

Chapter 13

NORMS AND MODALITY

Amie L. Thomasson

Claims about necessity and possibility play a central role in metaphysical debates. Consider classic puzzles about material constitution: a statue may be made of a lump of clay, but it seems that the lump of clay *could survive* certain changes in shape that the statue *could not* survive. But how could they differ in these ‘modal properties’ when the statue and clay are otherwise identical? Or consider the ancient Ship of Theseus problem: if the planks of a ship are gradually replaced with new ones, and then the old planks are reassembled, which is the original ship: the one with the new planks, or the old? Can a ship survive changes in all of its parts? Can it survive disassembly and reassembly? Other puzzles arise about personal survival and identity, when we ask whether persons could survive the loss of memories, brain transplants, or teleportation.¹

Answering metaphysical questions like these requires us to determine which statements about what is metaphysically possible or necessary are true. But how can we do that? If we think of our modal claims as describing the world, it’s natural to think that we have to find out whether there are the needed *truthmakers* for our claims of metaphysical necessity or possibility. However, as I will argue in this chapter, the search for truthmakers for metaphysical modal claims leads to a morass of ontological and epistemological problems. Here I will argue for a different approach to understanding metaphysical modal claims: thinking of them not as serving to *describe* modal features of the world (nor as other possible worlds), but rather serving a *normative* function of conveying semantic rules and their consequences. Understanding metaphysical modal claims in this way, I will argue, enables us to demystify the ontology and epistemology of modality, and to clarify the epistemology of metaphysics.

13.1 The search for modal truthmakers

It has become standard to think that, as Tony Roy puts it, “the problem of modality is a problem about truthmakers for modal propositions” (2000, 56). But what could serve as the truthmakers for our claims of metaphysical necessity or possibility? Are they modal features, or this world—modal facts, or modal properties? Call a view a form of ‘heavyweight modal realism’ if it holds that there are distinctively modal properties or facts that *explain* what it is that *makes* some modal statements true. It is tempting to think that when we say: “A person can survive a transplant of her brain into another body”, or “A painting cannot survive a process that involves replacing 40% of the original surface paint” these statements simply *describe* what modal properties people

or paintings have (the modal property of (not) possibly-surviving-this-change), just as we describe the person or painting as having other properties (weight, color, etc.). Alternatively, we might think of modal statements as attempts to describe modal *facts* in the world, and as holding true if those modal facts indeed obtain.

But heavyweight modal realism faces what Huw Price (2011) has called the ‘placement problem’: how are these modal facts or properties supposed to fit into the natural world? They do not seem to be physical properties or facts like those investigated by the empirical sciences—so what are these modal facts or properties supposed to be, and why should we think there are such things? How are they related to the non-modal facts or properties studied by the natural sciences? As the case of the clay and the statue makes clear, this relation is pretty mysterious—because objects like the statue and clay can have all the same physical properties and yet differ in their modal properties. As a result, it seems like we can’t think of the modal properties as ‘higher level’ properties that are somehow fixed by an entity’s more basic physical, or other non-modal properties.

If we think that, to know which metaphysical statements are true, we have to come to know their truthmakers, we face even more difficult epistemological problems. For how can we hope to discover what modal properties an object has, or what modal facts obtain? Hume observed long ago that there seems no prospect of giving an empirical account of our knowledge of modality—so what sort of account can we give? Even if one thinks, with Barbara Vetter, that one can acquire knowledge of dispositions or potentialities empirically (having observed many glasses shattering, we infer that glasses are *disposed* to break on sharp impact) (Vetter 2015, 11–13), the same methods cannot ground knowledge of distinctively *metaphysical* modality. For the same observations of the statue/lump of clay lead to different modal conclusions: that the statue would not survive a squashing while the lump would. The so-called ‘grounding’ problem arises precisely because no non-modal/non-sortal properties that *can* be empirically known seem capable of grounding the difference in the *metaphysical* modal properties (identity and persistence conditions) attributed to the statue and the clay.²

One prominent alternative to heavyweight modal realism is David Lewis’s (1986) possible worlds realism. On this view, we need not accept that there are any distinctively *modal* features of this world. Instead, we accept that there are many other concrete worlds causally and spatio-temporally disconnected from our own—call these the (merely) possible worlds (our actual world is also a possible world). Lewisian possible worlds realism still enables us to understand modal statements as descriptions, but they are seen as attempted descriptions not of *modal* features of *our* world, but of *non-modal* facts in one or more of the possible worlds (including our actual world).³

However, few have been willing to accept that there are such possible worlds, or that they could adequately serve as non-modal truthmakers for our modal propositions (Jubien 2007; Divers and Melia 2002). Even if we are content to let the ontological issues slide and allow that there *are* possible worlds, a massive problem of *relevance* remains—a problem that was raised in reviews of *The Plurality of Worlds* by Nathan Salmon (1988), Graeme Forbes (1988), William Lycan (1988), and Allen Stairs (1988). The problem is that our modal statements just don’t seem to be *about* what goes on in other worlds, even if there are such worlds (Stairs 1988, 344); these don’t seem like *relevant* truthmakers.⁴ The fact that even if we accept the ontology, its *relevance* to the modal question remains in doubt, might already be taken to suggest that the modal claims aren’t aiming to *describe* facts about other worlds at all.

Lewis’s possible worlds realism also faces daunting epistemic problems like those that trouble the heavyweight realist. For given the causal isolation of the other possible worlds from our own, it remains unclear how we could know anything about them, or about what claims they make

true. Lewis (1986, 104–115) does suggest that we commonly come to have the modal beliefs we do by way of engaging in imaginative experiments guided by a principle of recombination (113–114). But it is not at all clear, on his view, why this sort of procedure *should* give us anything that counts as modal *knowledge*: why should imagination guided by this principle give us any information about what is going on in causally and spatio-temporally disconnected concrete worlds? Lewis himself makes it clear that he does not take himself to be answering that question.⁵

13.2 Exposing the descriptivist assumption

As we have seen, a daunting array of puzzles and problems arises from the attempt to find truthmakers for our metaphysical modal statements—whether we think of the truthmakers as modal properties, modal facts, or possible worlds. What I want to call attention to in this chapter is that they all arise from an assumption so common that it has become almost invisible: the assumption that modal statements are *descriptive* or *representational* in character—that is, that they function to describe or track certain ‘features of reality’, which can then serve to make modal claims true.⁶

I will argue that this assumption should be brought to light and reexamined. Before we start asking what the truthmakers are for modal claims, we should step back to ask a more basic question: what *function* does it serve to make metaphysical modal claims? Do they serve a kind of describing or world-tracking function, or do they have another function entirely—in a way that might make the search for truthmakers otiose?

In one sense it might seem just obvious that metaphysical modal statements are descriptive. If I say ‘Mary is necessarily human’, this sounds parallel to saying ‘Mary is unusually tall’; both are indicative in form and are naturally thought of as ‘describing’ (or ‘representing’) Mary in certain ways. I certainly do not wish to deny these obvious truths.⁷ The philosophical assumption of descriptivism, however, goes beyond these truisms: it involves an assumption about *function*. Many of the basic terms in our language seem to serve the function of tracking certain features of our environment, with which they are meant to co-vary, enabling us to get around better. So, for example, it is plausible that terms such as ‘wolf’ and ‘river’ serve such a descriptive tracking function. To assume that a term is descriptive in our sense is to assume that it serves that function. Huw Price (2011) calls terms that serve this function ‘e-representations’, those whose job “is to co-vary with something else—typically, some *external* factor, or environmental condition” (20). Where terms serve this kind of function, it is natural to think of them as aiming to correctly represent what there is (and is not) in the world—and answerable to the world in the sense that we look to the world to determine if what we say using those terms is true or false. When discourse is descriptive in this way, it seems natural to look to the world to find ‘truthmakers’⁸ for our claims about wolves or rivers, features of the world that ‘explain how sentences about the real world are made true or false’ (Mulligan et al. 1984, 288).

But there are plausible and interesting philosophical accounts of some central, philosophically interesting terms that treat them as serving very different functions from describing or tracking elements of our environment. For example, Paul Horwich (1998) treats the function of the truth predicate as serving as a device of generalization; Stephen Yablo (2005) suggests that nominative vocabulary for numbers enables us to simplify our expression of scientific laws; and moral expressivists like Simon Blackburn (1993) argue that moral discourse serves not to describe moral facts, but rather to enable us to coordinate our attitudes in certain useful ways.

Even where modal discourse is concerned, the descriptivist assumption wasn’t always so invisibly dominant. In the early days of analytic philosophy, it was common to deny that modal statements of various kinds serve a descriptive function. The approach was suggested by early

conventionalists like Schlick (1918),⁹ who argued that necessary statements of mathematics and logic are not descriptive statements, but serve as implicit definitions of concepts. It was developed in a new way by Wittgenstein in the *Tractatus* (1922/1933), who treated the propositions of logic as tautologies which say nothing about the world.¹⁰ The approach reappeared in a more sophisticated vein in the work of the later Wittgenstein, and in Ryle's work on statements of scientific laws, which he took to serve not to describe the world but rather to serve as 'inference tickets' (1950, 121). Sellars (1958) develops a similar treatment of statements of scientific laws, which he treats as having the function of *justifying* or *endorsing* inferences from something's being an A to its being a B. More recently, approaches to modality along these lines have been developed by Simon Blackburn (1987/1993) and Robert Brandom (2008).

In the remainder of this chapter, I aim to lay out a view in that tradition, on which *metaphysical* modal statements fundamentally serve not to *describe* features of this or other worlds, but rather serve a basically *normative* function. On reflection, it shouldn't be surprising that modal terms serve a normative function. As a grammatical group, modal terms include not only the metaphysician's 'possible' and 'necessary', but also such terms as 'can', 'may', 'must', and 'shall', which are characteristically used in issuing requirements and permissions, and in stating commands and rules in an impersonal indicative form. These different sorts of modal terms (for alethic, deontic, and epistemic modalities) tend to come together across a wide range of languages (Papafragou 1998, 371), and children tend to learn to use modal terms for obligation, necessity, and possibility at around the same time (about age three) (Wells 1985, 159–160, 253). So it would make sense to think that they have something in common—perhaps that they all enable us to convey norms in useful and perspicuous ways.

13.3 What function does modal vocabulary serve?

But why might it be useful to have modal terms convey rules and norms? There are surely other ways of communicating rules and norms, such as in non-modal imperatives, or with a stick. Let me begin by discussing why modal terms might be useful in conveying rules in general, and then turn to the particular role of *metaphysical* modal terms in conveying *semantic* rules.

To see what functions modal terms might serve in conveying rules, think about the way rules of games are expressed in language. Some rules may be expressed in imperatives, for example, for checkers:

- “Move only on the dark squares”

But rules can also be expressed in declarative sentences (in the indicative mood), as:

- “Players move their pieces only on the dark squares”, or
- “Black always moves first”

Putting rules in the indicative mood has certain advantages over the imperative. For starters, one can't easily state “Black moves first” in an imperative form without knowing who the black player is, and addressing him or her directly. Secondly, expressing rules in the indicative mood enables us to make explicit our ways of reasoning with rules, so that we can, for example, embed them in conditionals and say “If black always moves first, then red never moves first”, whereas we cannot put an imperative in the antecedent of a conditional.

But there are also dangers of expressing rules in the indicative form, since they might be mistaken for *descriptions* of what *does happen* or *has happened*—making it hard to distinguish the

expression of the *rule* that black always moves first from the red player's misguided complaint that black *always* moves first.

We can, however, add a modal verb, and say instead:

- “Players *must* move their pieces only on the dark squares” or
- “The black player *must* move first”

Expressing rules in this modal form preserves our ability to make explicit our ways of reasoning with rules—since it is still in the indicative. But it also brings other advantages. First, it clearly distinguishes these statements of rules from mere *descriptions* of what *does* happen. Second, it enables us to express permissions as well as requirements. Neither the imperative form nor the simple indicative enabled us to do that: if we ask, “Does each player take a turn every round?” the only way to give a *negative* answer to this question, as Ryle (1950/1971, 244) pointed out, is to add a modal verb, and say “No, a player *may* choose to skip a turn”. These observations lead to the hypothesis that at least one function it serves to have modal terminology in our language is to give us a way of expressing *rules* or *norms* in the indicative mood, in a way that makes the regulative status more explicit, enables us to make explicit our ways of reasoning with rules, and enables us to express permissions as well as requirements.

13.4 The function of metaphysical modal claims

But if modal terms have as their function conveying rules or norms, what rules or norms might be at stake in metaphysical modal claims? The heart of the normativist view of modality is to see metaphysical modal claims as functioning to convey *semantic* rules. The interesting and tricky feature, however, is that they do not do so by *describing* what the semantic rules are. If we said that they *describe* what the rules are—that the adoption of semantic rules is a truthmaker for our metaphysical modal claims—then we would still be stuck with the old descriptivist assumption that we need truthmakers for our modal claims. Moreover, we would fall into the problems of classical conventionalism—our necessary claims would only hold contingently, as it is a contingent matter that we adopt some rather than other semantic rules.

But nor do metaphysical claims of necessity convey semantic rules by *stating* these rules in a metalanguage: metaphysical modal claims are object-language claims. Instead, they *convey* these rules by *using* those very terms—remaining in the object language. Consider the following dialogue:

- Child: “Mom, is Aunt Sophie always going to be a bachelor?”
- Mom: “Bachelors must be men, dear”.
- (Pretentious philosophical mom: “It is necessary that bachelors are men, dear”.)

What is going on in this dialogue? In the response, Mom just uses the term ‘bachelor’ and states a necessary truth: It is necessary that bachelors are men. But what she is *doing* thereby is communicating a rule that *could* be stated in the metalanguage, as “The term ‘bachelor’ may only be applied to men”.

Now consider a more philosophical dialogue.

- Question: “Can a ship survive having all of its parts gradually replaced?”
- Response: “Yes, as long as the replacement process is gradual. For all that is essential to artifact identity over time is a continuous history of maintenance, not the retention of any particular material part”.

Again, here we have a dialogue conducted in the object language, about ships and other artifacts. But what is being *done* through this dialogue, on the normativist view, is not describing some modal properties of ships that the philosopher pretends to have discovered, but rather a way of communicating some rules of use for ship names (and names for other artifacts): that we are permitted to say this is ‘the same ship’ as before, or to re-apply the name ‘The Queen Mary’, as long as there has been a continuous history of maintenance.

Although the primary function of metaphysical modal claims, on this view, is to convey semantic rules rather than to report metaphysical discoveries, it is still useful to do so by just *using* the terms, in the object language. We often use terms as a way of demonstrating or implicitly commenting on how the term is (to be) used, or whether it should be used at all. Chris Barker (2002) calls these ‘metalinguistic’ uses as contrasted with ‘descriptive’ uses, where metalinguistic uses are those in which a term is used to “communicate something about how to use a certain word appropriately”, rather than to communicate (other) information about the world.¹¹ For example, we engage in what has become known as ‘metalinguistic negation’, when one speaker says, “The performance was good tonight”, and another replies, “It wasn’t good, it was spectacular!” In a case like this, the second speaker apparently *uses* language in order to *show* what choice of words she thinks was appropriate. In other cases, we may sometimes demonstrate how vague terms are appropriately used in a context by using them in certain ways. In some contexts, for example, one might communicate what the standards for tallness are around here by pointing to a man (whose height is not in doubt) and saying “*Jones* is tall” (see Barker 2002, 1–2)—in which we are not adding information about Jones’s height, but rather using the term ‘tall’ in a way that communicates information about how it is appropriately used in this context.

In short, it is not unusual or idiosyncratic for us to communicate standards for language use by *using* it in certain ways. That is exactly what the normativist thinks is going on with claims about what is metaphysically possible and necessary: they are claims in the object language, and so in that sense are world-oriented, ‘about the world’, not *about* language (just as the aforementioned claims are about the performance or about Jones). Yet their *function* is to convey how the terms *ought to be used*—to convey norms. In the case of metaphysical modal claims, these are semantic norms, typically concerning actual and hypothetical cases in which the term should be applied and refused, or applied again ‘to the same thing’. What the addition of the modal verb does, over the simple indicative, is to ‘flag’ this regulative function, making it more explicit, and enabling us to convey permissions as well as requirements.

So, in sum, on the analysis given here, there are two odd features of metaphysical modal claims. First, like other modal *statements*, though they fulfill a *normative* function, rather than being expressed in imperatives they are expressed in *indicative* form—for good, functional reasons. Second, though simple utterances of claims of metaphysical necessity are in the *object* language, they involve implicitly *metalinguistic* uses of the terms—as ways of conveying something about how the relevant terms are *to be* used. Both of these features can lead us astray into thinking of modal statements as if they are worldly descriptions in need of truthmakers. But once we’ve noticed the commonalities with other cases in which normative modal language is expressed in indicatives, and object-language claims are used to serve a metalinguistic purpose, we can see that they are not so very strange after all, and they can see our way clear to a more plausible, and less problematic, analysis of modal discourse that does not begin from the drive to seek modal truthmakers in this or other worlds.

But although the normativist doesn’t think of modal claims as needing truthmakers, a normativist can nonetheless allow that our modal claims are true or false. Given the rules that (on this view) govern the use of our modal terms themselves, we are entitled to add ‘necessarily’ onto any object-language expression of an actual semantic rule. So we can begin from “All bachelors

are men” and (since that claim is an object–language expression of a semantic rule) add ‘necessarily’ and assert “Necessarily, all bachelors are men”. We then need only adopt a deflationary understanding of truth (see, e.g. Horwich 1998), according to which the concept of truth is simply governed by the equivalence schema: $\langle p \rangle$ is true iff p , to recognize the equivalence of this with “ \langle Necessarily, all bachelors are men \rangle is true”. The uncontroversial equivalence schema applies just as well to modal as to non-modal indicatives, so there is no problem in allowing that modal claims may be true, stated in propositional form, and used in reasoning.

13.5 Remaining challenges and hopes

The road to developing a full modal normativist approach is long and full of challenges. Some of the challenges I have discussed elsewhere¹²—including showing how it avoids the problems that plagued classical conventionalism, and showing how to avoid the Frege–Geach problem by giving the *meaning* of modal discourse, not just its function or use. Another major and familiar challenge is showing how this view can accommodate not only simple *a priori* necessities like “Necessarily, all bachelors are men”, but the sorts of *a posteriori* and *de re* necessities Kripke (1980) famously called attention to: such as ‘Water is necessarily H₂O’ and ‘Elizabeth Warren is necessarily human’. The first key to handling such necessities is to accept that even names and kind terms have *some* conceptual content.¹³ The second key is to note the varied and often ostensive and world-deferential forms semantic rules can take. There is no space to develop that solution here, but the original approach was developed in Sidelle (1989) and is applied specifically to the normativist approach in Thomasson (2020).

At any rate, if we can make a normativist view along these lines work, it will be very attractive. One advantage of this view is ontological, and comes from not thinking of modal properties, modal facts, or possible worlds as things our modal claims aim to describe or track, and that are capable of explaining what makes them true. The normativist may allow that there are modal facts and properties—and even other possible worlds—but not in the sense of ‘positing’ them to ‘explain’ the truth of our modal claims. Instead, the ontological entitlement to say that there are such things is explanatorily ‘downstream’ from such truths. That is, we can start by making metaphysical modal claims (which have another function entirely); for example, “Necessarily, all bachelors are men” or “Obama is necessarily human”. From these modal truths, we can make trivial inferences to the existence of modal facts (that it is a fact that it is necessary that all bachelors are men) and properties (that Obama has the property of being necessarily human). But we arrive at talk of these modal facts and properties by hypostatizations out of our modal expressions; we do not need to start by ‘discovering’ these worldly modal features to figure out which modal claims to accept.

The most important advantage of a normativist approach is epistemological, that of avoiding the notorious difficulties heavyweight realist views and possible worlds realist views face in explaining our knowledge of modal facts. If we think of ourselves as trying to track and describe the modal properties, modal facts, or possible worlds (the presence of which could make the claims true), it is very difficult to see how we could have any (quasi-)perceptual or intellectual access to these modal facts or properties or worlds. The normativist demystifies modal knowledge by considering the move from *using* language to knowing *basic* modal facts to be a matter of moving from *mastering* the rules for properly applying and refusing expressions (as a competent speaker), to being able to explicitly *convey* these constitutive rules and their consequences in the object language and indicative mood.

A third, related, advantage of the normativist view is its helpfulness in clarifying the methodology of metaphysics and justifying the use of intuition in modal debates. If we think of metaphysicians as trying to ‘detect’ modal properties of objects, the hopes of adjudicating debates

about the modal features of persons or works of art seem slim: for no one, it seems, has any useful answer to the question of how they are supposed to be detected. Moreover, although it is common to rely on intuitions to support metaphysical views, it's not clear how to justify *why* intuition should be thought a reliable guide to the modal features of the world (when it certainly fails to be a reliable guide about most other features) (see Sosa 2008, 233). But on the normativist view, we have good reason for thinking that intuitions of competent speakers may play a useful role in revealing and making explicit the *actual* semantic rules, and thereby in coming to express modal truths in the object language—and signaling this with the addition of modal verbs.

Nonetheless, as I have argued elsewhere, some uses of metaphysical modal claims may be fruitfully seen as engaged in what David Plunkett and Tim Sundell (2013) have called 'metalinguistic negotiation': as ways of *advocating for* changes in the rules—whether to precisify them or alter them in other ways, in order to serve various purposes, rather than simply as ways of conveying the rules there are.¹⁴ The function of the metaphysical modal claims may still be normative, but it may have to do more with pressing for changes in the rules than with communicating or enforcing the extant rules. The fact that, in the object language, we may often engage in this kind of metalinguistic negotiation of what how our terms *should be* used enables us to account for the fact that debates about metaphysical modality are often enduring and hard to resolve—even among competent speakers. For what is at issue is not just what rules *do* govern the terms (though these, too, may be imprecise, open-ended, contextually variable), but what rules *should* govern our terms—where this is sensitive to a range of other issues about what we should value and how we should live.

But whether they are used with the force of communicating those semantic rules there are, or of pressing for the rules the speaker thinks there ought to be, seeing metaphysical modal claims as having a *normative* function, to do with conveying and enforcing semantic rules, promises to do a great deal to demystify the epistemology of modality—and with it, the methodology of metaphysics.

Notes

- 1 While there are many other sorts of modal claim (e.g. asking what is physically possible or logically possible), I will focus here on claims like these—about what is *metaphysically* possible or necessary—since those play a central role in many metaphysical debates.
- 2 For discussion of the grounding problem, see Burke (1992), Zimmerman (1995), Bennett (2004), and Thomasson (2007, ch. 4).
- 3 I do not mean to suggest that Lewis himself thought of his possible worlds as truthmakers for modal propositions, only that possible worlds realism along Lewis's lines is capable of supplying the truthmakers that the truthmaker theorist needs.
- 4 In the latter form this is the famous 'Humphrey' objection Kripke (1980, 45 n. 3) raises against Lewis.
- 5 For further critical discussion of Lewis's reply to the knowledge problem, see Bueno and Shalkowski (2004).
- 6 Huw Price uses the terminology 'representational' and puts the point in terms of denying that all discourse is 'e-representational'. See Price (2011) for the original formulation and criticisms of the representationalist/descriptivist assumption.
- 7 Price similarly notes that those he calls 'non-facutalists' (our non-descriptivists) may accept that moral claims, for example, are 'statements in some minimal sense' ('Semantic Deflationism and the Frege Point', p. 3 in pdf).
- 8 Though I do not mean to endorse truthmaker theory here—only to point out that, however plausible it is in descriptive cases, it leads us astray in others.
- 9 Schlick, in turn, was developing ideas originating in Hilbert's *Foundations of Geometry* and attempting to generalize them to the cases of logic and mathematics. See Baker (1988, 187ff).
- 10 A neo-conventionalist view has also been developed by Alan Sidelle (1989).
- 11 Barker distinguishes when adjectives have a 'descriptive' use from when they have a 'metalinguistic' use (2002, 1). The thought here is that modal terms signal that the assertion in question has a metalinguistic rather than a descriptive use.

- 12 See my (2020).
 13 I (Thomasson 2007) and others (Devitt and Sterelny 1987) have argued for this position elsewhere.
 14 See Plunkett (2015) and Thomasson (2020) for developments of the idea that certain metaphysical debates may be seen as engaged in metalinguistic negotiation.

References

- Baker, Gordon. 1988. *Wittgenstein, Frege and the Vienna Circle*. Oxford: Blackwell.
- Barker, Chris (2002). "The Dynamics of Vagueness". *Linguistics and Philosophy* 25: 1–36.
- Bennett, Karen (2004). "Spatio-Temporal Coincidence and the Grounding Problem". *Philosophical Studies* 118: 339–371.
- Blackburn, Simon (1993). *Essays in Quasi-Realism*. New York: Oxford University Press.
- Brandom, Robert (2008). *Between Saying and Doing: Towards an Analytic Pragmatism*. Oxford: Oxford University Press.
- Burke, Michael. (1992). "Copper Statues and Pieces of Copper: A Challenge to the Standard Account". *Analysis* 52(1): 12–17.
- Devitt, Michael and Kim Sterelny (1987). *Language and Reality*. Cambridge, MA: MIT Press.
- Divers, John and Joseph Melia (2002). "The Analytic Limit of Genuine Modal Realism". *Mind* 111(441): 15–36.
- Forbes, Graeme (1988). "Critical Study: The Plurality of Worlds". *Philosophical Quarterly* 38(151): 222–240.
- Horwich, Paul (1998). *Truth*. 2nd edn. Oxford: Oxford University Press.
- Jubien, Michael (2007). "Analyzing Modality". *Oxford Studies in Metaphysics* 3: 99–139.
- Kripke, Saul (1980). *Naming and Necessity*. Oxford: Blackwell.
- Lewis, David K. (1986). *On the Plurality of Worlds*. Oxford: Blackwell.
- Lycan, William (1988). "Review of 'On the Plurality of Worlds'". *Journal of Philosophy* 85(1): 42–47.
- Mulligan, Kevin, Peter Simons, and Barry Smith (1984). "Truth-Makers". *Philosophy and Phenomenological Research* 44(3): 287–321.
- Papafragou, Anna (1998). "The Acquisition of Modality: Implications for Theories of Semantic Representation". *Mind and Language* 13(3): 370–399.
- Plunkett, David and Tim Sundell (2013). "Disagreement and the Semantics of Normative and Evaluative Terms". *Philosopher's Imprint* 13(23) (December): 1–37.
- Price, Huw (2011). *Naturalism without Mirrors*. Oxford: Oxford University Press.
- Roy, Tony (2000). "Things and *De Re* Modality". *Nous* 34: 56–84.
- Ryle, Gilbert (1950/1971). "'If', 'So', and 'Because'". In *Collected Papers*, Vol. 2. London: Hutchison.
- Salmon, Nathan (1988). "Review of 'On the Plurality of Worlds'". *Philosophical Review* 97(2): 237–244.
- Schlick, Moritz (1918). *Allgemeine Erkenntnislehre*. Berlin: Springer.
- Sellars, Wilfrid (1958). "Counterfactuals, Dispositions and the Causal Modalities". In Herbert Feigl, Michael Scriven, and Grover Maxwell, eds., *Minnesota Studies in Philosophy of Science, Vol. 2: Concepts, Theories and the Mind-Body Problem*. Minneapolis: University of Minnesota Press, 225–308.
- Sidelle, Alan (1989). *Necessity, Essence and Individuation: A Defense of Conventionalism*. Ithaca: Cornell University Press.
- Sosa, Ernest. 2008. "Experimental Philosophy and Philosophical Intuition". In Joshua Knobe and Shaun Nichols, eds., *Experimental Philosophy*. Oxford: Oxford University Press, 231–240.
- Stairs, Allen (1988). "Review Essay: 'On the Plurality of Worlds'". *Philosophy and Phenomenological Research* 49(2): 333–352.
- Thomasson, Amie L. (2007). *Ordinary Objects*. New York: Oxford University Press.
- (2020). *Norms and Necessity*. New York: Oxford University Press.
- Vetter, Barbara (2015). *Potentiality*. Oxford: Oxford University Press.
- Wells, Gordon. 1985. *Language Development in the Preschool Years*. Cambridge: Cambridge University Press.
- Wittgenstein, Ludwig (1922/1933). *Tractatus Logico-Philosophicus*. Translated by C. K. Ogden. London: Routledge.
- Yablo, Stephen (2005). "The Myth of the Seven". In Mark Eli Kalderon, ed., *Fictionalism in Metaphysics*. Oxford: Oxford University Press.
- Zimmerman, Dean (1995). "Theories of Masses and Problems of Constitution". *Philosophical Review* 104: 53–110.