#### Metaphysics as the 'Science of the Possible'

#### JTM Miller

# Published in *The Routledge Handbook of Metametaphysics*, 2020, Bliss, R and Miller, JTM (eds.).

# **Pre-Proof Copy. Please Cite Published Version**

Abstract: This chapter considers the view that a central concern of metaphysics is what is possible. That is, the idea is that, unlike science, metaphysics studies not only what is actual, but the ways that reality could be. This view, if right, provides metaphysics with a distinct subject matter from that of science, and, depending on what modal epistemology we adopt, a distinct methodology too. In this chapter, I first provide an overview of the view, before highlighting some of the most prominent objections, and possible routes of response.

This chapter considers the view that a central concern of metaphysics is what is possible. That is, the idea is that, unlike science, metaphysics studies not only what is actual, but the ways that reality could be. This view, if right, provides metaphysics with a distinct subject matter from that of science, and, depending on what modal epistemology we adopt, a distinct methodology too. In this chapter, I first provide an overview of the view, before highlighting some of the most prominent objections, and possible routes of response.

## 1. Stating the View

Conee and Sider, in their introduction to metaphysics, describe a view wherein:

'metaphysics is about what could be and what must be... Metaphysics is about some actual things, only because whatever is necessary has got to be actual and whatever is possible might happen to be actual. This allows us to say that physics pursues the question of what the basic constitution of reality actually is, while metaphysics is about what it must be and what it could have been' (2005: 203).

Callendar puts it as the view that 'whereas scientists excavate dusty field sites and mix potions in laboratories to tell us which states of affairs are actual, metaphysicians are concerned with what is and isn't metaphysically possible' (Callender 2011, 36).

However, despite the fact that, as French and McKenzie state, these 'sentiments pepper the contemporary [metaphysical] literature' (2012: 46), there has been relatively little explicit discussion of this conception of metaphysics. One older statement of a version of the view can be found in the work of Leibniz. Grosholz and Yakira comment that Leibniz takes the 'science of the possible' to be the investigation of the rational grounds of reality. This takes Leibniz to have been interested in the ways that reality could be such that certain types of knowledge, in particular knowledge of arithmetic, are possible (Grosholz and Yakira 1998: 74). That is, given that we know certain things about the world, how could the world be such that we could know those things.

Leibniz's rationalism thus seeks to understand how reality could be such that what we observe and what knowledge we have can be adequately explained. Wolff held a similar position, arguing that philosophy is 'the science of the possible, with the task of showing how and why things are possible' (Frängsmyr 1990: 33). Note that this gives metaphysics a crucial *explanatory* element. The world is a certain way

and what metaphysics is trying to do is provide some account as to why it is that way and which is the theory that best explains it.

Russell also, in the final chapter of his 1912 book Problems of Philosophy, remarks that:

'Philosophy is to be studied, not for the sake of any definite answers to its questions since no definite answers can, as a rule, be known to be true, but rather for the sake of the questions themselves; because these questions enlarge our conception of what is possible, enrich our intellectual imagination and diminish the dogmatic assurance which closes the mind against speculation'.

If philosophy aims are enlarging our conception of what is possible, then metaphysics, as a branch of philosophy, would seem to aim to do likewise.

More recently, one of the few explicit and detailed statements of the view appears in the work of EJ Lowe.<sup>i</sup> For Lowe, taking metaphysics to be science of the possible takes metaphysics to be 'charged with charting the domain of 'objective or real possibility' (Lowe 2011: 100). That is, metaphysics seeks to tell us what entities are possible and compossible and hence, of the range of ways that we might theorise reality to be, which are genuine ways reality as a whole could be.

This makes metaphysics an inherently holistic or systematic enterprise. Understanding what are the genuinely possible ways that reality could be requires us to consider how that account coheres, or not, with other commitments within our other metaphysical views. That is, to know whether it is a genuine possibility that Xs exist requires us to consider whether Xs are compossible with Ys, and to know

whether this is genuinely possible may require us to consider various other claims about Zs and the relations that hold between Xs, Ys, and Zs too.

This also makes metaphysics 'implicitly modal' (Lowe 2011: 106). It is modal in the sense that it can by itself only tell us what there could be, not what there is, and that it is only with experience, added to the metaphysical theorising, that we can arrive at claims about the actual world. We can theorise a myriad of ways that reality as a whole could be, and the role of metaphysical debate is to reduce that range of possibilities by ruling out some views, or combinations of views, as not real or genuine possibilities.

This provides metaphysics with a distinct subject matter from science. Metaphysics, unlike science, takes part of its subject matter to be possible ways reality could be, and not just ways that it actually is. Metaphysics may be more general than the particular sciences, but even if there were an all-encompassing science that took all existing entities to be within its remit, it would still not have the same subject matter as metaphysics, as metaphysics would also include enquiries into what is possible.

An immediate response could be that there is no kind of necessity (and possibility) that is broader or distinct from that of scientific necessity (see Swoyer 1982, Shoemaker 1998, Ellis 2001). How far this is problematic depends on how such claims are cashed out in more detail. On one reading, such views, do not deny that there is a notion of metaphysical possibility, but only that it (entirely) overlaps with that of scientific (or physical) possibility. If that is the case, this overlap may limit or constrain the scope of metaphysical inquiry, but it would not mean that it has no subject matter as there is still some sense of 'what are possible ways reality could be' to be studied. However, as I will discuss in section 3, there remains the question of whether this would allow metaphysics to have a *distinctive* subject matter from that of science.

If metaphysics is concerned with the possible, then what about the actual? As noted above in the quote from Conee and Sider, the answer normally given is to point out that what is possible is deeply connected to what is actual. Metaphysics can thus be 'devoted to exploring the realm of metaphysical possibility, seeking to establish what kinds of things could exist and, more importantly, co-exist to make up a single possible world' (Lowe 2006: 4), whilst science (primarily) aims to establish which of the possibilities explored is the actual way reality is. This results in a complementary relationship between science and metaphysics, where both are needed to provide an account of the structure of reality:

Metaphysics and empirical science are not 'continuous' with each other in any sense which implies that they have the same goals and methods, or that metaphysics is just the extension of empirical science to questions of greater generality than any that are addressed by the so-called 'special' sciences. Rather, when both are conducted fruitfully, metaphysics and empirical science exist in a symbiotic relationship, in which each *complements* the other (Lowe 2011: 101–102).

This symbiotic relationship means that advances in one of these fields will influence the work in the other. Breakthroughs in science will allow us to consider possibilities that were previously ignored, or reject theories that had been taken to be genuine possibilities.<sup>ii</sup> Similarly, work on the possible ways that reality might be will help to direct our investigations into how reality actually is. Metaphysics therefore progresses by ruling out possible ways reality could be as being non-genuine possible ways, providing insights into possible ways that reality could be that are still 'live'.

This account of the relationship between science and metaphysics that emerges out of this modal conception of metaphysics is one of the main benefits of the view in that the view seems to provide a

distinctive subject matter for metaphysics. Furthermore, the view potentially allows for metaphysics to have a distinctive method depending on our modal epistemology. As will be discussed in more detail below, if metaphysics is concerned with the possible, then its methodology will be adopted from how it is that we can gain knowledge of what is possible. If we do so through a priori methods, and assuming that the methods of science are (at least primarily) non a priori, this would make the method of metaphysics distinct from that of science. Any account of what metaphysics is that could do both, or even one, of these would certainly be significant.

Additionally, as noted, this conception of metaphysics combines easily with a holistic conception of metaphysical inquiry in the sense that understanding whether Xs exist will involve, in part, understanding whether Xs and Ys are compossible (given a prior commitment to Ys). This imports into metaphysical inquiry a degree of system building, and a recognition of the importance of considering the impact of certain theoretical commitments on other parts of our theorising that some have found attractive.

#### 2. Some Further Details

Before moving onto potential problems for this conception of metaphysics, I will comment and clarify a couple of further points.

The first concerns how we should read the notion of 'possible'. The first option is epistemically. It seems plausible that Lewis had something like this in mind in his conception of metaphysics. Lewis endorsed the idea that philosophy sought to arrive at a total reflective equilibrium. This is arrived at by systematising philosophical and pre-existing opinions into an orderly system (Lewis 1973: 88) such that the task of metaphysics is to 'find out what equilibria there are that can withstand examination' whilst

being compatible with certain general principles (Beebee 2018: 16; see also Lewis 1986: x). States of reflective equilibria thus seem best understood as epistemic states. They are theories or systems that provide the wanted balance between philosophical views, pre-existing intuitions, and general principles (such as parsimony): different ways, in line with our general epistemic interests, the world might be like.

In contrast, Lowe reads the notion of 'possible' more metaphysically. Competing theories are not just different ways that, for all we know, the world might be like, but rather as competing ways that reality is or could be. This is not epistemic then, or better, not *merely* epistemic. If metaphysics is the science of the possible then it is investigating reality itself, not just how we happen to think, talk, or perceive it.

I will assume this stronger metaphysical reading in what remains of this chapter, noting here that as currently stated it leaves open the question of how we can tell what are the genuinely possible ways that reality could be. I will return to this question and the topic of modal epistemology later in this chapter.

Second, we might ask how this conception relates to other metametaphysical views. As discussed elsewhere in this volume, we might think of metaphysics as being about understanding what grounds what, or asking what is fundamental. If metaphysics is understood as being the investigation of what are the possible ways that reality could be, then all of these are different (perhaps competing) conceptions as to how to delineate those possibilities. Put another way, the metametaphysical claim is that the aim of metaphysics is to investigate possible ways reality could be. The results of such an investigation, however, will depend on other metametaphysical commitments we may have (e.g. that metaphysics should investigate grounding or fundamental relations). This means that, metaphysicians who conceive of metaphysics as the science of the possible, but differ with regard to other

metametaphysical (and first-order metaphysical) commitments, may also differ with regard to what they think are genuine ways reality could be.

I wish to take no position on this here. Minimally stated, taking metaphysics to be the science of the possible requires us to take no position on what limits there are on the genuine ways reality could be. Other metametaphysical positions, when combined with this one, may do so.

One potential exception to this concerns neo-Quinean approaches that argue that metaphysics is about asking 'what exists?' (see Quine 1948; Egerton, this volume, Parent, this volume). This is because if we were to endorse an existence based approach, we might think that to take metaphysics to be the science of the possible is to commit ourselves to a Meinongian ontology that accepts the existence of merely possible entities. Science would then study actual entities, and metaphysics would have a broader domain that includes the merely possible. Whilst some might accept merely possible entities into their ontology, most do not, and this would certainly cause some issues with how far we can combine this account of metaphysics with various forms of naturalism. Ney, for example, writes that:

metaphysicians frequently remark when describing their subject matter that although the sciences are concerned only with what is actually case, or what can happen that is compatible with the actual laws of nature, metaphysicians are concerned too with what is merely possible, including what may be only logically possible and incompatible with actual scientific laws. But note that this doesn't correspond to a broader domain. For there aren't in addition to the actual entities that exist, also any merely possible entities for metaphysics (though not the sciences) to be about. One would have to adopt the modal realism of David Lewis (1986) to think otherwise (Ney 2019: 15). However, to think that this requires us to take merely possible entities as existing is to view metaphysics through a neo-Quinean lens that those who endorse the view that metaphysics is the science of the possible need not accept.<sup>iii</sup>. Rather, the claim being discussed is not that merely possible entities exist, but that debates in metaphysics are about 'conditionals of the form, "If such and such counterfactual situation were to obtain, then so and so would be the case." (Ney 2019: 15).<sup>iv</sup> Even if we accept that Xs do not actually exist, claims about whether *were* Xs to exist, could Ys also exist, can be true or false, and can reveal something abour the nature of Xs, Ys, and the ways that reality actually is. In this way, it would seem that no ontological commitment to the existence of merely possible entities is needed in order to take metaphysics to be the science of the possible.

## 3. Floating Free From Science?

A first criticism of this conception of metaphysics is whether it allows metaphysical theorising to 'float free' from science, and in particular physics. The problem is that this way of viewing metaphysics could allow for rampant unrestrained speculation by metaphysicians under the cover of trying to find out what is metaphysically possible, as opposed to what is 'merely physically possible'.

Morganti and Tahko, for example, take up this line of thought, arguing that the 'claim that science can determine which of the possibilities identified by metaphysics is actual falls short of constituting a satisfactory methodological basis, exactly because it seems to allow for totally unconstrained metaphysical theorising that, nevertheless, somehow latches onto reality' (2017: 2567). The concern is that there is nothing that limits our metaphysical speculation or determines the limits of what is *metaphysically* possible, allowing metaphysical theories to float free of science, contra the claim of a close, symbiotic relationship.

Connected concerns are raised by both Callender (2011), and French and McKenzie (2012). Callender diagnoses the clash between science and metaphysics as arising from the metaphysicians move towards inquiring into a notion of metaphysical possibility that leaves science as no longer relevant to metaphysics:

'Being about what metaphysically must and could be, metaphysics on this conception is forced by the change of target into studying more general abstract principles, such as whether two objects can ever occupy the same place and same time. If the concern is whether this principle holds in the real world, science will be relevant to assessing its truth. But why should science be relevant to assessing its truth in metaphysically impossible worlds wherein science is very different? Plainly it's not: science, after all, is mostly about the metaphysically contingent' (2011: 40-1)

French and McKenzie argue that the way that metaphysicians have approached investigating the possible ways reality could be has rendered science 'peripheral', meaning that 'physics has only an 'incidental' or marginalized role within metaphysics *even* if we buy into this conception of metaphysics' (2012: 46). Indeed their aim is to go further and argue that we should reinstate 'physics as the proper point of departure for modal questions concerning the actual', and emphasise 'just how fruitless modal discussions concerning physical ontology are if taken to be divorced from actual physics' (2012: 46-7). The idea therefore is that a conception of metaphysics that is in principle divorceable from physics should be rejected, and metaphysics as the science of the possible is one such conception.

There are at least two points that are correct in these objections. The first is that science is concerned with possibility and necessity. Williamson (2016, 2017), for example, has argued that possibility and

necessity are studied in natural sciences. Natural science thus is not a modality-free zone, though it remains an open question as to whether the modalities explored in science are the same as the metaphysical modality invoked above.

The second point is that metaphysics, as a discipline, cannot allow its speculation to entirely float free of science. This is in part because of the above recognition that science does investigate modality, but more centrally because, unconstrained by science, metaphysical speculation would have no plausible route to justify its claim that it is actually getting at how reality is at all.

Perhaps the most natural response, echoing the outline above, is to reassert that we should not think of metaphysics as an isolated or bordered off domain. That is, to argue that the boundary between metaphysics and science is blurred as investigations into how reality could be, and how it actually is, are intrinsically connected. For example, we could accept metaphysical investigation as being about the genuinely possible ways that reality could be, but when it comes to assessing a theory's relative merits, a lack of coherence with empirical data could be taken as a mark against that view as a plausible account of how reality as a whole is. That is, a lack of coherence with empirical data will help to indicate that that account does not really refer to a genuine way that reality could be.

French elsewhere seems to suggest something along these lines, arguing that metaphysical inquiry into possible ways that reality could be will produce a:

'kind of 'conceivability spectrum', ranging from unconstrained conceivability, which should perhaps come with a metaphysical 'health warning' as it may include Meinongian objects and inconsistencies in general, to logically constrained conceivability, with the Principle of Non-Contradiction, of course, acting as a significant constraint, to conceivability constrained by intuitions, with regard to which we can draw on recent discussions of the role of such intuitions in philosophy [...], to metaphysically constrained conceivability, which may come before the previous entry depending on what the relevant metaphysical and 'intuitive' constraints are, to, finally, physically constrained conceivability (or 'naturalistic' conceivability, perhaps), within which we might distinguish constraints based on classical physics, quantum physics and so forth' (2018: 225).

Where we fall on this conceivability spectrum is a matter for debate. It would be wrong to think that there are no metaphysical theories that are at that extreme point, and hence, presumably metaphysicians that might argue for being unconstrained in that way. It would be equally wrong to think that there are no metaphysical theories that are strongly and deeply linked to empirical findings. I have suggested that metaphysicians should avoid the furthest end of metaphysical speculation that is divorced from all empirical consideration. I have not argued directly for that here; however, my view is similar to the 'conditionalized' support for analytic metaphysics recently provided by French and McKenzie (2016). What we can say, at least, in response to the worry that metaphysics will float free of science is that it need not float free, and that we should be vigilant against allowing it to. Admittedly, this is unlikely to assuage some, as it does allow for there potentially being unconstrained metaphysical theorising.<sup>v</sup>

Ultimately, what constraints guide the limits of possibility will turn on questions about how we conceive of the relationship between the various different kinds of possibility, and the scope of those possibilities. For example, if we take metaphysical possibility to be constrained by facts about the laws of nature or the causal powers of fundamental properties and relations, then the empirical inquiry into those aspects of reality will be crucial to understanding what we think is metaphysically possible. These are questions, though, about what are the genuine possible ways reality could be, and not about whether metaphysics studies what are the genuinely possible ways reality could be. If metaphysical possibility is constrained in these ways – if, for example, we conclude that what is metaphysically possible must still be consistent

with the laws of nature – this does not undermine the conception of metaphysics under discussion. Rather, it indicates progress made in determining what are the genuinely possible ways reality could be.

## 4. How distinctive?

Blurring the boundaries between metaphysics and science, though, only reignites questions about whether the subject matter of metaphysics is suitably distinctive, or at least distinct from that of science. The issue is how sharp the distinction between science and metaphysics is to be drawn. Too loosely and we cannot say that metaphysics has a distinct subject matter from science; too sharp and metaphysical reasoning might (always) be too unconstrained. Metaphysics as the science of the possible needs to thread the needle between these two unwanted conclusions. I will suggest a way in which we might do so.

Let us call 'narrow metaphysics' that part of human enquiry done by metaphysicians into the possible ways that reality (as a whole) might be. Narrow metaphysics is not divorced from empirical data as which (types of) entities we are interested in will be influenced by experience or science. But its subject matter is possible ways that reality might be.

We can distinguish this from 'broad metaphysics'.<sup>vi</sup> Broad metaphysics aims to provide an account of how reality actually is, drawing upon findings and views within narrow metaphysics and empirical findings in order to try to discover which of the possible ways reality could be is the way that it actually is.

So understood, it is in virtue of the subject matter of narrow metaphysics that we can say that the subject matter of metaphysics is distinctive. Narrow metaphysics is distinctively concerned with how reality could be, whilst broad metaphysics is non-distinctively concerned with how reality actually is. We therefore can avoid too loose or too sharp a boundary between metaphysics and science by recognising that all work labelled 'metaphysics' may not have the same (primary) aims.<sup>vii</sup>

This does mean that, in so far as science is not a 'modality-free zone' (Williamson 2018), (parts of) science may also be engaged in 'narrow metaphysics'. Speaking as a philosopher, I cannot say how accepted this consequence might be by scientists, but restricting metaphysics to solely those that work within philosophy departments would seem unhelpfully limiting. A claim that the subject matter of metaphysics is distinctive cannot be based on a desire to restrict where such work takes place as it is unclear why we should expect our conception of metaphysics to neatly fit into contingent discipline boundaries within universities.<sup>viii</sup>

Even if we grant this distinction between narrow and broad metaphysics, we might relatedly worry that this does not make metaphysics distinctive enough from other *philosophical* domains. For example, Bennett (2016) has argued that studying the extent of what is possible in an a priori fashion is not distinctive of metaphysics compared to other philosophical areas of inquiry.<sup>ix</sup>

The response to this will depend on how one conceives of philosophy more broadly. For some that have defended the view that metaphysics is the science of the possible, a lack of sharp distinction between metaphysics and the rest of philosophy indicates the central role of metaphysical thinking in philosophy (Lowe 2006: chapter 1). If this is the case then it will naturally be the case that metaphysical research exists in a variety of philosophical domains. Whether this is right, though, will depend on a discussion

of meta-philosophical issues concerning the relationship between various domains of philosophical theorising that I cannot cover in depth here.

#### 5. Conceptual Analysis?

The above focused on the relationship between science and metaphysics, and tried to describe a view wherein metaphysics is distinct from, but closely related to, science. However, by drawing a distinction between metaphysics and science, a related objection arises: if metaphysics is about how reality could be, then is metaphysics 'merely' conceptual analysis? The worry is that metaphysics, under this view, will ultimately just be involved in reflecting on our concepts, thereby again allowing metaphysics to float free from any connection to reality itself.<sup>x</sup>

Certainly under this view, conceptual analysis will likely be a significant part of the method of metaphysics. For example, it is by considering definitions of central terms within our theorising that we arrive at views about what (types of) entities are possible and compossible. One method to try to work out whether it is genuinely possible that Xs, Ys, and Zs all exist is to consider the concept that each of these entities fall under and see whether positing their existence is compossible with each other (and any general principles that we might also endorse).<sup>xi</sup>

However, accepting that metaphysicians do engage in conceptual analysis, does not immediately lead to the conclusion that metaphysics is *mere* conceptual analysis. That is, we can hold that metaphysicians when engaging in conceptual analysis are trying to improve our concepts. This is an interest in concepts which is 'normative' and metaphysical: 'it is concerned to improve our concepts, or ways of thinking of things, by making them more accurate, that is, more truly reflective of the essences or natures of the things that we are thinking of when we deploy those concepts' (Lowe 2011: 108). Concepts are not the

primary subject matter of metaphysics, but part of the work required to delineate the possible ways that reality as a whole might be may involve honing and improving our concepts.

This can be linked to the notion of 'metalinguistic negotiation' (Plunkett 2015, Plunkett and Sundell 2013, 2014, Burgess and Plunkett 2013a, 2013b). Plunkett describes a metalinguistic negotiation as 'a dispute in which speakers each use (rather than mention) a term to advocate for a normative view about how that term should be used' (2015: 832).

The extent to which metaphysics is engaged in conceptual analysis is the extent to which metaphysicians are engaging in metalinguistic negotiation. For example, when metaphysicians argue about the concept 'property', they are arguing about how the concept should be used and what it should mean. We might, amongst other views, think that the concept 'property' denotes a universal, or a trope, or something that has a dispositional essence, etc. One reason, potentially amongst others, to engage in metalinguistic negotiation is in order to make those concepts more accurate to the natures of the things that the concepts pick out.

This is in line with Plunkett's claim that to engage in metalinguistic negotiation does not mean that we are 'merely' talking about concepts:

Suppose one argued (as I think is correct) that an important part of communication among biologists involves metalinguistic negotiation. (The different meanings of 'species' is a good place to start with such a proposal, as is the different meanings of 'intelligence'). Would that mean that there aren't facts about animals and their behavior to investigate, and then all biological argument is just about normative issues about word and concept choices? Clearly not. (2015: 860). The biological argument is not only about word or concept choice, as what settles the issue with respect to concept choice may be 'non-voluntary' (Plunkett 2015: 860-1). Similarly, the different meanings of 'property' are not just about word and concept choices, but about which of the competing concepts best track reality, and the genuinely possible ways that reality could be. To say which does best track reality, though, may involve a substantial element of conceptual analysis to refine the concepts first.

## 6. Knowing the Possible?

If metaphysics is the science of the possible, then we must also provide some account of how it is that we can come to know what is possible. That is, a fully developed version of this view requires a developed modal epistemology. This chapter is not the place for an in depth discussion of modal epistemology, but I will highlight some consequences which may ensue from the adoption of different forms of modal epistemology.<sup>xii</sup>

There are a wide spectrum of views that seek to explain how we can come to have modal knowledge, and each of them will provide a way to explain how we acquire such knowledge. If metaphysics is the science of the possible, these views will influence what we take to be the methodology of metaphysics.

This is because if metaphysics is the science of the possible, then its method will be derived from whatever methodology is required to gain knowledge of what is possible. For example, if we adopt a form of modal rationalism, then the methodology of metaphysics will be a priori. If this is right, then metaphysics may have both a distinct subject matter (that of what is possible), and a distinct methodology.<sup>xiii</sup> If, however, we adopt some form of modal empiricism,<sup>xiv</sup> holding that empirical methods can lead to knowledge of what is possible, then metaphysics may not have a distinctive method, though the distinctiveness of the subject matter will remain.

There are, though, views in modal epistemology that will cause more serious problems for this conception of metaphysics, such as an extreme form of modal scepticism that argues that we can have no modal knowledge (see van Inwagen 1998 for a discussion of such views). If extreme modal scepticism is right, then this would force us to reject all claims that purport to be about metaphysical possibilities, thereby undermining the claim that metaphysics has a distinctive subject matter from that of science. For these reasons, it seems that combining the strongest form of modal scepticism with the view that metaphysics is the science of the possible cannot be done whilst maintaining a view of metaphysics that has a subject matter that is suitably distinct from science.

Alternatively, we might accept modal conventionalism (Cameron forthcoming), or hold that modal statements are not truth-evaluable. Though very different, these kinds of views argue that claims about necessity (and possibility) are not about the world, holding that modal claims are not true in virtue of the world, but rather due to how we speak about it (in the case of conventionalism), or only reflect rules of use of our terms (Thomasson 2007).

One line of response to these views holds that they fail to adequately distinguish between claims about how we use words, and how the entities that our words refer to are. For example, Yablo (1992), in his response to Sidelle (1989), argues that the fact that we can decide how we use certain terms does not mean that the properties of the entity referred to by those terms are conventional. 'Water' could have been used in various ways, but this does not rule out water – the substance – having various modal features. Along similar lines, Russell (2010) has argued that conventionalist accounts are focused on the meaning of sentences, whilst a metaphysical interest in modality is about the status of the propositions expressed by those sentences, and has argued that the conventionalist has no plausible way to bridge this gap.<sup>xv</sup>

If, though, modal claims do turn out to be true only in virtue of our language, then, this would certainly have serious consequences for the view that metaphysics is the science of the possible. At the very least

we would be forced to reject the assumption I have made throughout this chapter that modal claims, and hence metaphysical claims, track real features of the world. Perhaps a deflationary version of metaphysics could come from this, whereby metaphysics is useful as a systematic inquiry into the nature of our concepts or language. However, this is certainly not the sort of metaphysics that those in the literature who have defended this conception of metaphysics would wish to accept.

## 7. Conclusion

The view that metaphysics is the science of the possible has a long, but often implicit, history. Often the view is listed as one of the major positions within the literature, but there are admittedly few that have explicitly defended it. In light of this, this chapter aimed bring some elements together in a single place, highlighting what I have taken to be the central aspects of the view.

Taking metaphysics to be the science of the possible is, naturally, not without its objections, and there are still a number of ideas to explore and refine in order for such an account to be persuasive. Perhaps, the most central task facing those that would wish to defend the view that metaphysics is the science of the possible is the clear need for an adequate modal epistemology. This task is not easy, but nor should it be surprising that an account of what metaphysics is may require us to combine it with commitments elsewhere. I have also suggested that (minimal) coherence with science is something that should constrain the most extreme forms of metaphysical theorising. However, it has to be noted that as I have outlined it, the view does not in principle rule out unconstrained metaphysical theorising (if, that is, we should want any definition of metaphysics to do so in the first place).

If these objections can be responded to, and the finer details outlined, then taking metaphysics to be the science of the possible potentially allows for a complementary conception of metaphysics and science, without a superiority of metaphysics over the empirical sciences or vice versa, and an inherently holistic

conception of metaphysics that recognises the need to understand how putative entities are related to each other in order to assess the plausibility of positing those entities.

#### References

Bealer, G. 1998. 'Intuition and the Autonomy of Philosophy'. In M. DePaul & W. Ramsey (eds.),

Rethinking Intuition: The Psychology of Intuition and Its Role in Philosophical Inquiry. Rowman &

Littlefield.

- Beebee, H., 2018. 'Philosophical Scepticism and the Aims of Philosophy', *Proceedings of the Aristotelian Society*, 118(1): 1-24.
- Bennett, K. 2016. 'There is no special problem with metaphysics', Philosophical Studies, 173: 21-37.
- Burgess, A., and Plunkett, D., 2013a. 'Conceptual Ethics I'. Philosophy Compass, 8(12): 1091-1101.
- Burgess, A., and Plunkett, D., 2013b. 'Conceptual Ethics II'. Philosophy Compass, 8(12): 1102-1110.
- Callender, C. 2011. 'Philosophy of Science and Metaphysics'. In S. French & J. Saatsi (eds.), *Continuum Companion to the Philosophy of Science*. Continuum. pp. 33-54.
- Cameron, R. 2009. 'What's Metaphysical about Metaphysical Necessity?', *Philosophy and Phenomenological Research*, 79(1): 1-16.
- Cameron, R. 2010a. 'On the Source of Necessity'. In B. Hale and A. Hoffman (eds.) *Modality: Metaphysics, Logic and Epistemology*, Oxford University Press.
- Cameron, R. 2010b. 'The Grounds of Necessity', Philosophy Compass, 5(4): 348-358.
- Cameron, R. forthcoming. 'Modal Conventionalism'. In O. Bueno and S. Shalkowski *The Routledge Handbook of Modality*, Routledge.
- Conee, E., and T. Sider (2005). *Riddles of Existence: A Guided Tour of Metaphysics*, Oxford University Press
- Cowling, S. 2013. 'Ideological Parsimony', Synthese 190 (17):3889-3908.
- Ellis, B. 2001. Scientific Essentialism, Cambridge University Press.
- Fischer, B., and Leon, F. (eds.), 2017. Modal Epistemology After Rationalism. Springer.
- Frängsmyr, T., 1990. 'The Mathematical Philosophy'. In Frängsmyr, T., Heilbron, J L., and Rider, R. E. (eds.). *The Quantifying Spirit in the Eighteenth Century. Berkeley*. University of California Press.
- French, S. 2018. 'Toying with the Toolbox: How Metaphysics Can Still Make a Contribution', *Journal* for General Philosophy of Science, 49(2) :211-230.

- French, S. and K. McKenzie, 2012. 'Thinking Outside the Toolbox: Towards a More Productive Engagement Between Metaphysics and Philosophy of Physics', *European Journal of Analytic Philosophy*, 8 (1):42-59.
- French, S. and K. McKenzie. 2016. 'Rethinking Outside the Toolbox'. In T. Bigaj and C. Wüthrich (eds.), *The Metaphysics of Contemporary Physics*, Brill.
- Jackson, F. 1998. From Metaphysics to Ethics: A Defence of Conceptual Analysis, Oxford University Press.
- Lewis, D. K., 1973. Counterfactuals. Blackwell.
- Lewis, D. K., 1986. On the Plurality of Worlds. Blackwell.
- Lowe, E. J., 1998. The Possibility of Metaphysics. Oxford: Clarendon Press.
- Lowe, E. J., 2006. The Four-category Ontology. Clarendon Press.
- Lowe, E. J., 2011. 'The Rationality of Metaphysics'. Synthese, 178: 99-109.
- Lowe, E.J. 2013. *Forms of Thought: A Study in Philosophical Logic*, Cambridge: Cambridge University Press.
- Miller, J.T.M. 2018a. 'E.J. Lowe', Internet Encyclopedia of Philosophy.
- Miller, J.T.M. 2018b. 'Are All Primitives Created Equal?', *The Southern Journal of Philosophy*, 56 (2): 273-292.
- Morganti. M., and Tahko, T., 2017. 'Moderately Naturalistic Metaphysics', Synthese 194: 2557–2580.
- Ney, A. 2019. 'Are the Questions of Metaphysics More Fundamental Than Those of Science?', *Philosophy and Phenomenological Research*, Online First. DOI: 10.1111/phpr.12571.
- Plunkett, D., 2015. 'Which Concepts Should We Use?: Metalinguistic Negotiations and The Methodology of Philosophy'. *Inquiry*, 58(7-8): 828-874.
- Plunkett, D., and Sundell, T., 2013. 'Disagreement and the Semantics of Normative and Evaluative Terms'. *Philosopher's Imprint*, 13(23): 1-37.
- Plunkett, D., and Sundell, T., 2014. 'Antipositivist Arguments from Legal Thought and Talk: The Metalinguistic Response'. In , Hubb, G. and Lind, D. (eds.), *Pragmatism, Law and Language*, Routledge.
- Quine, W.V.O. 1948. 'On What There Is', The Review of Metaphysics, 2(5): 21-38.
- Russell, B., 1912. Problems of Philosophy. Home University Library.
- Russell, G. 2010. 'A New Problem for the Linguistic Doctrine of Necessary Truth'. In C. D. Wright & N. J. L. L. Pedersen (eds.), *New Waves in Truth*. Palgrave-Macmillan.
- Shoemaker, S. 1998. 'Causal and metaphysical necessity', *Pacific Philosophical Quarterly*, 79 (1):59-77.
- Sidelle, A. 1989. *Necessity, Essence, and Individuation: A Defense of Conventionalism*, Cornell University Press.
- Sider, T. 2003. 'Reductive theories of modality'. In M. J. Loux & D. W. Zimmerman (eds.), *The Oxford Handbook of Metaphysics*. Oxford University Press.
- Swoyer, S. 1982. 'The Nature of Natural Laws', Australasian Journal of Philosophy, 60 (3):203-223.
- Thomasson, A.L. 2007. 'Modal Normativism and the Methods of Metaphysics', *Philosophical Topics*, 35 (1/2):135-160.
- Vaidya, A. 2015. 'The Epistemology of Modality', *Stanford Encyclopedia of Philosophy*, Edward N. Zalta (ed.).

Van Inwagen, P. 1998. 'Modal epistemology', Philosophical Studies, 92(1): 67-84.

Williamson, T. 2016. 'Modal science', Canadian Journal of Philosophy, 46 (4-5): 453-492.

Williamson, T. 2017. 'Modality as a subject for science', Res Philosophica, 94 (3): 415-436.

Williamson, T. 2018. 'Spaces of possibility', Royal Institute of Philosophy Supplements, 82: 189-204.

Yablo, S. 1993. 'Is Conceivability a Guide to Possibility?', *Philosophy and Phenomenological Research*, 53 (1):1-42.

<sup>ix</sup> I am grateful to an anonymous reviewer for pushing me to consider this point.

<sup>x</sup> Though, see Jackson (1998, this volume) and Bealer (1998) for more detailed discussions of metaphysics as conceptual analysis.

<sup>xi</sup> By 'general principles' here, I mean what elsewhere has been labelled 'ideology' (see Cowling 2013, Miller 2018b).

<sup>xii</sup> For a more in depth discussion of modal epistemology, see Roca-Royes (this volume) and Vaidya (2015).

<sup>&</sup>lt;sup>i</sup> For a more detailed reconstruction of Lowe's metametaphysical views, see Miller 2018a.

<sup>&</sup>lt;sup>ii</sup> See French and McKenzie (2016) who provide examples that they argue shows that the 'actual can veto crucial assumptions about what [the available] possibilities are'.

<sup>&</sup>lt;sup>iii</sup> See, for example, Lowe (2013: ch. 4) in which he argues that ' $\exists$ ' should be analysed as the 'particular quantifier' rather than as an existential quantifier, with the particular quantifier being able to quantify over non-existent objects without implying their existence.

<sup>&</sup>lt;sup>iv</sup> For clarity, Ney's focus is a related but distinct to that of this chapter. Ney is discussing the view that metaphysics is more fundamental than science, and arguing against the claim that metaphysical necessity is more fundamental than physical necessity. I am making no claims about what is more fundamental here.

<sup>&</sup>lt;sup>v</sup> This leaves aside the question of whether philosophers and scientists are talking to each other enough. Again, it seems that the answer is that some are; some are not. Some metaphysics should be more in line and engaged with empirical data; some interpretations of the empirical data maybe could benefit from an increased engagement with metaphysical considerations.

<sup>&</sup>lt;sup>vi</sup> To distinguish between narrow and broad metaphysics is not to say that they are distinct domains of enquiry. They are linked, given that, as noted above, investigating the ways that reality could be is and the ways it is are done alongside each other.

<sup>&</sup>lt;sup>vii</sup> I say 'primary' as it is of course possible that some metaphysical work will fall into both categories, as explorations of the genuine ways reality could be *and* how reality actually is. Indeed, it may even be that most work does not fit neatly into one or other of these categories. Even if this is the case, this distinction can still be useful as a way to illustrate the complex aims of metaphysical inquiries.

<sup>&</sup>lt;sup>viii</sup> This is not to deny that those trained as metaphysicians within philosophy departments might have developed skills to engage in metaphysics that those trained in empirical scientific methods have not, and vice versa, but this is more a topic for the sociology of metaphysics.

<sup>&</sup>lt;sup>xiii</sup> See Lowe 1998. This also assumed that science does not rely on a priori methods (see Farr and Ivanova, this volume).

<sup>&</sup>lt;sup>xiv</sup> A lot here will depend on the precise details of the favoured account of modal empiricism. For more detailed discussions about non-rationalistic modal epistemologies, see Fischer and Leon 2017.

<sup>&</sup>lt;sup>xv</sup> There is far more that could be said about this, and about other 'neo-conventionalist' views of modality (see Cameron 2009, 2010a, 2010b; Sider 2003).