*Introduction*

All areas of philosophy are in the business of explaining things, and hence of explaining some things in terms of other things. Sometimes we are explaining the way things are at one time, by appealing to the way things are at some other time, and sometimes we are explaining the way things are at one time, in terms of some other way they are that same time, and sometimes we are explaining one way things are, atemporally, in terms of some other way they are, temporally or atemporally. Often when we are explaining the way things are at one time, by appealing to the way things are at some other time, we are engaging in *causal explanation:* we are explaining the way things are a later time—the effect—in terms of some earlier cause. When we explain why Usain Bolt runs so fast, by appealing (amongst other things) to his countless hours of training, we are providing a causal explanation.

Not all explanations, however, are causal explanations. In general, explaining the way things are at one time, in terms of some other way they are that same time, or explaining the way things are, atemporally, in terms of some other way they are, temporally or atemporally, is not a matter of providing a causal explanation. Unsurprisingly, it’s controversial exactly which putative explanations are real explanations, and controversial, amongst the real explanations (henceforth we just call these *explanations*), which are genuinely non-causal. But various philosophers have supposed that at least some of the following count as non-causal explanations: our explaining that someone is in a particular mental state (like pleasure) by appealing to them being in a certain brain state; or that the flag is red, because it is maroon, or that Annie is a dog because she’s a labradoodle,[[1]](#footnote-1) or that some action is right because it maximises utility, or that a society is just because of the way it arranges its institutions. Indeed, perhaps sometimes when we explain the way things are at one time, in terms of how they are at some *other* time, we are nonetheless providing non-causal explanations. Arguably, when we explain that some particular building is a church, because of some earlier event of consecration, we are providing an explanation that is at least in part non-causal. Some non-causal explanations have become known as *metaphysical explanations*, and they are the bread and butter of philosophy.

While these sorts of non-causal explanations are common in philosophy, they are also common outside of philosophy. When they are employed to articulate connections between the subject matters of various scientific sub-disciplines they are sometimes known as *inter-level explanations*. So, when physicists account for the macroscopic thermodynamic properties of a system (i.e., its temperature, pressure, etc.) in terms of the distribution and motion of the microscopic particles that make up the system, and biologists explain why there is some DNA by noting that there exists a chain of nucleotides in a certain order, they are articulating the kind of explanations with which we are interested.

The sorts of explanations with which we are interested can, in fact, be found pretty much everywhere. They are not a recherché interest of contemporary philosophers and scientists. When Dorothy explains to Emily that the painting depicts a horse because of the way the paints have been arranged on the canvas; when George explains to Hermione that torturing cats for fun is wrong because of the pain caused to the cat; when Phyllida explains to Jack that the bicycle parts have to be put together in a certain way in order for there to be a bicycle; when Jenny explains to Herbert that in order for society to be just, they need to arrange their institutions in certain ways, they are all (arguably) engaging in metaphysical explanation. Engaging in metaphysical explanation, then, is a mainstay of explanatory discourse whereby we help one another to understand the world. So while philosophers have, of late, started to seriously theorise about this kind of explanation, and while this kind of explanation is especially prevalent within philosophy itself, it is not by any means a uniquely philosophical notion.

This book focuses on that phenomenon: *metaphysical explanation*. This is, very roughly, the phenomenon we take to underpin, or perhaps even be partly constituted by, our behaviours of seeking and providing explanations of a certain sort (metaphysical), by appealing to certain sorts of structures in the world, in order to bring it about that we come to understand, or find illuminating, or gain new capacities to intervene in the world (or some such).

As we see it, there are two distinct aspects to the phenomenon of metaphysical explanation: a worldly aspect, and a psychological-cum-epistemic aspect. Correspondingly, there are accounts which target these different aspects of the phenomenon. What we call *worldly structure accounts,* are accounts that attempt to spell out what sorts of worldly structures there need to be in order for there to be a metaphysical explanation present.

There also appears to be a psychological-cum-epistemic aspect to the phenomenon. That is, there need to be subjects with appropriate sorts of mental states that connect in appropriate ways to the presence of that worldly structure if there are to be metaphysical explanations. However, this aspect of has received little attention. Indeed, almost all theorising about the phenomenon has focussed on the development of worldly structure accounts.

When one takes the psychological-cum-epistemic aspect seriously—as we do—there emerge several related questions. First, there is the question of whether, in order for there to be a metaphysical explanation present, there must be certain *psychological* states in the relevant subjects, and if so which states matter. Second, there is the question of whether some, or all, of these psychological states must be *epistemic* states. That is, must those psychological states be warranted by being appropriately connected to the world and to other psychological states? These first two questions concern whether there is a psychological or epistemic aspect to metaphysical explanation itself

Further, we can divide the question of whether, in order for there to be a metaphysical explanation present, there must be certain psychological or epistemic states in the relevant subjects, into two further elements. The first is the *goal-directed* element of metaphysical explanation. An account of this element will show how a subject’s current explanatory goals, and the ‘why-questions’ to which they seek answers, will determine what counts as a metaphysical explanation for that subject. The goal-directed element of metaphysical explanation is epistemic in the sense that it is directed towards answering particular questions, or making certain particular discoveries, or advancing certain goals which are, in themselves, very likely epistemic.

The second is the *concordance* element. An account of this element will show how broader features of a subject’s psychological or epistemic states determine what counts as a metaphysical explanation for her, regardless of her current explanatory goals, or the why-questions she currently has in mind. We will be at pains to spell out our preferred way of thinking about this element throughout the book, but in the broadest sense this element is related to whether the subject has a certain understanding, whether she can make use of the explanatory connection, whether she can synthesise the explanation, etc.

In this book we will largely set to the side the goal-directed element of metaphysical explanation. In doing so we assume that whether something counts as a metaphysical explanation for a subject, does not depend on whether or not it answers any particular why-questions the subject has in mind (assuming they had any in mind). So suppose, for instance, that Freddie is wondering why it is that the door is red, and that Freddie asks Jenny, and she responds by telling Freddie that torture is wrong because torture fails to maximise utility. Let’s suppose that Freddie has the appropriate sorts of psychological or epistemic states that concordance requires—he understands, (let’s suppose that’s what matters) what torture is, that it causes pain and hence fails to maximise utility, and he understands the connection between the two. As we will ultimately put it, Freddie *understands* one fact (that torture is wrong) in terms of the other (that torture causes fails to maximise utility) by representing those facts, and representing there to obtain a certain connection between them. So, on our view, Freddie meets the concordance aspect of metaphysical explanation. Then we will say that what Jenny said is a metaphysical explanation for Freddie (holding fixed that there is some worldly relationship between torture’s being wrong and its causing pain, if this is required) even though, quite clearly, what Jenny said is not an appropriate response to Freddie’s question.

We will suppose that the goal-directed element of metaphysical explanation is best accommodated by appealing to questions about *acts* of metaphysical explanation, and that it is only the concordance element that need be accommodated by an account of metaphysical explanation itself. As a result, we must allow that even once we have determined what metaphysically explains what for a subject—where this may or may not have a psychological-cum-epistemic aspect—there is the further question of which explanation is *appropriate* to offer her, given her goals, in response to a particular explanation-seeking why-question. Determining which utterance of a metaphysical explanation is appropriate, and thus an *act* of metaphysical explanation, is something that will plausibly depend on the psychological or epistemic characteristics of the explanation-seeking subject, as these are related to their particular explanation-seeking behaviour.

Developing an account that shows why Jenny’s response to Freddie is, while a metaphysical explanation, not appropriate and thus not an act of metaphysical explanation, is not something we will attempt; for our focus is on questions about the psychological-cum-aspect of metaphysical explanation itself, not acts thereof. Quite generally though, it seems right to think that a particular utterance will only count as an act of metaphysical explanation if the proposition uttered is true—if there is a metaphysical explanation present for the subject—and the utterance is appropriate—it answers the why-question to which the subject wants an answer. If that is roughly right, then we can be thought of as providing the beginnings of an account of when something counts as an act of metaphysical explanation: namely, the conditions under which the proposition uttered is a metaphysical explanation. We leave it to others to fill in the remaining details about when uttering such a proposition is appropriate.

Henceforth then, when we talk about the psychological-cum-epistemic aspects of metaphysical explanation, it is the concordance element of metaphysical explanations that we will have in mind. We will reflect on goal-directed elements of metaphysical explanation only insofar as we are discussing acts of metaphysical explanation.

*Psychological accounts* of metaphysical explanation, then, attempt to spell out which psychological states matter for there being a metaphysical explanation present. If metaphysical explanation also has an epistemic role, then there will also be *epistemic accounts* of the phenomenon: these are accounts that attempt to spell out which epistemic states matter for metaphysical explanation.

Of course, there will be no motivation to develop an epistemic account of metaphysical explanation if the phenomenon turns out not to have an epistemic aspect. Often we will simply talk of the psychological-cum-epistemic aspect of metaphysical explanation, where we want to remain neutral about whether this aspect is characterised by one, or both, of these aspects.

What we call *comprehensive* *accounts* are ones that attempt to spell out all that is required in order for there to be a metaphysical explanation present. Then a *pure* *comprehensive worldly structure account* is one according to which in order for there to be a metaphysical explanation present, there only needs to be some worldly structure present: no mention of the mental states of any subject is required in order to account for the phenomenon of metaphysical explanation. (Note that a pure comprehensive worldly structure account is compatible with a psychological or epistemic account of the appropriateness of acts of metaphysical explanation.)

On the other end of the spectrum, a *pure comprehensive psychological account* is one according to which in order in order for there to be a metaphysical explanation present, all that matters is that there obtain the relevant psychological states, and no mention of worldly structure is required.

Each of these first two comprehensive accounts focuses on one aspect of metaphysical explanation to the exclusion of the other. By contrast, what we will call a *comprehensive psychological account* is one according to which in order for there to be a metaphysical explanation present, there only needs to be some worldly structure and some psychological states present: there do not need to be any epistemic states. Finally, a *comprehensive epistemic account* is one according to which in order for there to be a metaphysical explanation present, there must be some worldly structure, and some psychological states, some of which are also epistemic states.

So far, we’ve introduced a number of places where epistemic considerations might enter into our picture of metaphysical explanation: in the goal-directed element of acts of metaphysical explanation, or in the articulation of one aspect of a comprehensive epistemic account of metaphysical explanation. There is, of course, another place where epistemic considerations will surely enter any such account: namely, in the service of providing what we will call an *epistemology of metaphysical explanation* itself. An epistemology of metaphysical explanation is an account of how we come to *know* what metaphysically explains what (assuming we do). This book does not attempt to present an epistemology of metaphysical explanation. But we will have something to say about the various mechanisms that we take to be implicated in our ability to detect the presence of metaphysical explanations, and in turn, we will make the case that these mechanisms are relatively reliable. So we will, by the end of the book, take ourselves to have offered the beginnings of an epistemology of metaphysical explanation.

Moving on, theorising about the different aspects of metaphysical explanation can be done in the service of quite different aims. As such, we can distinguish two rather different projects with which one might engage. One of these is the project of articulating and accounting for what we will call a *philosophical* notion of metaphysical explanation. The other is a project of articulating and accounting for what we will call an *everyday* notion of metaphysical explanation.

The everyday notion of metaphysical explanation is metaphysical explanation as it features in the lives of everyday people; it is what we all do when we (metaphysically) explain one thing in terms of another, to ourselves, or to others. By contrast, the philosophical notion of metaphysical explanation is a specialised notion; it is a notion that philosophers are developing to do certain sorts of useful theoretical work within philosophy. These might, of course, end up being the very same notion. As we discuss in chapter 1, many philosophers working on metaphysical explanation have explicitly said that the notion of metaphysical explanation that is of interest to them is one that has a venerable history of use going back through the ages, and indeed a notion that is a part of everyday discourse. It is, we are reassured, not some new and parochial notion invented by contemporary philosophers. So it is possible that these philosophers are attempting to capture the everyday notion in their theorising, because they think that this notion is a useful philosophical notion. In that case the two notions are the same.

Recently, philosophers have developed a number of accounts of metaphysical explanation. As we will see in chapter 3, most of these accounts do not do well when measured against the desiderata we develop for a theory of everyday metaphysical explanation. This brings into question whether the notion they have in mind is the everyday notion or the philosophical notion. Indeed, perhaps it is more charitable to see their accounts as attempts to explicate a distinctively philosophical notion of metaphysical explanation. We are open to this possibility. So we will often simply talk of contemporary accounts of metaphysical explanation, where we want to leave open whether these are best interpreted as accounts of the philosophical notion, the everyday notion, or both. With that said, even if the two notions are distinct, it seems likely that there is a good deal of overlap between them. After all, otherwise it wouldn’t be true to say that they are both notions of metaphysical explanation.

In this book we are explicitly interested in providing an account of *everyday metaphysical explanation.* We are interested in how subjects like us, as we are, come to make judgments about what metaphysically explains what, and the conditions under which we do so. So the target in this book—everyday metaphysical explanation—is the phenomenon with which ordinary people engage when they judge that one thing explains another (and where that explanation is metaphysical).

Why focus on everyday metaphysical explanation? Well, if there is really just one unified notion of metaphysical explanation that is the target of both philosophical and everyday accounts, then we are focussed on the same notion as other contemporary work in this area, and insofar as our account differs in important ways from most such work, it can be seen as a competitor to these accounts. If, on the other hand, there are two distinct notions, then our account is not best seen as competing with extant accounts, but as developing an account of the everyday notion.

Insofar as there is supposed to be an important connection between philosophical and everyday notions of metaphysical explanation—which we think is critical, lest philosophers end up vigorously theorising about a notion of explanation that has nothing to do with the explanations with which non-philosophers engage—developing a clear account of everyday metaphysical explanation is a much-needed complement to extant philosophical accounts. Indeed, it seems plausible that the philosophical notion of metaphysical explanation should be seen as a refinement of the everyday notion. So, much of what we say here is of direct relevance to theorists interested in developing comprehensive psychological or epistemic accounts of philosophical metaphysical explanation. We will, however, leave it to those interested in pursuing those projects to decide what is relevant, and how.

Here is the state of play: philosophers working on metaphysical explanation have almost exclusively focused on providing accounts of the worldly structure aspect of the phenomenon. As we discuss later, whether these have been intended to be comprehensive accounts is not clear. What is clear is that the primary focus has been on articulating what sort of relation needs to hold between facts, or states of affairs, or objects and properties, in order for it be the case that one of those facts, (or states of affairs, etc.), can be cited as a metaphysical explanation for another. In what follows we will restrict our discussion to talking of facts, where we are conceiving of facts as bits of worldly structure composed of objects, properties and relations, and where we will represent the fact that x, as [x]. Then contemporary theorists of metaphysical explanation often suppose that we need to posit a new primitive, asymmetric, irreflexive and non-monotonic relation: *ground*. The sorts of worldly structures that need to obtain, they say, for there to be a metaphysical explanation of one fact in terms of another, is for the latter to ground the former. Only where we have these *grounding structures,* they say, do we have metaphysical explanations.

Surprisingly, though, little to no consideration has been given to how these bits of the world—grounding structures, if many contemporary theorists are to be believed—must connect up with the minds of subjects like us if we are to count as having a metaphysical explanation of one thing in terms of another. That is, little to no consideration has been given to the psychological-cum-epistemic aspect of metaphysical explanation.

With that in mind, our aim is to develop a naturalistically pleasing comprehensive account of everyday metaphysical explanation. Of course, one man’s naturalism is another man’s metaphysically mysterious bogeyman, so rather than try to define ‘naturalistically pleasing’ we will just say something about what we are aiming to do.

First, we want an account of what we are doing when we offer, and receive, everyday metaphysical explanations, which appeals to individuals’ cognitive resources.

Second, holding everything else fixed, we want a parsimonious account of what structure the world must have, in order for there to be metaphysical explanations.

Third, we want to provide an account of which cognitive mechanisms are involved in us coming to make judgements about what metaphysically explains what. We think that the ultimate aim of this line of inquiry ought be to connect this mechanistic account to an account of how we come to know what metaphysically explains what.[[2]](#footnote-2) In other words, ultimately we want an epistemology of everyday metaphysical explanation.

As we noted earlier, however, our aim in this book is somewhat narrower than this. We are not aiming to provide an account of how we know what metaphysically explains what, because we don’t want to take a stand on what conditions need to obtain for knowledge to obtain. Instead, we limit ourselves to the project of what we might think of as the *beginnings* of an epistemology: a psychological account of how it is that we come to make judgements about what metaphysically explains what, and, as part of that, an account of how we come to track those features of the world that must obtain if such an explanation is to obtain. In particular, we aim to offer an account of how we reliably come to track the relevant features of the world: something that we take to be necessary, but perhaps insufficient, for providing an epistemology of everyday metaphysical explanation.

In this book we argue for a comprehensive psychological account of everyday metaphysical explanation. We ask: what worldly structure must obtain for a metaphysical explanation to obtain *at all,* and what relations must that structure bear to the minds of subjects in order for an everyday metaphysical explanation to obtain *for those subjects*. Our aim is to show that given the empirical evidence we have to date, the comprehensive psychological account we offer is adequate.

We will suggest that the best way to frame a comprehensive psychological account of everyday metaphysical explanation is in terms of the following schema (**CPA**).

**CPA:** A proposition of the form ⌜x *because* y⌝ is true at context of explanation, <w, t, s>,[[3]](#footnote-3) iff [y] R [x], and at that context of explanation, [y] plays psychological role P relative to [x] for s.

There is a lot going on in **CPA**, and we will say a little to unpack its various aspects here. Doing so will help pre-empt the structure of the book, much of which is devoted to spelling out **CPA** in detail.

Firstly, as we discuss in chapter 1, in this book we will suppose that everyday metaphysical explanations *are* true propositions of the form ⌜x *because* y⌝ and we will use an italicised ‘*because’* when talking about *metaphysical* explanation as opposed to explanation of any other sort. Then propositions of that form are ones in which a proposition is to be substituted for ⌜x⌝ in the schema, and a proposition is to be substituted for ⌜y⌝ in the schema. If there is some distinct philosophical use of *because* that captures philosophical metaphysical explanation, we will talk of ⌜x *becauseS* y⌝, where the subscripted S denotes that it’s a specialised kind of *because*.

Importantly, **CPA** tells us that propositions of that form are true (or not) at contexts of explanation rather than simply true or false *simpliciter*. As well as further explicating the notion of everyday metaphysical explanation, Chapter 1 takes up the task of making clear what it is for a proposition to be true at a context of explanation. For now, we can just think of **CPA** as saying that a proposition of that form is always true or false relative to a particular subject.

The rest of the book takes on the task of showing that a comprehensive psychological account of the kind we end up with when we appropriately fill in **CPA** can go a long way towards satisfying the desiderata for an account of everyday metaphysical explanation that we develop in chapter 2. To be clear, though, we don’t, at this stage, know exactly which features everyday metaphysical explanation has, and so we don’t yet know exactly what needs to be accounted for. As such, we can’t be sure that a comprehensive psychological account can do all the work that is required: that it can, in fact, be truly comprehensive. It might be that in the fullness of time it becomes clear that to account for everyday metaphysical explanation we need an account that also appeals to certain epistemic states of subjects. We are certainly not averse to this being so.

So you should think of the account we offer as an interim one. Given what we know so far about everyday metaphysical explanation, we argue that the account we offer is appealing: that we can develop a compelling account of everyday metaphysical explanation without considering epistemic factors such as whether subjects form their beliefs through reliable process, whether their beliefs are justified, etc.

Importantly, even if it should turn out that an account of everyday metaphysical explanation ought appeal to such factors, the account we offer can still provide the backbone to a future epistemic account of the phenomenon. That’s because, in the end, we’d expect a comprehensive epistemic account to be one that specifies how it is that psychological states identified by a psychological account need to connect up to the world, and perhaps also to other psychological states. Throughout book we will make various suggestions along these lines regarding how one might add to our account to generate a comprehensive epistemic account, should such an account prove necessary.

In chapter 2 we outline a set of desiderata for an account of everyday metaphysical explanation. In particular, we argue that such an account must be concordant with a plausible account of our practices, must provide correct truth-conditions and must be epistemically tractable. Moreover, if the account posits new worldly structure, there must be a plausible account, arising from the phenomenon of everyday metaphysical explanation, of why we ought posit such structure. We argue that in order to satisfy these desiderata, an account must accommodate the best systematisation of our judgements regarding what metaphysically explains what. We then make the case that we ought not rely on *a priori* reason, or our own intuitions and judgements, or the intuitions and judgements of other philosophers, about the judgements people make. We thus motivate the idea that in order to measure an account of this sort against these desiderata we need to appeal to empirical research. In particular, we argue that we will need empirical data regarding our practices surrounding metaphysical explanation, and regarding our pattern of judgements about what metaphysically explains what.

Chapter 3 begins by outlining some existing empirical research into people’s judgements about *causal* explanation, and uses this to frame some hypotheses about people’s judgements about metaphysical explanation. We then describe four empirical studies we ran, and discuss the results. We use this empirical data to spell out some of the empirical content of the general desiderata that we present in chapter 2. This will then be used to guide our discussion in the remainder of the book, of the extent to which various accounts of everyday metaphysical explanation meet the desiderata. Let’s be clear right up front: sometimes the data that we find as a result of these experiments are not the data that philosophers have assumed to obtain. So sometimes the data that we are accommodating are not those that contemporary theorists have been trying to accommodate in developing accounts of metaphysical explanation. The resulting account, then, which accommodates this data, looks very different from extant accounts.

**CPA** tells us that a proposition of the form ⌜x *because* y⌝ is true at context of explanation, only if there is the presence of an R-relation between [y] and [x]. Chapter 4 connects this aspect of the truth-conditions with extant work on metaphysical explanation discussed in chapter 1. There, we develop a comprehensive psychological account of everyday metaphysical explanation by appealing, in part, to contemporary work on the worldly structure aspect of metaphysical explanation. The question we ask is whether we can pair an extant worldly structure account with an account of what relation that structure needs to bear to a subject’s psychology, in order for that subject to have an everyday metaphysical explanation. Since contemporary accounts of worldly structure typically appeal to so-called grounding relations—primitive asymmetric, irreflexive, non-monotonic relations that obtain between facts—we call the kinds of account we develop in chapter 4 comprehensive extant grounding-based accounts (or just extant grounding-based account for short). We spell out three versions of this kind of account, but go on to argue that these kinds of account are not adequate to our purposes. We ought not, we argue, posit a relation of ground, at least conceived in this manner, as any part of an account of everyday metaphysical explanation.

Whether or not contemporary grounding-based accounts succeed, by their own lights, as accounts of the worldly structure aspect of some philosophical notion of metaphysical explanation is not something about which we will have anything to say. Nor will we take a stand on whether the accounts we generate, in chapter 4, would serve as successful *comprehensive* accounts of philosophical metaphysical explanation, on the assumption that this is distinct from everyday metaphysical explanation. We hope, however, that those who are interested in pursuing the project of developing a comprehensive account of philosophical metaphysical explanation, which incorporates psychological-cum-epistemic elements will find our discussion in this chapter useful in providing at least the beginnings of such an account.

Moreover, we won’t take any stand on whether or not there are other reasons to posit grounding relations conceived in this manner. For instance, as we will see, grounding relations are typically thought to be primitive relations of *relative fundamentality.* These relations are thought to generate a sort of ontological structure to our world, in which more fundamental facts support, or give rise to, less fundamental facts. Indeed, one of the motivations for positing irreflexive and asymmetric grounding relations is that these seem particularly well suited to play the role of relations of relative fundamentality. That our world is structured in something like this manner is something that many philosophers find intuitive. This book does not attempt to argue against such a picture. It may be that there are good reasons to posit the sorts of grounding relations that these theorists posit. But we will make the case that these relations play no role in our best account of *everyday* metaphysical explanation.

That leaves us, then, with no account of the relevant worldly structure. Chapter 5 remedies this absence. There, we countenance a range of R-relations: relations which, when they hold between certain facts, generate the kind of worldly structure that is necessary for an everyday metaphysical explanation to be present for a subject. Having set aside grounding as a candidate R-relation we consider three alternative views about the worldly structure aspect of everyday metaphysical explanation.

The first two views of worldly structure are *monist* accounts on which there is a single R-relation. Motivated by considerations arising from chapters 1 through 4, we develop a new symmetric *grounding-based account*. On that view there is one R-relation and that relation is a grounding relation. Grounding, however, is not conceived as *extant grounding-based* theorists do, as an asymmetric, irreflexive, non-monotonic relation. Instead, drawing inspiration from interventionist models of causation, we will suggest that the grounding relation is a kind of symmetric glue that binds together facts. Unlike the interventionist models by which the account is inspired, however, we will suppose that interventional connections are reflexive and monotonic, and thus that grounding has these features. Ultimately we will argue that appealing to grounding, thus conceived, affords the kind of flexibility of account that, in chapter 4, we argue extant grounding-based accounts cannot.

According to the second monist account we develop, the R-relation is the necessitation relation, where x necessitates y just in case in every world in which x obtains, y obtains.

The third account is a pluralist account, according to which there is a plurality of R-relations, each of which is a different kind of *non-causal correlational relation*. Non-causal correlational relations are correlational relations that include modal relations like necessitation, but also some weaker correlational relations.

In the remainder of the book we consider three accounts of everyday metaphysical explanation: the three accounts we generate when we plug in each of these three views of the nature of the R-relation, combined with our account of what psychological properties a subject needs to have in order for a metaphysical explanation to obtain at their context of assessment. While we will conclude that the non-causal correlation-based account is the strongest of those we explore, our primary goal will be to articulate the slightly different costs and benefits of each account, by measuring them against the desiderata outlined in chapter 2. We will also show that all three accounts do better than the extant grounding-based accounts we develop in chapter 4.

Here, then, is a respect in which this book is unapologetically radical. It takes a radical view of the kind of structure that is necessary for there to be an everyday metaphysical explanation present for a subject. Indeed, it is radical along two dimensions. First, as just noted, it’s radical in terms of the kinds of relations we countenance. As we will see in chapters 1 and 4, it is typically held that no classical modal relation such as necessitation can generate the kind of worldly structure that is necessary for metaphysical explanations to obtain. The reason for this, very roughly, is that modal relations are relations of mere correlation. As such, we find lots of modal correlations (that is, modal relations) where there is no real explanatory connection between the correlated facts.

For instance, the existence of Freddie the cream labradoodle necessitates the existence of the number 2: every world containing the former contains the latter, because the number 2 exists of necessity (we shall suppose). Yet most philosophers are strongly of the view that there is no explanatory connection between Freddie and the number 2. No matter what psychological states are engendered in, say, Annie, regarding Freddie and the number 2, it cannot be that, for Annie, the existence of Freddie metaphysically explains the existence of the number 2. We reject this orthodoxy, at least as it pertains to *everyday* metaphysical explanation. On two of the three proposals we consider in chapter 5, the R-relation is a relation of mere correlation. So on our account, if there is a subject who has the right sorts of psychological states (more on this shortly) regarding Freddie and the number 2, then it will be true, for that subject, that the existence of Freddie metaphysically explains the existence of the number 2. Of course, we don’t say there are such subjects. But we will argue that it is a virtue of our account that it can accommodate there being such subjects.

This brings us to the second respect in which our account is radical. One version of our account says, roughly for now, that there is an everyday metaphysical explanation of [x] in terms of [y] present for subject S, iff [y] necessitates [x], and S represents the right sort of connections between [y] and [x] (more on this shortly). Nothing else need obtain. One could, instead, think that amongst the class of R-relations, there are additional constraints one can bring to bear which filter out some of those R-relations which are not apt to back any explanation, regardless of any subject’s psychological states. For instance, one could think that only *some* necessitation relations are such that, when combined with the right kind of psychological state, we get an everyday metaphysical explanation.

This, however, is not the route we take. We countenance *all* of the instances of the necessitation (and non-causal correlational relations) as being apt to back there being a metaphysical explanation present for a subject, so long as the subject has the right sorts of psychological states.

We will defend this choice in more detail in the remainder of the book. For now, we just want to note that we are aiming for a view that is maximally flexible in being able to accommodate our judgements about subjects very *unlike* us: aliens, say, with very different psychological capacities, or subjects who have very different abilities to act in and on the world. We, for instance, cannot really see how what happened at the big bang explains why Freddie chose kangaroo rather than beef for dinner. But perhaps there are subjects who can. We want to be able to accommodate our judgements about these kinds of subjects. We cannot intervene on the sun in order to bring something about. But there are potentially subjects who could, and we want to be able to accommodate our judgements about subjects such as these.

For, as we outline in chapter 2, an account of everyday metaphysical explanation ought accommodate the best systematisation of our judgements about what metaphysically explains what for various subjects: subjects who are unlike us in a variety of ways. For instance, in chapter 3 we present empirical evidence that when making judgements about which metaphysical explanations obtain for a subject who can intervene on abstract objects, a majority of people are inclined to judge that the existence of a singleton set metaphysically explains the existence of its member. We, subjects around here, cannot intervene on abstract objects (at least, not directly), but still, we want to accommodate our judgements about which metaphysical explanations are present for such subjects.

The mere fact that philosophers around here are disinclined to find this explanatory at their contexts is, when it comes to everyday metaphysical explanation, eclipsed by the tendency of non-philosophers to make such judgements. We thus argue that very different everyday metaphysical explanations can obtain for subjects very unlike us, and hence that which instances of the R-relation are apt to back everyday metaphysical explanations ought not be constrained by what subjects like us in fact find explanatory *for us*.

To put it a little differently, as everyday metaphysical explanation is a partly psychological phenomenon, we don’t want to prejudge what sorts of things we might judge that *other* subjects find explanatory. We want to allow that, at least in principle, if there were a subject with very different psychology and capacities than us, who had the right kinds of psychological states regarding Freddie and the number 2, then that subject would be someone for whom we would judge the existence of Freddie metaphysically explains the existence of the number 2. In this, we depart from orthodoxy on this matter.

With our three accounts of the R-relations on the table, chapter 6 focuses on explicating the nature of psychological role P: the psychological role that [y] must play relative to [x] for a subject, if that subject is to count as having an everyday metaphysical explanation. We argue that [y] plays psychological role P relative to [x] for a subject at a context, just in case [y] elicits *subjective* *understanding* of [x] in the subject at that context.

We then present an account of the nature of subjective understanding, conceived, as we do, as a psychological state. We will argue that S’s subjectively understanding [x] in terms of [y] is a matter of S’s mental map representing things to be a certain way. In particular, it is a matter of S representing *interventional affordances*—ways of intervening on the environment that will result in interventions to other parts of the environment—to obtain between [x] and [y]. We will say that S subjectively understands [x] in terms of [y] just in case she represents that there are ways of intervening on [y] that are ways of intervening on [x]. We then argue that S’s subjectively understanding [x] in terms of [y] at a context, C, is sufficient for [y] to play psychological role P for S at C (her context of explanation) relative to [x].

Our account of subjective understanding, and hence of psychological role P, is unapologetically psychological. *Subjective* *understanding* differs from *understanding* insofar the former is a purely psychological notion, and the latter is typically thought, by philosophers, to be an epistemic notion. On our view, a subject—Gary—can count as subjectively understanding one fact in terms of another, by representing certain interventional affordances between those two facts, even if the affordances he represents to obtain between those facts do not, in fact, obtain. Moreover, Gary can subjectively understand one fact in terms of another even if he has no justification for representing the affordances between those facts.

By contrast, we will assume that Gary can only count as what we will call *objectively* *understanding* one fact in terms of another, if he both subjectively understands that fact in terms of the other, and, in addition, the world is as his subjective understanding represents it to be, and as *strongly objectively* *understanding* one fact in terms of another, if he both subjectively understands that fact in terms of the other, and, in addition, the world is as his subjective understanding represents it to be and his representation is the result of some reliable process, or is otherwise warranted in some manner. Objective understanding, then, is an epistemic notion, while subjective understanding is a psychological one.

Even as it stands, however, it’s important to note that our account of everyday metaphysical explanation is not an ‘anything goes’ account. It’s not that if Gary represents certain connections to obtain between certain facts, and hence subjectively understands one of those facts in terms of the other, then one of those facts metaphysically explains the other for Gary. Whether there is a metaphysical explanation present for Gary is constrained by whether or not there is some relevant worldly structure: in particular, it’s constrained by whether or not those facts are related by an R-relation. This is important: it means that each of us *can* be wrong about what, for each us, metaphysically explains what. Gary can mistakenly judge that there is a metaphysical explanation present for him, when in fact there is not. Indeed, on our account Gary can even be mistaken about whether or not psychological role P is being played, for him, by some fact relative to another. While, as we discuss in chapter 9, we typically have pretty good access to our own (and even to others’) states of subjective understanding, this access is not apodictic. We can be wrong about whether we even *subjectively* understand something.

In all, we think these are attractive features of our account. On the one hand, we think, and data from chapter 3 confirms, that some people are inclined to judge that sometimes subjects are wrong in their own judgements about what metaphysically explains what. This is something we want our account to accommodate. Having said that, we also want to accommodate the patent fact that people are pretty good at making these judgements; that, often, we find answering questions about what metaphysically explains what to be quite epistemically tractable.

In chapter 7 we offer an account of how we reliably detect R-relations, which appeals, *inter alia*, to various evolved cognitive mechanisms. Then in chapter 8 we explore how we reliably detect subjective states of understanding. Taken jointly, these two chapters provide an account of how we reliably come to judge that one thing metaphysically explains another for a subject at a context of explanation.

This is, of course, only the beginnings of an epistemology of everyday metaphysical explanation. Nothing we say in chapters 7 or 8 speaks to the question of whether the mechanisms that we have for detecting R-relations or states of subjective understanding are of the right kind to generate knowledge of those relations or states. That’s because nowhere do we take a stand on what is required for a subject to have knowledge. So we leave open that what we offer falls short of providing an epistemology of everyday metaphysical explanation.

Nevertheless, we take it that chapters 7 and 8 jointly go some way towards showing that the comprehensive psychological accounts we develop are epistemically tractable, and that this helps to show that such an account is a plausible alternative to a comprehensive epistemic account. For while these accounts allow that propositions of the form ⌜x *because* y⌝ can be true in the absence of a connection between the relevant psychological state and the world, if we have reason to think that we have mechanisms that reliably produce in us representations that correspond with the R-relations that obtain, this goes some way towards satisfying the motivation for adopting an epistemic account. For if the account we provide in chapter 7 is accurate, the relevant psychological states *do* *mostly* turn out to be epistemic states (again, depending on what is required in order for a subject to have knowledge). It’s just that their doing so is not a necessary condition on the truth of propositions of the form ⌜x *because* y⌝: on our view such propositions will be true even if the relevant psychological states are not produced by the mechanisms we outline, and hence are not produced by a reliable mechanism. We take it, though, that these cases will be rare. These are cases in which although ⌜x *because* y⌝ is true at a subject’s context, that subject doesn’t count as having knowledge that ⌜x *because* y⌝. We see it, very generally, as an attractive feature of our account that it cleaves the truth-conditions for propositions of the form ⌜x *because* y⌝, from the conditions under which a subject knows that ⌜x *because* y⌝.

While our primary aim is to provide the beginnings of an epistemology of *everyday* metaphysical explanation, we think that at least some of what we say will be of use to those developing accounts of philosophical metaphysical explanation. This is particularly so for those pursuing comprehensive psychological or epistemic accounts of philosophical metaphysical explanation, or a comprehensive worldly structure account paired with an account of the conditions under which an utterance expressing a proposition of the form ⌜x *becauseS* y⌝ counts as an *act of metaphysical explanation*. We will say more about acts of metaphysical explanation in chapter 1. Indeed, the resources we develop in chapter 7 will be of use even to those who think there is no psychological aspect even to acts of metaphysical explanation, insofar as we make some headway on developing an epistemology of grounding.

The combination of the three new views about the R-relations we outline in chapter 5, and our account of psychological role P, from chapter 6, yields three novel comprehensive psychological accounts of everyday metaphysical explanation. In chapters 9 and 10 we put all three accounts through their paces with regard to the desiderata we set out in chapter 2 and refined in chapter 3. While we will make the case in favour of the pluralistic non-causal correlational view over the alternatives, our primary aim is simply to present a range of plausible comprehensive accounts of everyday metaphysical explanation, and to show that this is so despite these accounts not appealing to the sorts of worldly structures presented in the literature so far.

Our first task, though, is to better articulate the underlying phenomenon of metaphysical explanation. We turn to this task in chapter 1.

1. Annie and Freddie are Kristie’s labradoodles. (They are also David’s Labradoodles. Thanks to David Braddon-Mitchell for feedback on this issue.) There are pictures of Annie and Freddie in the front matter to this book. That Freddie is a cream labradoodle and Annie is a black labradoodle are important things to keep in mind while reading on. [↑](#footnote-ref-1)
2. Some readers will bemoan the lack of ‘to’ after ‘ought’ in this sentence and others like it throughout the book. We want to flag here that our preferred use is perfectly grammatical, if a little antiquated. [↑](#footnote-ref-2)
3. <w,t,s> specifies a world, time and subject. [↑](#footnote-ref-3)