The Pragmatics of Metaphysics Explanation:
An Epistemology of Grounding

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Abstract

Explanation can be distinguished between linguistic practices and metaphysical relations. At least with respect to metaphysical explanation, some are skeptical that any knowledge gained via explanation qua linguistic practices confers knowledge of explanation qua metaphysical relation. I argue that this skepticism is unfounded. Engaging in the linguistic practice of explanation gives us no reason to skeptical in beliefs about corresponding metaphysical relations like causation or grounding. Moreover, those very linguistic practices can provide resources to justify beliefs in those relations. So, exploring those practices can move us forward in developing an epistemology of grounding and metaphysical explanation.

Keywords: Grounding, Metaphysical explanation, Essence, Contrastivity.

1. Introduction

There is a voluminous and growing literature on grounding. However, the literature on the epistemology of grounding is relatively sparse. There are numerous contributions to the literature addressing questions about the nature of grounding. Is grounding irreflexive? Asymmetric? Transitive? Is grounding well-founded? Is grounding properly expressed as a relation or as an operator? Does grounding relate facts or entities of any ontological category? There aren't as many contributions addressing questions about how it is that we come to know claims about grounding. This paper is a contribution to the latter project. I will argue that our explanatory practices can confer justification for beliefs about grounding claims, i.e., claims about metaphysical explanation.

Some are skeptical about this link. Some argue that the nature of explanatory practices, is such that they cannot confer justification for beliefs about worldly relations that purportedly underwrite or serve as the truthmaking basis for these practices. According to this line of thought, our explanatory practices are subjective in some pernicious sense. Worldly relations are objective. Beliefs

justified via subjective means cannot justify beliefs about objective claims. Therefore, explanatory practices cannot justify beliefs about worldly relations like grounding. I will argue that this argument is unsound. Not only is it false that explanatory practices fail to justify beliefs about worldly relations, but it is also the case that those practices themselves can provide resources to justify beliefs about worldly relations like grounding.

In section 2, I will provide a brief survey of metaphysical explanation. In section 3 I will exposit the skeptical argument against the epistemic connection between grounding and explanatory practices. Sections 4 and 5 will show that the argument is unsound. Section 6 will show how our explanatory practices can confer justification for beliefs about grounding or metaphysical explanation.[1]

2. Metaphysical Explanation

Explanations are generally what people give in response to why-questions. It is typical for an explanation to follow an indicator term like "because". Explanations come in different varieties. A common form of explanation is a causal explanation. We often give causal explanations in response to questions about why something happened. Someone asks a doctor, "Why did I get sick?", and the doctor might give an explanation that identifies particular causes, like a bacterial infection. Another common form of explanation is an appeal to reasons. We appeal to such reasons in response to questions about an individual's actions. Someone might ask why I went to the kitchen and in response, I might say that I wanted to get something to eat and that I believed that there were leftovers in the refrigerator.

Alongside these kinds of explanations, there is another possible category of explanation. These explanations are what metaphysicians call "metaphysical explanations". Rather than asking why something happened, or why someone acted in some way, we might ask why something is the way that it is. Such questions might be answered by appealing to causes. When we ask why diamonds are hard, we might answer this by providing the causal antecedents that led to the formation of diamonds. However, there is a different way of answering this question. We might explain why diamonds are hard by identifying their underlying composition and structure. Diamonds are hard because they are composed of carbon atoms arranged in a crystalline pattern. Note that this way of explaining doesn't tell us why or how something came to be. Rather this explanation tells us why something is the way that it is by appealing to some other, usually more fundamental, fact about that very same thing. Philosophers often use the phrase "in virtue of" to signal such an explanation. Here are some common examples of this kind of explanation.

(1) The statue has a particular weight in virtue of the weight of its constituting matter.

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[1] It is worth asking whose explanatory practices confer justification. Would it be the explanatory practices of ordinary individuals? I hold that the explanatory that confer justification are those conducted by metaphysicians in the ontology room. Since why-questions and answers to why-questions require interpretation, identifying the explanatory practices of metaphysicians as justification-conferring will at least provide some clarity that may be missing in ordinary language practices. Thanks to an anonymous reviewer for raising this point.

(2) Moral claims are true in virtue of natural facts.

(3) Mental states occur in virtue of the occurrence of corresponding brain states.

These sorts of explanations, i.e. explanations that involve some kind of non-causal determinative connection between explanans and explanandum, are what falls into the category of metaphysical explanation.

I will assume without argument that for at least some kinds of explanations correspond with some kinds of metaphysical relations.[2] Examples of such explanations are causal explanations. Hume and Humeans aside, it is commonly supposed among contemporary analytic metaphysicians that the truth of causal claims corresponds to some mind-independent feature of the world. To say truthfully that x causes y is to say that some particular worldly relation, perhaps counterfactual dependence or minimal sufficiency, holds between x and y. In like manner many, but not all, metaphysicians hold that the truth of metaphysically explanatory claims corresponds to some mind-independent feature of the world.[3]

The metaphysical relation that is most commonly associated with metaphysical explanation is the widely discussed notion of grounding. There are few if any, uncontroversial claims to be made about the nature of grounding.[4] That said, grounding is generally thought to have the formal features of irreflexivity, asymmetry, and transitivity. Grounding is also generally thought to be necessitating. If x grounds y, then necessarily if x, then y. For this paper, one primary question to address is what the relationship is between grounding and metaphysical explanation.

What we observe from the proceeding is that the term "explanation" is ambiguous. It can refer to the sorts of things that individuals communicate to each other. Alternatively, it can refer to mind-independent relations out in the world. We can say that Jones gave an explanation to Smith. We can also say that a bacterial infection explains why someone is sick, apart from anyone stating that there is a bacterial infection. Henceforth I will call the former *explanatory practices*. I will call the latter *worldly relations*. "Metaphysical explanation" can either refer to an explanatory practice or a worldly relation, such as grounding. There is nothing in this paper that hangs on whether the term "metaphysical explanation" should be reserved exclusively for the explanatory practice or the worldly relation.

3. The Skeptical Problem of Metaphysical Explanation

At least concerning metaphysical explanation, there have been concerns expressed about the epistemic relation between our explanatory practices and corresponding metaphysical relations. Suppose that Wong asks a why-question and Garcia answers Wong's question. Suppose that Wong forms a justified belief as a result of Garcia's answer. Does this justified belief also confer justification for believing that some corresponding worldly relation holds? Some philosophers have argued that at least with respect to metaphysical explanation, we should adopt a skeptical stance about that question. In her (2016) Naomi Thompson states:

[2] See Audi 2015 and Roski 2021 for defenses of the realist thesis.
[3] See Miller and Norton 2017 for a dissenting opinion.
[4] See Bliss and Trogdon 2021 for a survey.

If metaphysical explanation is like ordinary explanation but in a metaphysical context, then (assuming we can meet the challenge of specifying what this context is) the problem is that metaphysical explanation, like ordinary explanation, will have pragmatic features. What makes for successful metaphysical explanation will depend (to an extent) on features of agents… But that straightforwardly contradicts [the thesis that] grounding relations are supposed to be entirely objective and mind-independent (397-398).

Anna-Sofia Maurin, in her (2018) argues as follows:

More precisely, if grounding is a mind-independently obtaining worldly relation, adopting separatism amounts to saying of explanation that it is not a mind-independently obtaining and worldly relation. Rather, explanation is mind-involving, pragmatic, and/or 'epistemic' (whatever we take those locutions to mean more precisely). But then, as part of what it is to be an explanation is to be this mind-dependent and epistemic thing, why think that explanation having the properties it does, justifies our thinking that those are properties had by worldly and mind-independent grounding? No good reason comes to mind (1578-1579).

The above passages suggest this line of reasoning, which I will call the *main skeptical argument*:

(1) Worldly relations are mind-independent.
(2) Explanatory practices are mind-dependent.
(3) If explanatory practices are mind-dependent and worldly relations are mind-independent, then justified beliefs brought about by explanatory practices do not confer justified beliefs in corresponding worldly relations.
(4) Therefore, justified beliefs brought about by explanatory practices do not confer justified beliefs in corresponding worldly relations.

I will assume that premise (1) is true by definition. I will discuss premise (2) in the next section. Why think that premise (3) is true? Suppose that it is the case that explanatory practices are mind-dependent. Explanatory practices include both the formation of the why-question and the answering of the why-question. Thus, to say that explanatory practices are mind-dependent is to say that either what counts as a why-question is mind-dependent or that what counts as an acceptable answer to a why-question is mind-dependent. Suppose that what counts as a why-question and an acceptable answer to the why-question are mind-dependent. Finally, suppose that x is justified in believing an explanation e just in case e is an acceptable answer to a why-question. What seems to follow from this is whether one is justified in believing e will be subject at least partially to mind-dependent factors. Such factors might include aesthetic preferences, practical considerations, or even wishful thinking.

Given what I said above about justification being a function of mind-dependent factors, the argument for premise (3) goes as follows. Mind-dependent factors like aesthetic or practical preference do not reliably track the truth of claims about worldly relations. If the factors by which one forms a belief that p are unreliable with respect to claims about q, then one is not justified in believing q on the basis of p. In other words, such unreliability undercuts one's justification for believing q.[5] For instance, suppose some epistemic subject S looks outside and

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[5] For more on undercutting and rebutting defeaters, see Pollock 1986.

sees that it is raining. S forms the belief that it is raining outside. S is justified in believing that it is raining outside on the basis of S's perception that it is raining. However, S has some reason to think that her perception is unreliable. Perhaps S took a drug earlier that produces hallucinogenic effects. Given that S has reasons to think that her perception unreliably tracks entities external to my mind, her justification for believing that it is raining outside has been defeated.

Since the factors that bring about one's belief in *e* via explanatory practice unreliably track the truths regarding corresponding worldly relations, while one may be justified in believing that *e* is an acceptable answer to a why-question, one is not justified in beliefs about some corresponding worldly relations on the basis of *e*. This reasoning is then applied to metaphysical explanation. The means by which we judge an answer to a metaphysical why-question to be satisfactory unreliably tracks corresponding metaphysical relations. As such, justified beliefs that arise from metaphysical explanatory practices do not confer justification for beliefs in corresponding metaphysical relations.

It's worth noting that beliefs about worldly relations fall into at least two categories. Such beliefs can be about the nature of such relations. Secondly, such beliefs can be about whether such a relation holds between certain relata. A strong form of skepticism would hold that justified beliefs formed via explanatory practices do not confer justification for either kind of belief about worldly relations. A weaker form of skepticism would allow for the possibility of justification for one of the two kinds of beliefs about worldly relations on the basis of justification via explanatory practice. This essay aims to show that justified beliefs via explanatory practice can confer justification for both kinds of beliefs about worldly relations.

4. The Pragmatics of Explanation: Why-Questions as Mind-Dependent

Premise (2) of the main skeptical argument says that explanatory practices are mind-dependent. Why think that this is true? One can derive support for this claim by appealing to work done on the pragmatics of explanation in the philosophy of science. A particularly influential account is given by Bas van Fraassen in his classic (1980). According to van Fraassen, explanations are answers to why-questions. Why-questions themselves are sensitive to context along three dimensions.

First, why-questions have a topic. Why questions have the form "Why *p*?" where *p* is some proposition. *p* is the topic of the question. The topic of a why-question is sensitive to context in all the usual ways. Suppose someone asks, "Why did the students get sick?" The topic of this question is the proposition, <The students got sick>. Answering this question in any satisfactory way will require that we specify contextual parameters like time, location, the specific individuals designated by "the students", etc. Moreover, the topic of a why-question is considered a *presupposition* (see Bromberger 1966). The topic of the why question must be assumed to be true in some sense in order for the question itself to be felicitous. Asking a question like "Why is Los Angeles the capital of the United States?" would be considered infelicitous.

Second, why-questions have a contrast class. A contrast class is a set of alternatives that specifies the appropriate answer to a why-question. By specifying a contrast class, an answer to a why question must not only explain why the topic

of a question is true but also explain why the members of the contrast class are false. Consider the following example:

Why did Suzy hit Jimmy with a pie?

The topic of this question, i.e. that Suzy hit Jimmy with a pie, can be associated with the following three contrast classes:

Why did Suzy, rather than (Jane, Angela, Eloise, etc.) hit Jimmy with a pie?
Why did Suzy hit Jimmy rather than (Bob, Steven, Marcus, etc.) with a pie?
Why did Suzy hit Jimmy with a pie rather than a (cake, doughnut, sundae, etc.)?

Consequently, there can be at least three different kinds of appropriate answers to this why question, depending on which contrast class we specify. Which contrast class we specify will be sensitive to context.

Third, there are considerations with respect to explanatory relevance when attempting to answer a why-question. Even after specifying the topic and contrast class of a why question, such a question can still admit of multiple correct answers. As an example, van Fraassen asks, "Why does blood circulate through the body?" A relevant answer for someone wanting to know what makes the blood circulate would be "because the heart pumps the blood through the arteries". A relevant answer for someone wanting to know the function of blood circulation would be "to bring oxygen to every part of the body tissue". According to van Fraassen, a proposition that is an explanatorily relevant answer to a why-question will bear a relevance relation to the ordered pair $<P_K, X>$, where P_K is the topic and X is the contrast class. There are a number of different ways in which some answer to a why-question can bear a relevance relation to $<P_K, X>$. Which relation is the right one will be sensitive to context. What relevance relations there are for any given $<P_K, X>$ will be important for what follows.

How does van Fraassen's account provide support for premise 2 of the main skeptical argument? Premise (2) states that explanatory practices are mind-dependent. In this case, the explanatory practices are the asking of why-questions, which includes contextual specification along the three parameters discussed above. Such practices are mind-dependent primarily because they are *interest-relative*. The topic of a why-question, i.e. what the question is about, is determined by the interests of the asker. It seems obvious enough that when someone asks a why-question, what they ask about will be determined by what they are interested in learning. If a person isn't interested in *p*, then we wouldn't expect them to ask why-*p*. The contrast class of a why-question is also determined by interest in several ways. First, the topic of a why-question can admit of more than one contrast class, as is the case with the pie sentences above. Which contrast class to focus on will depend on what the asker wants to know. Second, what to include in a contrast class can be a function of interest-relativity. Suppose that Suzy hit Jimmy with a pie. Suppose further that it is counterfactually true that four other individuals could have hit Jimmy with a pie. Rather than including all four other individuals in the contrast class, the asker might only be interested in contrasting with just one of the individuals. Thus, as a result of the asker's interest, the size of the contrast class may vary. Finally, explanatory relevance is also a function of interest-relativity. There are a number of different ways in which an explanation can enter into a relevance relation with $<P_K, X>$, and many of these ways are a function of interest. For instance, there can be a number of correct answers to a why-question that differ with respect to complexity. Which of these answers is

relevantly related to the why-question will depend on the interests of the individual asking the question. Someone with a layperson's understanding of epidemiology will not be interested in a highly technical answer to the question of why diseases spread.

The upshot of the above is unsurprising. Why-questions are mind-dependent in that what they are about and whether they are event asked at all is up to us. If there is no sapient life in the universe, then there are no why-questions being asked. In this sense, explanatory practices are ontologically dependent on minds in that it is essentially an activity conducted by individuals with an interest in seeking certain kinds of knowledge. However, the reader may have noticed a discrepancy between the argument given in section 3 and what was presented here. In this section, a defense of premise 2 was given by showing that the *asking* of why-questions is at least partly a function of interest, and thus mind-dependent. In the previous section, a defense of premise 3 was given by showing that if the *answering* why-questions was a function of mind-dependent factors, then no justification is conferred for beliefs about worldly relations. The main argument thus stands guilty of committing equivocation. Explanatory practices can be mind-dependent in that the asking of why-questions is a function of mind-dependent factors. Explanatory practices can be mind-dependent in that the answering of why-questions is a function of mind-dependent. So, in order for the main skeptical argument to be sound, it must be shown either that the mind-dependence of asking why-questions entails the mind-dependence of answering why-questions, or that the answering of why-questions is mind-dependent for independent reasons. In the next section, I will argue that neither is the case. The mind-dependence of answering why-questions does not necessarily entail the mind-dependence of answering why-questions. Moreover, it is not the case that the answering of why-questions is necessarily mind-dependent. In arguing for both I will thus show that the main skeptical argument is unsound.

5. The Pragmatics of Explanation: Why-Questions as Mind-Independent

Suppose it is the case that the asking of why-questions is a function of mind-dependent factors such as interest-relativity. Does it follow from this that the answering of why-questions is also a function of mind-dependent factors? The answer is no. The fact that we ask why-questions about what we are interested in does not imply that what we consider to be an acceptable answer is determined by what we consider to be interesting, or by any other mind-dependent factor. In fact, we have some reason to think that the asking of why-questions itself is guided by mind-independent factors beyond interest relativity, such as factors related to identifying truth.

We first begin with the topic of the question. Specifying the topic of a why question involves specifying the context. There are elements to context specification that are objective. For instance, specifying the referent of an indexical term like "I" or "here" is plausibly objective in nature. If David Lewis utters "I am a philosopher", then the referent of "I" in this context is David Lewis. Who "I" refers to is not assessment-sensitive. In other words, reference to such indexicals does not change relative to who happens to be the listener. Once the context establishes that "I" refers to David Lewis, the sentence "I am a philosopher" is true regardless of who happens to be assessing the sentence. Topic

specification seems to generally involve this kind of reference fixing—going from character to content, using David Kaplan's terminology. For instance, consider the question, "Why did the robbery occur?" Fixing the context involves specifying parameters like world, location, and time. If we specify the context such that it results in a true proposition, then we've established the topic for the question. For instance, if we identify the parameters as 2:45 pm on August 4 2021 at The Bank of Princeton in Princeton, New Jersey in the actual world, and if it is indeed true that a robbery occurred at that time, location, and world, then it is the cause that we've specified the topic for the why question. This process is not sensitive to interest-relativity, and so we have reason to believe that this aspect of specifying the why question does not entail that answering a why-question is subject to mind-dependent interest-relativity.

The next aspect is the contrast class. Specifying a contrast class involves engaging in counterfactual reasoning. Selecting members of a contrast class involves identifying relevant alternatives. There are limits to which alternatives are plausibly members of a contrast class, and those limits are for the most part not sensitive to interest relativity. Consider the following example, "Why did LeBron pass the ball to Anthony?" Suppose the topic has it that this question is about a particular action that occurred during an NBA game. Suppose further that we are to form a contrast class for values of x in the following: "Why did LeBron pass the ball to Anthony rather than x?" We reason counterfactually in order to determine the appropriate members of this class. Doing so involves substituting names for y in the following and evaluating whether the resulting proposition is true: "LeBron could have passed the ball to y rather than Anthony". If the sentence is true, then we have a suitable candidate member of the contrast class. Given the features of the context, and given the usual factors that go into determining the closest possible worlds, this sort of counterfactual reasoning places constraints on admissible members of the contrast class. Other teammates on the basketball court at the time of the action would be admissible members of the contrast class. Someone living halfway across the world would not be an admissible member of the contrast class. This goes some way in showing that membership in a contrast class isn't a matter of interest-relativity. We generally don't add things to a contrast class on the basis of pragmatic or practical reasons. So, insofar as specifying a contrast class plays a role in justifying explanation, interest-relativity is not part of the justification process. Thus far any interest-relativity found in formulating the why-question doesn't entail interest-relativity in answering the question.

Of the three why-specifying components, it may seem that relevance relations are the most conducive to interest-relativity. A why-question with a specified topic and contrast class can still have multiple correct answers. Would this not be a case of interest-relativity that would defeat justification for believing in some corresponding objective relation? This needn't be the case. To say that a why-question can have multiple correct doesn't necessarily some anti-realism about the answers. Rather, it can be the case that there are multiple objective relations at work when it comes to answers to a particular why-question. Consider the following question, "Why are diamonds hard?" There are at least two correct answers to this question, and they correspond to different worldly relations. One response is to identify the conditions under which diamonds are formed. Another response identifies the underlying matter and structure of a diamond. Which answer we want is a function of our interests, but the answer still corresponds to

some objective feature of reality. Furthermore, given that explanatory relations are transitive, there can be multiple correct answers involving the same relation. One answer to why question can identify the immediate cause of the question topic. Another answer can identify a cause that is further upstream. The same can be said for grounding relations. There can be answers that identify the immediate grounds or answers that identify the ultimate grounds for the topic of the why question. Again, while it may be the case that which part of the causal or grounding chain we focus on is a matter of interest, this does not imply that whether or not the answer is correct is a matter of interest.

Interest isn't the only thing that factors into relevance. Another might be our ability to understand. Suppose someone asks why people get cancer. What answer is relevant for this individual will depend on their level of understanding with respect to biology and human physiology. A highly technical answer will not be relevant for someone with no background in either. Does this way of measuring relevance imply that answering why-questions is a function of mind-dependent factors? Not necessarily. When we provide different answers to a why question for different levels of cognitive ability, we are not thereby changing the subject and talking about different things. It is plausible to think that different answers are still talking about the same worldly relation under different descriptions. It is often the case that an answer to a why question given to an individual with little to no background will appeal to figurative language. Even at this level we are often still talking about some worldly entity, under the plausible assumption that the figurative language can be translated into a correct literal answer. Consequently, we have some good reasons to think that relevance does not imply that providing an adequate answer to why-questions is subject to mind-dependent factors.

The foregoing considerations hopefully suffice in showing that any mind-dependence in formulating why-questions does not entail any mind-dependence in answering why-questions. We move on to the question of whether the process of answering why-questions itself is a function of mind-dependent factors. If that is the case, then there would be good reason to be skeptical that such answers correspond to objective relations. However, this needn't be the case. It is certainly true that people can deem an answer to a why question as good because it suits their interest, but it's far less certain that every good answer to a why question is based even partly on interest. In many cases what makes an explanation good is that it identifies an objective mind-independent relation.

Methods for identifying such a relation can be derived from the pragmatics of why-questions themselves. For instance, consider Peter Lipton's discussion on contrastive inference (Lipton 1991). Lipton demonstrates that the very act of producing a contrast class provides a way to infer causal relations. Contrastive inference is a variant of Mill's methods of agreement and difference. Mill's methods are one way in which one infers that there is a causal relation. According to the method of difference, we infer that C is the cause of E when we observe that in a variety of cases where C is absent, E is also absent. According to the method of agreement, we infer that C is the cause of E when we observe that C is present, E is also present throughout multiple cases where the only relevant commonality is both C and E. Contrastive inference works backward. We observe E in scenario 1, but not in other relevant scenarios. Those scenarios form a contrast class. We then apply the method of difference and look for what scenario 1 has that the others lack. Recall that forming a contrast class involves counterfactual reasoning.

Contrastive inference and the methods of difference and agreement are also applications of counterfactual reasoning. Counterfactual reasoning does not necessarily involve any kind of subjective interest. In these cases, what makes an explanation good is not that it serves our interests. Rather what makes an explanation good is that it successfully locates a causal relation.

Such methods can do at least two things for us. First, methods like contrastive inference can justify our belief that some worldly relations hold. For instance, we use contrast classes to justify our belief that some event x causes some other event y. Second examining such methods can justify our beliefs about the nature of worldly relations. For instance, we can examine how we form contrast classes in order to identify certain features of the worldly relation we take to be doing the explanatory work. When we use contrast classes to identify causes, we note that we do not include potential causes that are outside of the effect's light cone. When we ask why John rather than Suzy hit Joe with a pie, we don't include someone who lives halfway around the world in the contrast class. Moreover, we don't include events in our contrast class that occur after the effect. When we ask why the assassination of Archduke Ferdinand led to World War I, we don't include the assassination of John F. Kennedy in our contrast class.[6] So, not only is it the case that methods such as contrastivity confer justified beliefs about whether corresponding worldly relations hold but investigating how we employ these methods can confer justified beliefs about the nature of corresponding worldly relations.

The upshot of the foregoing is that while interest plays a role in specifying a why question, it does not threaten justification for believing that explanation corresponds to some worldly relation. What kind of why-question we want answered is surely at least a partial function of interest. However, what answer we think is correct is not necessarily a matter of interest. Oftentimes it is not a matter of interest at all. In fact, it is often in our best interest that the answer to a why-question identifies the correct worldly relation. For instance, we recognize that there are some cases where identifying an answer to a why-question as correct on the basis of interest are instances of motivated reasoning. It seems plausible to hold that motivated reasoning is in tension with epistemic rationality. To infer that we are not justified in believing in some corresponding worldly on the basis of a good explanation confuses our interests in asking the question with the methods we use in answering that question. Furthermore, we have reasons to think that our explanatory practices, i.e. how we ask and answer why-questions, can provide us with various justified beliefs about corresponding worldly relations.

It's also worth noting that van Fraassen himself doesn't take the answering of why-questions to be necessarily interest-relative. With respect to answering why-questions, van Fraassen has the following to say.

> How good is the answer *Because A*? There are at least three ways in which this answer is evaluated. The first concerns the evaluation of *A* itself, as acceptable or as likely to be true. The second concerns the extent to which *A favours* the topic *B*

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[6] The possibility of causal loops complicates matters when it comes to the temporal ordering of causal relations. However, the general point still stands. Our practices in forming contrast classes can still confer prima facie justified beliefs about the nature of the causal relation.

as against the other members of the contrast-class… The third concerns the comparison of *Because A* with other possible answers to the same question; and this has three aspects. The first is whether *A* is more probable (in view of *K*); the second whether it favours the topic to a greater extent; and the third, whether it is made wholly or partially irrelevant by other answers that could be given (1980: 146).

What is worth pointing out here is that for van Fraassen, a good answer to a why-question is one that directs us to the truth. Given that van Fraassen is developing a theory of scientific explanation, this should come as no surprise.

Peter Achinstein provides the following analysis of the illocutionary act of giving explanations:

> *S* explains *q* by uttering *u* iff *S* utters *u* with the intention that their utterance render *q* understandable by producing the knowledge, of the proposition expressed by *u*, that it is a correct answer to *q* (Achinstein 1983: 18).

The important part of this analysis is that the explanation must be a *correct* answer to a question like "Why q?" Correctness is not understood in terms of aesthetic preferences or practical interests. Correctness is understood in terms of truth (Achinstein 1983: 42).

Finally David Lewis notes that providing an explanation, in particular a causal explanation, amounts to providing a causal history. Given that we are finite minds, no human has the ability to provide a complete causal history as an answer to a why-question. Consequently, we use pragmatic tools like the ones van Fraassen developed in order to provide a relevant partial history that answers a particular why-question.

> Why-questions, of course, are among the questions that inevitably get partial answers. When partial answers are the order of the day, questioners have their ways of indicating how much information they want, or what sort… One way to indicate what sort of explanatory information is wanted is through the use of contrastive why-questions (Lewis 1986: 229).

The above references should provide additional reasons in favor of rejecting the claim that answering why-questions is a mind-dependent affair. As I mentioned above, this should come as no surprise, given that much of the developmental work on explanations occur in the philosophy of science. A theory of scientific explanation that entails that all answers to why questions are mind-dependent would have disastrous consequences for those who take science to provide us with objective knowledge about the world.

Before proceeding to the next section, I want to make clear that it is certainly true that *some* answers to why-questions are entirely a function of mind-dependent factors. Surely, we look for answers to some why questions that satisfy our aesthetic preferences or our practical interests. Sometimes we look for answers on the basis of wishful thinking or to confirm our own biases. What is important to note here is that while some cases of answering why-questions are mind-dependently determined, some are not. We see from the literature on the methodology of science that we recognize a large class of cases where the process by which a why-question is answered is not governed by mind-dependent factors. So, we see that at least with respect to cases involving causal or scientific explanation, it is not the case that mind-dependent factors in why-question

formulation imply mind-dependence in answering why-questions. Nor should we think that there is anything perniciously mind-dependent about the process of answering why-questions in themselves. Thus, we have reasons to reject the main skeptical argument.

6. The Epistemology of Metaphysical Explanation

The last step is to take what was just said about answering why-questions involving causes and to apply the same methods to metaphysical explanation. In doing so, we can develop an epistemology of metaphysical explanation. What we observed above is that there are tools that we employ in formulating and answering why questions that can also confer justification for believing that some worldly relation. One such tool that I will focus on here is contrastivity. We identify contrast classes in order to specify the why-question we are asking. As Lipton pointed out, we can employ such contrast classes in isolating causes. As I mentioned above, this use of contrast class can both justify beliefs about whether causal relations hold and beliefs about the nature of causal relations. Using contrast classes can confer similar justification for beliefs about metaphysical relations such as grounding. I will discuss one type of case where explanatory practices like contrastivity can justify beliefs.

A common type of question in metaphysics is the "What is *F*?" question. What is time? What are properties? What is possibility? Such questions can be plausibly interpreted as inquiries into essences. To ask, "What is *F*?" is to ask about *F*'s essence. Philosophers have argued that there is a close relationship between grounding and essence.[7] The fact that *x* is *F* is grounded in the fact that *x* is *G*, and *G* constitutes at least a part of *x*'s essence. For example, the fact that Saul is in pain is grounded in the fact that Saul's brain is undergoing a kind of c-fiber activation, and this c-fiber activation constitutes the essence of being in pain. This appeal to essence is explanatory. The reason why Saul is in pain is that Saul's brain is undergoing c-fiber activation.

We can employ contrast classes when answering such questions. When we ask, "Why is *x* an *F*?", we can form at least two contrast classes. We can ask, "Why is *x*, rather than *y*, *F*?" Alternatively, we can ask, "Why is *x* an *F* rather than a *G*?" Forming such contrast classes allows us to engage in contrastive inferences. Such inferences allow us to locate some essence or partial essence in virtue of which *x* is *F*. Furthermore, contrastive inferences enable us to form justified beliefs about both the nature of essences and grounding relations. We can illustrate the use of contrast classes in answering why-questions about natural kinds.

Suppose we ask the question, "Why are whales mammals?" In this question, we are asking what is it that grounds the fact that a whale is a mammal. In other words, we are asking for the essence of mammal-hood, i.e. what it is to be a mammal, such that a whale counts as a mammal. In order to answer this question, and thus identify what it is that grounds the fact that a whale is a mammal, we can create a contrast class to locate the mammal essence. We can why whales rather than squids count as mammals. Creating such a contrast class both specifies the question and enables us to perform contrastive inferences. As mentioned

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[7] For the connection between grounding and essence, see Fine 2012, Rosen 2010, and Kment 2018.

previously, making contrastive inferences involves using a variation of Mill's methods of difference and agreement. We note that whales are mammals, but squids are not mammals. This contrast class leads us to search for some F that whales possess and that squids lack that may serve as the full or partial essence of mammal-hood. Just as adding more to the contrast helped Semmelweis to be more precise in identifying the cause of childbed fever, we can add more to a contrast class so as to identify an essence with more precision. Contrasting whales with squids will provide us with some information. Whales have backbones, squids don't. This is insufficient for identifying the essence of mammals. Adding something like sharks to the contrast class helps us get closer to identifying the essence of mammals. Moreover, we can employ different contrast classes to further triangulate the sought-after essence. In addition to asking why whales, rather than sharks or squids, are mammals. We can ask why whales are mammals, rather than reptiles or amphibians. Engaging in this kind of contrastivity with respect to question-asking and answering is a method that can confer at least prima facie justified belief in the claim that x being F^* explains why x is F. This in turn can justify our belief that x being F^* serves as the grounds for x being F.

In addition to justifying beliefs about whether some metaphysical relation holds, explanatory practices can justify beliefs about the nature of metaphysically explanatory relations. For instance, there is currently a debate in the grounding literature about whether there is a unified metaphysically explanatory relation. Call this unified relation "big-G" grounding. Some argue that there is no theoretical utility in positing a big-G grounding relation. Rather, a plurality of "small-g" grounding relations is sufficient for a metaphysician's theoretical purposes.[8] Such relations might include constitution, composition, determinate/determinable, etc.

Examining our explanatory practices may help to move this discussion forward. Recall that a satisfactory answer to a why-question must bear a relevance relation to the topic and contrast class of the question. As I argued above, whether an answer bears a relevance relation to the why-question is not solely a matter of subjective factors. Answers that correspond to appropriate worldly relations like causation also bear a relevance relation to why-questions. We can reframe the debate about the theoretical unity of grounding in terms of relevance relations. Is it the case that there are answers that correspond to a big-G grounding relation that bear relevance relations to why-questions? Or, is it the case that there are no such answers, and that an answer that would bear such relevance relations corresponds to one of a plurality of small-g grounding relations.

Framing the debate about the theoretical unity of grounding around relevance relations allows us to focus on our explanatory practices to see if there is evidence for thinking that there are big-G grounding relation answers that are relevantly related to certain why-questions. For example, Ted Sider observes that there are cases involving general theses about positions like naturalism and physicalism that are best expressed using big-G grounding (see Sider 2020). In other words, there are why-questions about global metaphysical views like naturalism or physicalism that are most relevantly answered by appeals to big-G grounding. Sider's observation is a hypothesis that we can investigate by examining our explanatory practices with respect to the relevant class of why-

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[8] See Wilson 2014 and 2021 for the influential criticism of big G grounding. See Schaffer 2016 and Berker 2018 for responses.

questions. Why are true scientific claims true? Why do we have any phenomenal experiences at all? Why is there something rather than nothing? In answering these questions, is it the case that an answer corresponding to big-G grounding is relevantly related, or is it the case that instead some answer corresponding to a small-g grounding relation is relevantly related? If we find that for each question, there is a small-g relation that is relevantly related, then that would be a reason to reject the theoretical unity of grounding. In sum, explanatory practices like contrast classes and relevance relations can be the means by which we arrive at justified beliefs regarding metaphysical relations like grounding.

7. Conclusion

What I've shown in this paper is that realist analytic metaphysicians need not fear epistemic explanations or explanatory practices in general. Rather than being solely governed by subjective or otherwise mind-dependent factors, such practices can offer us a rich vein of insight into how it is that we justify our beliefs about worldly explanatory relations. By incorporating seminal work by philosophers of science on explanation, the paper gestures towards an opportunity for the discussions on grounding to be enriched by the literature on scientific explanation. Further engagement with the literature on scientific explanation will surely advance the discussion on both the metaphysics and epistemology of grounding.

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