don’t wish to prejudge. It’s somewhat standard to take the laws of nature to be metaphysically contingent. Talk of absolute modality usually aims to capture alternative ways things might have been that aren’t constrained by the actual laws of nature. But it *might* be that the laws are metaphysically necessary—a thesis known as *nomological necessitarianism*. It might not be easy to establish whether that’s true. Perhaps only some laws not all of them are necessary. Is it a mere physical necessity or rather a metaphysical necessity, for example, that spacetime must have four dimensions? (Sider 2011: 282). My own view is that whether nomological necessitarianism is true generally depends on whether the laws of nature are tied to the essence of the fundamental physical entities. Fine explicitly considers this hypothesis and concedes that it might also seem “especially congenial” to an essentialist way of thinking, since metaphysical necessities are for him rooted in the identity of things:

Natural necessities might then be taken to constitute the special case in which the things in question are the natural properties or kinds. [They would be] those essentialist truths that arise from the identity of natural kinds” (2005: 239).

Fine gives a battery of arguments against nomological necessitarianism, which we can’t discuss here. But *if* the laws of nature have the strength of metaphysical necessity, they will also be “absolute” in the relevant sense. Nomological necessitarianism may even have metaphysical and natural necessity coincide.

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<sup>14</sup> Thanks to Matti Eklund for raising this issue.

Similarly, other types of necessity might also qualify as absolute in this sense. That will depend on whether those types of necessities are also constrained by essence in the way metaphysical necessity is. For example, mathematical necessity might be absolute in the sense of thesis (ii), such that *mathematical platonism* is true (understood broadly as the thesis that mathematical entities are mind-independent, meaning real and most objective). The key question in this case is arguably whether mathematical necessity is grounded in the nature or essence of the mathematical entities. Mathematical entities, while perhaps populating a separate “third realm”, would be mind-independent in virtue of having real essences like concrete objects.

## Conclusion

I have distinguished two theses that talk of metaphysical modality as “absolute” conveys and argued that they should be divorced. We can discard characterizations in terms of non-relative necessity, as well as unrestricted, unqualified, or the broadest possibility and exceptionless necessity (thesis (i)), while preserving the idea that metaphysical modality has privileged status and philosophical value in virtue of its being real or most objective modality, having its source in the nature or essence of things (thesis (ii)).

We might draw a parallel with metaethics. *Moral relativism* can be taken to deny that there are *absolute moral norms*. More precisely, relativism denies that there is a universal standard of conduct that’s (i) *non-relative or independent of any framework of reference* (a certain time/place/culture/or individual preference), and as such (ii) perfectly “*real*” and (deontologically) inviolable. Although non-relativists in turn often endorse both (i) and (ii), the two theses are mutually independent. Particularly, one might reject (i) while holding (ii). For example, certain naturalistic positions understand moral norms as dependent on human nature, but not less real or inviolable because of that. More broadly, it might be argued that even if no moral norm is absolute in the sense of being non-relative or independent of any framework of reference (they might even be “constructed” or mind-dependent), those norms are nonetheless perfectly real and compelling.

Similarly, philosophers often speak of metaphysical possibility and necessity as real, exceptionless and inviolable. Metaphysically necessary and possible truths may be relative to or dependent upon a specific reference framework (the essentialist laws). But granted such a framework and the conditions that must be in place, that doesn’t make metaphysical modality any less real and objective in the most general sense. Metaphysical modality is still uniquely significant, even though structurally it’s just like the other modalities.<sup>15</sup>

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<sup>15</sup> Thanks to Nate Bice, Paul Boghossian, Matti Eklund, Tristan Haze, Graham Priest, Sonia Roca-Royes, Anand Vaidya, Michael Wallner, Nathan Wildman, and an anonymous referee for *Inquiry* for helpful comments on a previous draft. Thanks also to the audience at the *Logic and Metaphysics Workshop*, CUNY Graduate Center in March 2020.

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