

PARADISE REGAINED: NAIVE SEMANTICS AND REGULATIVE
METAPHYSICS

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ABSTRACT

ROBERT SMITHSON: Paradise Regained: Naive Semantics and Regulative Metaphysics.
(Under the direction of Thomas Hofweber)

In this dissertation, I identify areas of language that are not threatened by empirical evidence or theoretical argument in ways that we typically expect when doing philosophy. Examples I consider include assertions about *ordinary objects*, *laws of nature*, *dependence*, *causation*, and *existence*. In each case, I argue that our mistaken epistemological assumptions are the result of mistaken semantic assumptions about our ordinary linguistic expressions. I appeal to these semantic conclusions to clarify and regulate a variety of metaphysical debates, such as the dispute between Humeans and non-Humeans about natural laws and the dispute between ontologists and deflationists over the substantivity of ontological debates.

This dissertation is dedicated to my spouse, Caroline. Thank you for your love and support while I have been obtaining my degree.

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1 INTRODUCTION

1.1 Introduction

Suppose we travel to the all-knowing Oracle to settle once and for all whether there is an external world of material objects. There, we receive a disheartening report: our experiences are caused not by material objects, but rather by a malicious demon intent on deceiving us. This testimony would surprise and dismay us. We might say things like ‘Tables and chairs don’t really exist!’ and ‘We don’t have bodies after all!’

But this initial shock would pass. And after several minutes, we would go back to saying things like ‘There is an apple in the kitchen’ or ‘The bus arrives soon’ just as we always had. This is because we would have to return to the ordinary concerns of human life: buying groceries, getting to the bus stop on time, and so on.

This raises a puzzle. Ordinarily, when we receive evidence that we think contravenes our judgment that P , we abandon our judgment that P . But in the above thought experiment, after temporarily abandoning our judgments about material objects, we would soon return to making such judgments.

Why? Is it because we are irrationally ignoring the evidence? Is it because we’ve changed the meanings of our object terms? Is it because we engage in pretense when we talk about objects? In this dissertation, I argue that none of these proposals are correct. What our return to ordinary speech *really* shows, I argue, is that we — or those of us who regard the demon scenario as a skeptical challenge to our judgments about objects — have false beliefs about what our ordinary object terms refer to. We initially retract our object judgments because we assume these judgments purport to describe some fully mind-independent external world. But we soon return to our object talk because this assumption

is mistaken. What we refer to with ordinary object terms depends on how we use these terms, and how we use these terms depends on our interests and concerns. When making judgments about objects in ordinary life, we do not care about what the mind-independent external world is like “in itself”; we care about the world as it appears to us. So I defend a semantic version of idealism — *edenic idealism* — on which our object terms refer to items in the world presented to us in experience.

Similar remarks apply to other areas of our discourse. When doing philosophy, we often treat our ordinary judgments as if they are theoretical hypotheses: hypotheses that aim at a certain objectivity, or unity, or explanatory power. So when evidence suggests that our discourse fails to meet these standards, we are tempted to conclude that our ordinary judgments are defective. But when the concerns of ordinary life impinge upon us, we return to speaking as we always have. This is because the use of our language is driven by our interests and concerns, and what matters to us in ordinary life is very different from what matters to us when giving philosophical theories.

In this dissertation, I identify areas of language that are not threatened by empirical evidence or theoretical argument in ways that we typically expect when doing philosophy. Examples I consider include assertions about *ordinary objects*, *laws of nature*, *dependence*, *causation*, and *existence*. In each case, I argue that our mistaken epistemological assumptions are the result of mistaken semantic assumptions about our ordinary linguistic expressions. I appeal to these semantic conclusions to clarify and “regulate” a variety of metaphysical debates, such as the dispute between Humeans and non-Humeans about natural laws and the dispute between ontologists and deflationists over the substantivity of ontological debates.

1.2 Regulative metaphysics

In the argument sketched in the introduction, I leveraged facts about the epistemology of our object discourse into an argument against realism about ordinary objects. This style

of argument owes its greatest debt to Berkeley and Hume, each of whom thought that we could use epistemic results to diagnose mistaken semantic presuppositions in our theorizing. I will refer to arguments of this form as “regulative arguments” since results from ordinary epistemology are used to *regulate* admissible philosophical theories.

In my dissertation, I offer updated versions of the arguments from Berkeley and Hume. So it will be helpful to briefly review the importance of regulative arguments for these historical philosophers.¹

1.2.1 Historical examples

Consider Hume’s arguments against necessary connections. Hume (1999, 7.2) claims that, even if necessary connections *were* intelligible, the fact remains that necessary connections aren’t what we are actually talking about when we use the ordinary term ‘cause’. According to Hume, we are able to infer (in ordinary contexts) that C causes E when we observe certain types of regularities. But, says Hume, if our ordinary term ‘cause’ expressed necessary connections, we would be unjustified in making this inference. So theories where causation involves necessary connections are incompatible with the ordinary epistemology of our causal judgments.

Berkeley (1948a, 171-207) offers a similar argument against mind-independent material objects. Berkeley claims that we are able to know, on the basis of our sensations, that ordinary objects like tables and chairs exist. But if our ordinary object terms referred to items in some mind-independent external world, this inference would be unjustified. So Berkeley concludes that theories where ordinary objects are mind-independent do not use ordinary object terms with their normal meanings.

¹For ease of presentation, I will present Berkeley’s and Hume’s regulative arguments within the framework of contemporary epistemology and philosophy of language. For example, I have replaced early modern talk of “ideas” with contemporary talk of “terms” and “concepts”. I have similarly replaced early modern talk of “knowledge” with the contemporary talk of “epistemic justification”. Despite these and other anachronisms, I have tried to respect the spirit of Berkeley’s and Hume’s arguments as much as possible.

These “regulative” arguments share three basic features. First: each argument identifies a tension between a philosophical theory T and certain judgments we make during everyday life. Second, it is claimed that T is defective, not our ordinary judgments. Third, the arguments identify T ’s defect as a mistaken presupposition about the semantic role of our ordinary linguistic expressions. We can precisify this form of argument as follows²:

Traditional regulative argument

1. On the T -theorist’s conception of X , judgments about X are not epistemically justified on the basis of ordinary evidence E .
2. Judgments about X are epistemically justified on the basis of ordinary evidence E .
3. The semantic role of the expression ‘ X ’ is different from the one presupposed by T .

Here, X might stand for causation, ordinary objects, colors, free will, etc.

1.2.2 Motivations

In a regulative argument, there is a tension between our ordinary judgments and a philosophical theory T . Given the tension, why locate the problem with T instead of locating the problem with ordinary judgments?

One might defend ordinary discourse by appealing to common sense. For example, one might think that the claims of common sense deserve more confidence than we could ever have in a philosophical theory challenging them.³ Berkeley, in particular, often appealed to common sense in order to defend the correctness of our ordinary judgments.⁴

But at present, I want to focus on a second possible defense, one that figures prominently in the arguments of this dissertation. Berkeley and Hume were much impressed by a phenomenon we might call the “powerlessness of theorizing”: no matter how convincing

²See Garrett (1997, chs. 1-2) for further discussion of this style of argument.

³*Cf.* Moore (1925).

⁴See, e.g., Berkeley (1948a, 172-173).

philosophical challenges to our ordinary beliefs might seem at the time, such theorizing has little hold on us when we return to the business of everyday life. Says Hume (1999, 120):

“Nor need we fear, that this philosophy, while it endeavors to limit our enquiries to common life, should ever undermine the reasonings of common life, and carry its doubts so far as to destroy all action, as well as speculation. Nature will always maintain her rights, and prevail in the end over any abstract reasoning whatsoever. ... If the mind be not engaged by argument to make [inferences from experience], it must be induced by some other principle of equal weight and authority; and that principle will preserve its influence as long as human nature remains the same.”

Similarly, Berkeley (1948b, 25) observes:

“...the illiterate majority of people, who walk the high road of plain common sense and are governed by the dictates of nature, are mostly comfortable and undisturbed. To them nothing that is familiar appears hard to explain or to understand. They don't complain of any lack of certainty in their senses, and are in no danger of becoming sceptics.”

Why is it that, so often, arguments that seem convincing when doing philosophy fail to move us in everyday life? Berkeley and Hume offer a very simple explanation: our interests and concerns when doing philosophy are very different from our interests and concerns in everyday life. Says Hume (2000, 1.7):

“I dine, I play a game of backgammon, I converse, and am merry with my friends. And when, after three or four hours' amusement, I would return to these speculations, they appear so cold, and strained, and ridiculous, that I cannot find in my heart to enter into them any farther.”

Similarly, Berkeley (1948a, 182) claims that our language is “framed by the Vulgar, merely for conveniency and dispatch in the common actions of life, without any regard to speculation.”⁵ This is why we see Philonous try to draw Hylas away from skepticism by appealing to ordinary human concerns:

⁵For an excellent exposition of Berkeley's view of ordinary subjects' resistance to philosophical arguments, see Bordner (2011).

“But are you all this while in earnest, Hylas; and are you seriously persuaded that you know nothing real in the world? Suppose you are going to write, would you not call for pen, ink, and paper, like another man; and do you not know what it is you call for? ... I am of a vulgar cast, simple enough to believe my senses, and leave things as I find them. To be plain, it is my opinion that the real things are those very things I see, and feel, and perceive by my senses. These I know; and, finding they answer all the necessities and purposes of life, have no reason to be solicitous about any other unknown beings.” (Berkeley (1948a, 228-229))

We might characterize Berkeley’s and Hume’s insight as follows. There are certain desiderata for our judgments when doing philosophy; perhaps we aim for judgments with a certain objectivity, or a certain unity, or a certain explanatory depth. But these desiderata do not matter to us in ordinary contexts. Because of this difference in the norms that matter to us, it is no surprise that discourse that seems satisfactory in ordinary contexts often seems defective when doing philosophy. But by the same token, it is no surprise that philosophical theorizing can sometimes fail to move us when we return to ordinary life.

This difference in norms explains why Berkeley and Hume locate the problem with theorizing rather than ordinary language. A philosophical theory could have authority over our ordinary discourse only if only if we were inclined to defer to that theory in everyday contexts. But, at least according to Berkeley and Hume, we do not actually care about theoretical norms in ordinary contexts.⁶

1.2.3 Project

Despite their historical importance, regulative arguments are no longer so prominent in contemporary philosophy. This is because regulative arguments have traditionally been associated with views in epistemology and the philosophy of language that no longer enjoy support.

⁶*Cf.* Carnap (1950, sections 2-3) on the difficulty of critiquing a practice from the outside.

As I mentioned earlier, my dissertation updates regulative arguments for a contemporary setting. This project involves two tasks. First, I *defend* regulative arguments against contemporary objections, showing that they can be formulated without problematic epistemological and semantic assumptions. Second, I identify contemporary *targets* of regulative arguments. I will discuss these tasks in the next two sections, respectively.

1.3 A contemporary defense

In this section, I'll discuss three challenges to regulative arguments from contemporary philosophy. Each of these objections challenges an epistemic or semantic assumption traditionally associated with regulative arguments. To respond to these objections, I show that these assumptions are unnecessary.

N.b.: There is not one specific context in my dissertation where I discuss these objections. They are objections that periodically arise throughout the chapters ahead.

1.3.1 Objection 1: worries about common sense

Regulative arguments identify a tension between our ordinary judgments and a philosophical theory T . And as discussed in 1.2.2, these arguments locate the problem with T rather than with our ordinary judgments.

In 1.2.2, I mentioned two ways one might justify this choice. One option is to simply appeal to common sense; another option is appeal to the phenomenon I called “the powerlessness of theorizing”. As it happens, the former option receives the most attention in the contemporary literature.⁷ So we might say that, at least within contemporary philosophy, regulative arguments are associated with the following assumption:

Assumption 1 (A1): Our ordinary judgments are epistemically justified because they are common sense.

⁷For a notable exception, see Hirsch (2011, ch. 6).

Because of this association, one way a contemporary philosopher might resist a regulative argument is by denying A1. For example, some philosophers think that common sense should have no role to play in philosophical theory choice. Says Sider (2013, 10):

“there is no independent reason to think that common sense is reliable about whether there exist tables and chairs as opposed to there merely existing suitably arranged particles. Our forbears presumably did not even consider the latter possibility. The Mooreanism I oppose says that we should trust common sense even in the absence of independent reason to think that it is reliable. And that seems no better than the absurd: “believe the masses...”

Other philosophers are inclined to afford common sense at least some measure of respect. For example, many philosophers regard the fact that a theory T violates common sense to be a cost of T .⁸ But even among this group, it is often thought that common sense can be abandoned if the theoretical utility is great enough. In other words, respecting common sense is not considered a constraint of adequacy for T ; it is just one virtue among many.⁹

On either of the above views, common sense judgments are defeasible. One reason this view may seem compelling is that, in many cases, common sense *is* mistaken. For example, common sense says that the world is flat, that simultaneity is observer-independent, etc. These examples show us that common sense is fallible. So, it might be argued, we should not automatically rule a theory T simply because it conflicts with common sense (as regulative arguments seem to suppose).

Response: the powerlessness of theorizing

In my dissertation, I show that regulative arguments do not actually require A1. As discussed in 1.2.2, Berkeley and Hume did not rest their critiques of philosophical theories solely on common sense. They were also motivated by facts about the kinds of evidence that subjects are responsive to in ordinary contexts.

⁸See, e.g., Lewis (1973b) and Lycan (2001, 41).

⁹For explicit endorsement of this stance, see Merricks (2001, 24), Paul & Hall (2013, 40-41), and Rinard (2013).

Suppose, for example, that a subject S asserts ‘That table is brown’ on the basis of her sensory experience. There are various types of evidence that would cause S to revise this judgment. For example, she might realize that the table only looked brown because of a trick of the light. Or she might remember that she took hallucinogenic drugs that affect her color vision. But there are other kinds of evidence that would *not* cause S to revise her judgment. For example, the Oracle thought experiment in the introduction to this chapter suggests that S would *not* (permanently) revise her judgment in response to evidence about evil demon scenarios.

In my dissertation, I argue that the best explanation of this behavior is the one given by Berkeley and Hume: our interests and concerns in ordinary life are different from our interests and concerns when doing philosophy. Since our ordinary judgments are governed by different norms, these judgments cannot be threatened by philosophical arguments in ways that are typically supposed.

The proponent of regulative arguments need not and should not endorse any claim to the effect that our ordinary judgments are infallible; these judgments are threatened by *ordinary* evidence all the time. But these beliefs are not threatened by distinctly *philosophical* evidence or argumentation. This is because philosophical discourse is governed by different norms than ordinary discourse.

Two types of evidence

Speaking more carefully: we should not assume that ordinary judgments are *never* threatened by philosophical theorizing. Instead, it is best to consider particular areas of our discourse one by one, examining the evidence in each case. There are two main types of evidence that I consider in my dissertation: *scrutability results* and *Oracle arguments*.

Scrutability results: Let C' be the conjunction of a set of sentences C . We can say that a sentence S is scrutable from C iff the sentence ‘If C' , then S ’ has the status of an *a*

priori truth in ordinary language.¹⁰ One way to show that an ordinary judgment O is not threatened by philosophical theorizing is to show that O is scrutable from the evidence E subjects ordinarily consider relevant to assessing O 's truth. For example, consider $E_i \equiv$ ' x has a mass of 2.5 kilograms'. Any competent subject given E_i could trivially infer $O_i \equiv$ ' x has a mass'. Since O_i has the status of a *a priori* truth (conditional on the truth of E_i), it is not the kind of sentence that could be threatened by philosophical argument (while supposing that E_i is true). While this example is very simple, I discuss more interesting cases of scrutability in 1.3.3.

We can leverage results about scrutability into a strengthened form of regulative argument:

Updated Regulative Argument, Scrutability Version

1. On the T -theorist's conception of X , sentences about X are not inferable *a priori* from ordinary evidence E .
2. Sentences about X are inferable *a priori* from ordinary evidence E .
3. The expression ' X ' does not refer to an item meeting the T -theorist's conception.¹¹

This argument is not threatened by concerns about common sense because it shows that X -judgments are not merely judgments that "seem obvious" to ordinary subjects. Because these sentences are *a priori* conditional on E , it is better to think of them as having the same status as conceptual truths in these contexts.

Oracle arguments: Let E_T be evidence that, according to philosophical theory T , contravenes ordinary judgment O . If ordinary subjects would not abandon their judgment O even after receiving and accepting E_T , this is strong evidence that E_T is not actually evidentially relevant to O (and that T relies on mistaken semantic presuppositions). To

¹⁰Here, and throughout the rest of this chapter, I am putting aside any Quine-inspired qualms with apriority.

¹¹I offer arguments of the above form to show that: (i) Quinean ontologists are mistaken in their conception of ordinary objects, numbers, and properties (ch. 3) and (ii) the items involved in conceptual grounding claims are not involved in metaphysical grounding claims (ch. 5).

obtain this kind of evidence, I sometimes appeal to Oracle thought experiments like the one from section 1.1. In such cases, an all-knowing and completely trustworthy Oracle gives ordinary subjects the evidence E_T . We can put Oracle arguments into the following step-by-step form:

Updated Regulative Argument, Oracle Version

1. Even if ordinary subjects were to accept (allegedly) contravening evidence E_T , they would continue to make judgments about X on the basis of ordinary evidence E_O .
2. If ordinary subjects would continue to make judgments about X on the basis of ordinary evidence E_O , the term ‘X’ does not refer to an item meeting the T -theorist’s conception.
3. The expression ‘X’ does not refer to an item meeting the T -theorist’s conception.¹²

Throughout my dissertation, I consider various objections to premise 2. This premise assumes that the best explanation of the behavior in the Oracle thought experiment is that subjects are not referring to an item meeting the T -theorist’s conception. But there are other possible explanations. For example, one might diagnose the behavior as a case of *conceptual change*. Or one might say that ordinary subjects are merely *pretending* to talk about X after the Oracle’s testimony. I argue that, at least in the cases considered in this dissertation, these alternative explanations are not plausible.

1.3.2 Objection 2: weaker standards of justification

Premise 1 of the traditional regulative argument asserts that, on the semantic presuppositions of theory T , our judgments about X are unjustified. Whether this premise is true will depend on our standards for epistemic justification. Traditionally, many proponents of regulative arguments have endorsed strong assumptions about these standards, such as:

¹²I offer arguments of this form to show that: (i) the term ‘cause’ does not express a relation with a unified nature (ch. 2), ii) the scientific term ‘law’ does not refer to non-Humean items (ch. 3), and (iii) ordinary object terms do not refer to items in the external world (chs. 6-11).

Assumption 2 (A2): A belief O is justified iff one has evidence that favors O over every alternative hypothesis.

But many philosophers would worry that A2 sets the standard for justification too high. So if premise 1 relies on A2, traditional regulative arguments will be unconvincing.

For example, most theorists today believe that, *pace* Berkeley, we *can* have justified beliefs about mind-independent material objects. For example, many philosophers (such as Vogel (1990)) claim that we can support the existence of material objects using inference to the best explanation (IBE). Other philosophers have given a contextualist defense of our knowledge of material objects, claiming that skeptical hypotheses only threaten our knowledge in philosophical contexts.¹³ Other philosophers endorse dogmatism, claiming that our beliefs in material objects enjoy a default justification that is not threatened by skeptical hypotheses.¹⁴

Response: the powerlessness of theorizing

In the chapters ahead, I argue that regulative arguments do not require A2 or any other substantive assumptions about epistemic justification. To illustrate this defense, I will again consider ordinary object discourse.

On each of the above views (IBE, contextualism, and dogmatism), the objector assumes that our judgments about objects are “hostage to fortune” in the following sense: it is coherent to suppose that all actual and counterfactual experiences are just as they are, but due to facts about some external reality independent of the human mind, truths about objects are different. One such example might be a scenario where an evil demon causes our experiences.

But there is a problem: the Oracle thought experiment (see section 1.1) suggests that our object judgments are not actually hostage to fortune in the way that these responses

¹³See, e.g., Neta (2003).

¹⁴See Pryor (2000).

suppose. It suggests that our object judgments would be true *even if* an evil demon were the cause of our experiences. So the explanationist, contextualist, and dogmatist are tilting at windmills: they are defending our object judgments from possibilities that were never a threat to begin with.¹⁵

At least in the ordinary object case, objection 2 represents a second way of failing to appreciate “the powerlessness of theorizing”. For the same reasons that philosophical arguments cannot threaten our ordinary judgments, so too they cannot *vindicate* or *justify* them. Philosophical arguments could only vindicate our object judgments if these judgments were threatened by the skeptical possibilities that interest philosophers (e.g., evil demon scenarios). But there is no such threat to begin with. Says Berkeley (1948a, 231): “What a jest is it for a philosopher to question the existence of sensible things, till he hath it proved to him from the veracity of God; or to pretend our knowledge in this point falls short of intuition or demonstration!”

For example, I mentioned above that Vogel uses inference to the best explanation to defend the existence of ordinary objects. But ordinary subjects would continue talking about tables and chairs whether his argument was successful or not. So any alleged justification such an argument would provide is idle and a mirage; given their ordinary evidence, subjects already possess all the justification ever wanted or needed.

We can show that a theory T cannot vindicate an ordinary claim O in the same ways that we show that T cannot threaten O (see 1.3.2). One strategy is to show that O is scrutable from our ordinary evidence E . If O is inferable *a priori* in this way, then it isn’t hostage to fortune in the way that the proponent of T assumes. A second strategy is to use an Oracle argument to show that O is not actually threatened by the possibilities that — by T ’s lights — falsify O .

¹⁵Here is an alternative way to make the point. The Oracle thought experiment suggests that our object judgments are “conditionally *a priori*”: so long as all possible ordinary evidence supports them, they cannot be threatened by hypotheses about what the external world is like “in itself”. Even if the contextualist, *et al* can account for our knowledge of objects, they cannot account for the (conditional) *apriority* of our object judgments.

1.3.3 Objection 3: the unavailability of analysis

Traditional regulative arguments do not explicitly offer any positive account of how sentences about X are epistemically justified by ordinary evidence *E*. But historically, proponents of regulative arguments have tried to account for ordinary epistemology by providing *conceptual analyses* of X-sentences in more basic terms (i.e., terms involved in sentences that are less epistemologically problematic):¹⁶

Assumption 3 (A3): Sentences about X can be given concise conceptual analyses.

The project of conceptual analysis still has its contemporary adherents. But for several reasons, most theorists today no longer think this project carries much chance of success.¹⁷ One major challenge was Wittgenstein's (1968) suggestion that we apply terms based on family resemblances; this suggestion was the guiding idea behind "prototype" theories of concepts (see Rosch (1978)). A second challenge was the recognition of *a posteriori* necessities by theorists like Putnam (1975), who argued that names and natural kind terms are not *a priori* equivalent to descriptions. But perhaps the most important challenge has been the poor track record of attempts at conceptual analysis. For example, given the dozens of failed attempts to provide a suitable conceptual analysis of terms like 'knowledge', many theorists have concluded that the term 'knowledge' has no definition.¹⁸

As I mentioned above, regulative arguments do not explicitly appeal to A3. But the fact that the positive epistemological account traditionally associated with regulative arguments has proved problematic can be seen as constituting an indirect objection to this style

¹⁶See, e.g., Russell (1985, 160-161). I note that Hume (1999) himself is often interpreted as a proponent of conceptual analysis. But Garrett (1997) persuasively argues that this is a mistaken interpretation; Hume never thought we needed to be able to give a precise definition of terms like 'cause', 'free', etc. As shall be seen in 1.3.3, I think Hume was exactly right on this point.

¹⁷For discussion, see Chalmers (2012, 10-12), Margolis & Laurence (1999, 2.2), and Prinz (2002, chs. 2-3).

¹⁸See Shope (1983).

of argument. If the proponent of regulative arguments cannot provide a better account, we might conclude that the epistemology of X-judgments is just a problem for everyone.

Response: scrutability without definitions

In this dissertation, I argue that regulative arguments do not require A3. As I described in 1.3.1, updated regulative arguments merely require that X-sentences are scrutable from (i.e., *a priori* inferable from) ordinary evidence *E*. And the very counterexamples that tell against the definability of X-sentences actually support the claim that they are scrutable in this sense.

To sketch the basic idea, I'll consider the term 'knows'.¹⁹ Because of the Gettier literature, the term 'knows' is the most famous example of the failure of the project of conceptual analysis. Still, we can make the following observation. Across a wide variety of ordinary cases, when a situation is described without using the term 'knows' or its cognates, we are able to judge *a priori* whether or not the situation is a case of knowledge. For example, let $\neg S$ be the sentence 'John does not know that: either Jones owns a Ford or else Brown is in Barcelona'. Let *D* be the conjunction of the sentences in the following Gettier case:

Smith believes with justification that Jones owns a Ford. Smith initially has no beliefs about Brown's whereabouts. Smith forms a belief that Jones owns a Ford or Brown is in Barcelona, based solely on a valid inference from his belief that Jones owns a Ford. Jones does not own a Ford, but as it happens, Brown is in Barcelona.

Competent subjects can judge *a priori* that $\neg S$ is true when presented with *D*. The same goes for all other cases in the Gettier literature: the entire progress of this literature depended on our ability to make these *a priori* judgments when presented with descriptions of cases. Taken together, these cases suggest the following: when we are told sufficient information about truth, evidence, and causes of a subject's beliefs, we can often judge *a*

¹⁹I discuss this case further in chapter 5.

priori whether or not that subject has knowledge. It is striking dialectical situation: while Gettier cases threaten the the definability of the term 'knows', they seem to support the more fundamental idea that sentences involving the term 'knows' stand in *a priori* inferential relations to sentences describing a subject's belief state.²⁰

What can explain our ability to make these *a priori* judgments? Here's one very plausible explanation: it is partially constitutive of the meaning of the term 'knows' that one is disposed to judge that $\neg S$ when presented with D (and similarly for other cases). This suggests that, even if the term 'knowledge' cannot be given an explicit definition, there is still a weaker type of conceptual link between 'knowledge'-sentences and more primitive sentences describing subjects' belief states.

This is not an isolated case. Philosophers have tried to give analyses of dozens of philosophically-interesting concepts ('cause', 'good', 'compose', 'law', 'freedom', 'possible', 'person', 'chance', 'fragile',). But in each case, the counterexamples that rule against the proposed analyses actually *support* the more basic claim that there are *a priori* inferential relations between sentences about X and the ordinary evidence for such sentences.

Deference Principles

It was a mistake to think there was ever a need to provide conceptual analyses of sentences about X. Instead of offering an analysis that purports to *explain* the ordinary epistemology of our judgments about X, the regulative theorist should simply defer to ordinary epistemology itself to determine when sentences about X are true. So in my dissertation, I endorse "deference principles" of the following schematic form (here, O is an ordinary judgment):

Schematic Deference Principle: O is true in a possible case C iff (actual)

²⁰Importantly, I am not claiming that our judgments of the form 'X knows that P' are never subject to revision; we revise these judgments all the time. For example, if we were to learn that Jones actually *does* own a Ford (but just had not told anyone about it yet), we would revise our judgment that $\neg S$. But these types of revisions only reinforce the idea that there are *a priori* inferential connections between knowledge-sentences and sentences describing the ordinary evidence for these sentences. Give subjects enough ordinary information about a case, and they always seem able to make judgments about whether X knows that P.

subjects would (ideally) judge that O when fully-informed of all evidence ordinarily considered relevant to assessing the truth of O at C .

For instance, here are two specific deference principles I defend in my dissertation (in chs. 7 and 8, respectively):

Deference Principle for Laws: P is a law of nature in a possible world W iff (actual) scientists would (ideally) judge that P falls under the predicate ‘is a law of nature’ when given an appropriate description of the Humean base at W .

Deference Principle for Causation: x causes y in a possible case C iff (actual) subjects would (ideally) judge that x and y fall under the predicate ‘causes’ when given an appropriate description of C .

In the chapters ahead, I will clarify how exactly these principles should be understood.

1.3.4 Summary

In each of 1.3.1-1.3.3, I have identified a problematic epistemic or semantic assumption traditionally associated with regulative arguments. In each case, I have argued that the assumption is inessential. We can summarize the above discussion with the following key points:

1. Our interests and concerns in ordinary life are different from our interests and concerns when doing philosophy (see 1.2.2).
2. Because of (1), the ordinary epistemology of our judgments can neither be threatened nor vindicated by philosophical argument (see 1.3.1 and 1.3.2).
3. Because of (1), there is no need for a philosophical theory explaining the ordinary epistemology of our judgments (see 1.3.3).

Stripped of their problematic assumptions, I think that regulative arguments should have an important role in contemporary metaphysics.

1.4 Contemporary applications

In this section, I'll briefly describe some of the targets of the regulative arguments developed in my dissertation. This section will summarize and draw from the main results of the chapters ahead.

1.4.1 Causation (ch. 2)

We think that some things have a unified nature for us to discover.²¹ For example, we think science has revealed the nature of water to be H₂O. We think that other things do not have a unified nature for us to discover. For example, we do not think that there is anything to discover about what it is to be a game.

What about the causal relation, or dispositions, or free will? For any philosophically-interesting item X , one can find a host of competing theories regarding the nature of X . In offering such analyses, philosophers assume that X is relevantly similar to water, not gamehood. My project in chapter 2 is to show how, in a given particular case, this assumption might be challenged.

I begin by identifying a semantic difference between terms like 'water' and terms like 'game' that explains why an informative analysis is possible for the former but not the latter.²² This difference can be seen by comparing two thought experiments.

Suppose that all of our ordinary evidence suggests that a certain sample X is water: it has the right appearance, taste, boiling point, etc. On the basis of this evidence, we would justifiably endorse the sentence $P \equiv 'X \text{ is a sample of water}'$. But notice that P is hostage to empirical fortune: if we were to find out that X has a different chemical structure from the one shared by all the other water-like liquids in our environment, we would revise our judgment and conclude that P is false. This shows that P 's truth presupposes that X shares

²¹I precisify what I mean by a "discoverable, unified nature" in chapter 2.

²²I actually identify two semantic differences, but for ease of presentation, I will describe only one of those features here.

some unified nature with other water-like substances in our environment.

But the following thought experiment shows that game judgments are different.²³ Suppose we become convinced that a certain theory A is the best possible analysis of gamehood (on whatever desiderata for theory choice one prefers²⁴). But suppose (plausibly enough) that there are still *some* cases where A conflicts with our intuitions; for example, perhaps A classifies multiplication tables as games. Now consider: how would our belief that A is the best possible analysis of gamehood affect the game-judgments we are disposed to make in *ordinary contexts*? For example, how would it affect our disposition to assert $Q \equiv$ ‘Multiplication tables are not games’ in ordinary contexts? I submit that, even if we were convinced that A was the best possible analysis of gamehood, we would feel no pressure at all to revise our judgment that Q (in any ordinary context). We would continue to assert Q just as we always had. This is because, when judging whether Y is a game in ordinary contexts, we do not *care* whether it shares some unifying feature with other cases of games.

This thought experiment reveals an important difference between ‘water’ and ‘game’. The fact that we revise our water-judgments when we learn that X does not share some unifying feature with other water-like samples suggests that ‘water’ expresses a property with a unified nature. But the fact that we feel no similar pressure to revise our game-judgments suggests that ‘game’ does not express a property with a unified nature. To capture this difference, I will say that game judgments are *epistemically secure* in a way that water judgments are not: our judgment that X is a game is not threatened by the possibility that X fails to share some unifying feature with other games.

The above discussion provides a method for determining whether a philosophically-interesting item X can be given an informative analysis: we test whether X -judgments are epistemically secure in the way described above. To illustrate this method, I consider

²³While this thought experiment does not directly appeal to an Oracle (see 1.3.1), it has a very similar structure and purpose.

²⁴For example, perhaps we become convinced that A upholds more of our our intuitive judgments than any other comparatively simple analysis.

causal judgments, ultimately defending the following thesis:

Thesis: The term ‘cause’ does not have the semantic role of expressing a relation with a discoverable, unified nature

1.4.2 Existence (ch. 3)

There is a vigorous debate over the existence of material objects like tables and trees. But deflationary theorists like Thomasson (2007) and Hirsch (2011) have argued that there is something misguided about this debate. It seems that, in ordinary language, the sentence ‘The table exists’ has the status of a trivial truth (on the assumption that there are particles arranged table-wise). So deflationists claim that the composition debate can be trivially resolved in favor of realism simply by reflecting on how we use ordinary English. Deflationists have made similar claims about other areas of ontology as well.²⁵

Recently, some ontologists have claimed that there can still be substantive debates in ontology *even if* deflationists are correct about ordinary language.²⁶ The claim is that, even if it is trivially true in ordinary English that tables exist, there is still a substantive debate over whether tables *exist**, where the existence* quantifier is a quantifier stipulated to correspond to the world’s most natural carving. Following Sider (2014), we can call the proposed shift in quantifiers the *Ontologese gambit*.

Some deflationists have worried that the notion of an existence* quantifier is unintelligible.²⁷ But in this chapter, I will raise an independent objection. I will argue that, even if we grant that *some* existence* questions are substantive, there are no substantive questions to ask about the existence* of things like ordinary objects, numbers, and properties – things whose *ordinary* existence is given a deflationary treatment. More precisely, I defend the following thesis:

²⁵For example, Schiffer (2003, 2.3) argues that we can trivially establish the existence of properties by looking to the ordinary use of property terms.

²⁶See, e.g., Cameron (2010).

²⁷See Hirsch (2011, 195).

Thesis: If the deflationist offers the correct explanation of the triviality of a certain *ordinary* existence statement, then there is no substantive question to ask about the truth of the corresponding existence statement

To defend this conclusion, I appeal to scrutability results (see 1.3.1) involving our ordinary object discourse.

1.4.3 Laws of nature (ch. 4)

Many philosophers have worried about the epistemology of non-Humean laws.²⁸ It is clear how we learn about the Humean base; at least in many cases, we directly observe and measure it. But if the laws are something over and above the Humean base, it is not clear how we could ever be epistemically justified in our beliefs about the laws.

The above argument has the form of a traditional regulative argument (see 1.2.1). But it is inconclusive as it stands. Along the lines of 1.3.2, non-Humeans have claimed that justified belief in the laws is possible even on the non-Humean view. For example, some non-Humeans have claimed that we are justified in positing non-Humean laws because they are needed to explain the striking empirical regularities science has discovered.²⁹

In chapter 4, I give an updated regulative argument for Humean laws which evades this non-Humean response:

Updated Regulative Argument for Humeanism

Premise 1: Even if scientists were to receive evidence E that — by the non-Humean's lights — falsifies their law judgments, they would not alter their law discourse.

Premise 2: If scientists would not alter their law discourse upon learning E , scientists are not referring to non-Humean laws when they use the term 'law' in ordinary scientific contexts.

3: Scientists are not referring to non-Humean laws when they use the term

²⁸See, e.g., Earman & Roberts (2005).

²⁹See, e.g., Armstrong (1983, 52-59).

‘law’ in ordinary scientific contexts. (from 1,2)

Corollary: two possible worlds cannot differ on what is a law of nature unless they also differ in their Humean base.

To establish premise 1, I consider Oracle thought experiments (see 3.1.2) where the Oracle tells us that the non-Humean laws are different than what ordinary scientific evidence leads us to believe. I argue that scientists would not change their law discourse in response to this testimony because of the central role that the law/non-law distinction has within ordinary scientific practice.

1.4.4 Dependence (ch. 5)

Some theorists (e.g., Schaffer (2009)) have recently claimed that the world has an ordered, hierarchical structure. Entities at lower ontological levels are said to *metaphysically ground* entities at higher ontological levels. In general, theorists claim that we need metaphysical grounding in order to accommodate cases of non-causal explanation:³⁰

1. x is roughly spherical in virtue of its having determinate shape R .
2. x is fragile in virtue of its molecular arrangement and the physical laws.
3. x 's action is wrong in virtue of its being done with the sole motive to cause harm.

It is said, for example, that the fact x 's *being roughly spherical* is metaphysically grounded by the fact x 's *having a determinate shape R* . But in chapter 5, I argue that there is another way to understand cases of non-causal explanation. Consider the following examples:

- 1'. x is a vixen in virtue of the fact that x is a female fox.
- 2'. x is a piece of furniture in virtue of fact that x is a chair.

³⁰The examples are from (in order): Schaffer (2012, 126), Rosen (2010, 110), and Fine (2012b, 1).

3'. x is bald in virtue of the fact that x has 20 hairs.

In cases [1']-[3'], the relevant explanation seems to be conceptual rather than metaphysical. We can say that these cases involve *conceptual grounding*, where conceptual grounding is a semantic relation between our sentences rather than a metaphysical connection between things out in the world. Intuitively, S conceptually grounds T if the sentence 'If S , then T ' is true because of the constitutive inferential roles of the expressions in S and T (see 1.3.3).

My project in chapter 5 is to clarify the relation between these two types of grounding. I argue that conceptual and metaphysical grounding are exclusive: if a given in-virtue-of claim involves conceptual grounding, then it does not involve metaphysical grounding.

Here is one such argument for grounding exclusion. Suppose we consider a case like [1], which features the property *being roughly spherical*. There are various views one might take of this property. One option is to say that *being roughly spherical* doesn't exist (eliminativism). Another option is to identify it with a set or a predicate (nominalism). Another option is to view it as a deflationary entity: a mere "shadow of a predicate".³¹ Or one can adopt a "heavyweight" view of this property, which I use as a catch-all term for any view not canvassed above.

In chapter 5, I first argue that anyone who views [1] as a case of metaphysical grounding is implicitly committed to viewing the property *being roughly spherical* as heavyweight. Next, I argue that we cannot trivially infer that any given heavyweight property is instantiated. But now suppose that [1] involves conceptual grounding. Then the inference between the sentences ' x has determinate shape R ' and ' x is roughly spherical' will be trivial for ordinary subjects. So I use this scrutability result in a regulative argument to establish that the property *being roughly spherical* is not heavyweight.³² This entails that

³¹See Schiffer (2003).

³²This argument is an example of the scrutability version of a regulative argument; see 1.3.1.

[1] does not involve metaphysical grounding.

I argue that the same considerations apply to many other proposed cases of metaphysical grounding. Once we recognize that these cases involve semantic connections, we cannot view the relevant objects and properties in the heavyweight way that is needed to view the case as involving metaphysical grounding.

1.4.5 Edenic Idealism (chs. 6-11)

Science suggests that the “external world” is very different from the world presented to us in experience. For example, most theorists today reject the claim that external objects have the vivid, sensuous color properties that they seem to have in experience. For a second example: results from special and general relativity suggest that external space is very different from the space presented to us in experience.

Despite these results, most philosophers think that we can uphold the truth of our everyday judgments about ordinary objects through a strategy called *functional identification*. The basic idea is: even if the world does not contain vivid, sensuous redness, the world does contain properties (such as surface reflectance properties and dispositional properties) whose role is similar enough to preserve our ordinary usage. By saying that ‘redness’ refers to one of those properties, we can preserve the truth of our ordinary color judgments.³³

But in chapter 6, I present a series of puzzles for this standard strategy. The puzzles are cases where it is very difficult to match up the objects and properties presented in experience with corresponding items in the external world.

On first pass, we might be tempted to say that the puzzles are cases where ordinary objects don’t exist. But I use an Oracle argument like the one given in the introduction to show that this conclusion is mistaken. On the basis of this Oracle argument, I offer the following regulative argument (see 1.3.1) against realism about ordinary objects:

³³Tye (2000) and McLaughlin (2003) adopt this strategy for colors, while Thompson (2010) and Chalmers (2012) endorse this strategy for spatial properties.

Updated regulative argument against realism

Premise 1: Even if ordinary subjects were to learn that the external world W_E does not contain suitable denotations for their ordinary object terms, they would not alter their discourse about objects.

Premise 2: If ordinary subjects would not alter their object discourse upon learning that W_E has no suitable denotations for their object terms, terms like ‘table’ and ‘chair’ do not have the semantic role of referring to items from W_E .

3. Terms like ‘table’ and ‘chair’ do not have the semantic role of referring to items from W_E .³⁴.

Supposing this argument is successful, what *do* our ordinary object terms refer to? I argue that the best way to explain our response to the Oracle’s testimony is to adopt the following semantic form of idealism:

Edenic Idealism (EI): Ordinary object terms refer to items in the *manifest world*: the world W_M of primitive objects and properties presented by our experiences.

For example, suppose you have a phenomenal experience of an apple. The realist wants to identify this apple with some item in the external world. But according to edenic idealism, the apple is a denizen of the possible world W_M presented by your experience. Far from being some outlandish metaphysical theory, I argue that, in fact, EI is the position of common sense. It is the most intuitively plausible view about what we are actually talking about when we use terms for ordinary objects.

In chapter 7, I develop the edenic idealist’s positive metaphysical account in more detail. In chapters 8-10, I defend edenic idealism from various traditional objections to idealism. I conclude by discussing some applications of edenic idealism in chapter 11.

³⁴Cf. Wittgenstein (1968, §293).

1.5 Future prospects for regulative metaphysics

In this chapter, I have sought to show that regulative arguments still have an important role in contemporary philosophy. To this end, I have explained why these arguments do not require certain problematic epistemic and semantic assumptions traditionally associated with them (section 1.3). I have also identified a variety of contemporary targets for regulative arguments (section 1.4).

In future research, I hope to apply the regulative approach to metaphysics to further areas of discourse. To conclude this chapter, I will mention a few further areas of discourse where regulative arguments may be relevant:

-*Scientific ontology*. In chapter 8, I discuss what view the edenic idealist should take towards scientific ontology. There, I observe that the same thought experiments used to challenge a realist view of ordinary objects may also challenge a realist view of items from scientific ontology (e.g., electrons, fields, quarks, etc.). This suggests the intriguing possibility of motivating a semantic form of idealism for scientific ontology as well. I am interested in defending this view, which I call *microphysical idealism*, in future work.

-*Time*: With edenic idealism (see 1.4.5), I argue that the semantics of our ordinary object judgments are closely tied to our experience of objects. I suspect that there is also a close link between the semantics of our temporal discourse and our experience of time. For example, I think Oracle thought experiments may help clarify certain debates in the philosophy of time (e.g., A-theory vs. B-theory).

-*Chance*: In future work, I am also interested in extending my argument for Humean laws (see 1.4.3) to an argument for a Humean view of objective chance.

2 WATER, GAMES, AND CAUSES: A DECISION PROCEDURE FOR ESSENCE HUNTERS

2.1 Introduction

We think that some things have a unified nature for us to discover.¹ For example, we think science has revealed the nature of water to be H₂O. We think that other things do not have a unified nature for us to discover. For example, we do not think that there is anything to discover about what it is to be a game.

What about the causal relation, or dispositions, or free will? For any philosophically-interesting item X , one can find a host of competing theories regarding the nature of X . In offering such analyses, philosophers assume that X is relevantly similar to water, not gamehood. My project in this chapter is to show how, in a given particular case, this assumption might be challenged.

I will identify two semantic features of the term ‘water’ that distinguish it from the term ‘game’. These features explain why an informative analysis is available for water but not gamehood. They also provide a method for determining whether a philosophically-interesting item X can be given an informative analysis. As an application, I will consider the term ‘cause’, defending the following thesis:

Thesis: The term ‘cause’ does not have the semantic role of expressing a relation with a discoverable, unified nature.

¹I will precisify what I mean by a “discoverable, unified nature” in 2.2.3.

2.2 The project of analysis

Before beginning, it will be useful to distinguish two main ways in which philosophers have thought about the project of philosophical analysis.

2.2.1 Conceptual analysis

On the traditional view, the project of analysis is an investigation of our concepts. For example, (1) would be interpreted as a definition of the term ‘cause’:

(1) Event C causes distinct event E iff there is a (possibly empty) set of events D_1, D_2, \dots, D_n such that D_1 counterfactually depends on C , D_2 counterfactually depends on D_1, \dots , and E counterfactually depends on D_n . (Lewis (1973a))

The standard strategy for evaluating traditional conceptual analyses is the method by counterexample.”² On this method, we test a proposed analysis of a term ‘ X ’ by checking whether it agrees with our intuitive judgments about X across various possible cases. Since these intuitive judgments plausibly involve the exercise of our conceptual capacities, any proposal that conflicts with these judgments fails as an analysis of the term. For example, consider the following case:

“Billy and Suzy throw rocks at a bottle. Suzy throws first, or maybe she throws harder. Her rock arrives first. The bottle shatters. When Billy’s rock gets to where the bottle used to be, there is nothing there but flying shards of glass. Without Suzy’s throw, the impact of Billy’s rock on in the intact bottle would have [shattered the bottle]. But, thanks to Suzy’s preempting throw, that impact never happens.” (Lewis (2000, 184))

Since (1) fails to uphold our intuition that Suzy’s throw causes the shattering of the bottle, this case is a counterexample to (1).³ So the task for the theorist analyzing the term ‘cause’

²For discussion, see Williamson (2007, ch. 6) and Paul & Hall (2013, chs. 2 and 6).

³In this case, the set of events connecting Suzie’s throw to the shattering would be: the flight of Suzie’s rock just as it leaves her hand, the flight of Suzie’s rock an instant later, ... , and the flight of Suzie’s rock just before it hits the bottle. But the shattering does not counterfactually depend on the flight of Suzie’s rock just before it hits the bottle, since if the latter had not occurred, Billy’s rock still would have shattered the bottle.

would now be to provide an amended analysis that avoids this counterexample.

2.2.2 Metaphysical analysis

While conceptual analysis still has its contemporary adherents, this project no longer enjoys its traditional prominence.⁴ While there are several reasons for this decline, perhaps the most important reason is that successful definitions have been very difficult to come by. For example: after many iterations of the method by counterexample, some philosophers have concluded that the term ‘cause’ simply does not have a definition.⁵

In response to these failures, some theorists have suggested that we reorient our approach to theorizing about causation, dispositions, knowledge, etc. Instead of interpreting biconditionals like (1) as an analysis of the term ‘cause’, we should instead view them as “metaphysical analyses” of the causal relation *itself*.⁶ Here is a representative quotation from the causation literature:

“Conceptual analysis ... is an explication of everyday concepts. ... On the other hand, [metaphysical] analysis seeks to establish what causation in fact *is* in the actual world. [Metaphysical analysis] aims to map the objective world, not our concepts” (Dowe (2000, 3))

This proposed shift from conceptual to metaphysical analysis is found in many other areas of the literature as well.⁷

⁴For discussion, see Chalmers (2012, 10-12).

⁵See Schaffer (2007, 872). Another famous example is the Gettier literature: after dozens of failed attempts to define the term ‘knows’, some philosophers have concluded that this term cannot be defined. See Shope (1983) for an overview.

⁶See, e.g., Sosa (2015, ch. 1). This project has various other names in the literature, including “factual analysis” (Mackie (1985, 178)), “empirical analysis” (Dowe (2000, ch. 1)), and “ontological reduction” (Paul & Hall (2013, 29)).

⁷For example, Milikan (1984, 73) claims that she is not analyzing the *concept* of meaning, but is instead analyzing the *nature* of meaning. Swoyer (1982, 221-222) clarifies that he is offering an “ontological” theory of natural laws that may not neatly line up with our concept of a law. Van Inwagen (1990, 66-68) is interested in when composition *really* occurs, as opposed to when we ordinarily judge that composition occurs. Kornblith (2002, 1-2) claims that he is not analyzing the *concept* of knowledge, but is instead giving an account of the nature of knowledge *itself*. Relatedly, many theorists (e.g., Locke (1689), Heil (2012, 196)) make a distinction between *real essences* and *nominal essences*.

One can motivate the project of metaphysical analysis with examples of *a posteriori* necessities. The identification of water with H₂O was not the result of traditional conceptual analysis; instead, it was a substantive discovery about the metaphysical nature of water. Similarly, the alleged identification of pain states with neural states is typically viewed as a substantive discovery about the nature of consciousness.

Metaphysical analyses have different criteria of adequacy than traditional conceptual analyses. They do not need to be analytic or *a priori*.⁸ They may not even have to be metaphysically necessary.⁹ But perhaps the most important difference is that metaphysical analyses are not required to align with our linguistic intuitions across all possible cases. For the purposes of this chapter, I will consider this a sufficient condition for a theory to count as an attempt at metaphysical analysis.¹⁰

2.2.3 The path ahead

To clarify the target of this chapter's arguments, this section has provided background on the various ways in which theorists have understood the project of analysis. Given the decline of the traditional project of conceptual analysis, the arguments ahead are primarily directed towards proponents of *metaphysical* analysis.

Let's say that *X* has a unified nature iff there is some single, natural feature that is necessary and sufficient for being an instance of *X*. Let's say that *X* has a discoverable nature iff learning *X*'s nature involves genuine discovery (i.e., extends beyond mere reflection on our concepts). Then, differences notwithstanding, proponents of metaphysical

⁸See Fair (1979, 231), Bigelow & Pargetter (1990), and Dowe (2000, 3).

⁹While some theorists (e.g., Earman (1976, 24), Tooley (1987, ch. 7)) require metaphysical analyses to be necessary, other theorists (e.g., Aronson (1982, 302), Salmon (1984, 239-242), and Dowe (2000, 3)) only require truth in the actual world. Paul & Hall (2013, 40-41) take a middle position, claiming that metaphysical analyses should not rely on facts "too specific to one's own world."

¹⁰Given this sufficient condition, here are some examples of metaphysical analyses in the literature. *Causation*: Aronson (1971), Mellor (1988, 229-230), Bigelow & Pargetter (1990, 278), Dowe (2000, 11), Woodward (2003, 115-117). *Composition*: van Inwagen (1990, see esp. 66-68), Merricks (2000, ch. 1). *Desire*: Morillo (1990), Arpaly & Schroeder (2013, ch. 6). *Knowledge*: Kornblith (2002, 1-2). *Possibility*: Armstrong (1989, ch. 4). *Laws of nature*: Swoyer (1982, 221-222).

analysis share a major assumption: *that the item X under analysis has a discoverable, unified nature*. The arguments ahead will show how we might challenge this assumption in a given particular case.

To make this challenge concrete, consider again the contrast between water and gamehood. Intuitively, the project of metaphysical analysis seems interesting for water but not for gamehood. This is because, unlike water, gamehood doesn't seem to be a thing with a discoverable, unified nature. I want to raise the following question: why should we assume that things like the causal relation, dispositions, etc. are like water instead of like gamehood?

2.3 'water' vs. 'game'

In this section, I will identify two important semantic differences between the terms 'water' and 'game'. These differences explain why the project of metaphysical analysis is legitimate for water but not for gamehood. We will then have a test for whether a philosophically-interesting item X can be given a metaphysical analysis by seeing whether the term ' X ' shares these features.

2.3.1 Epistemic security

Suppose that all of our ordinary evidence suggests that a certain sample X is water: it has the right appearance, taste, boiling point, etc. On the basis of this evidence, we would justifiably endorse the sentence $P \equiv$ ' X is a sample of water'. But notice that P is hostage to empirical fortune: if we were to find out that X has a different chemical structure from the one shared by all the other water-like liquids in our environment, we would revise our judgment and conclude that P is false. This shows that P 's truth presupposes that X shares some unified nature with other water-like samples in our environment.¹¹

¹¹This is not to say that we can know *a priori* that water has a unified nature. For example, if it had turned out that half of the water-like stuff around us was H₂O while the other half was some other chemical, it is plausible that our term 'water' would have referred to both types of substances (see Block & Stalnaker (1999,

But the following thought experiment shows that game judgments are different. Suppose we become convinced that a certain theory A is the best possible analysis of gamehood (on whatever desiderata for theory choice one prefers¹²). But suppose (plausibly enough) that there are still *some* cases where A conflicts with our intuitions; for example, perhaps A classifies multiplication tables as games.

Now consider: how would our belief that A is the best possible analysis of gamehood affect the game-judgments we are disposed to make in *ordinary contexts*? For example, how would it affect our disposition to assert $Q \equiv$ ‘Multiplication tables are not games’ in ordinary contexts? I submit that, even if we were convinced that A was the best possible analysis of gamehood, we would feel no pressure at all to revise our judgment that Q (in any ordinary context). We would continue to assert Q just as we always had.¹³ This is because, when judging whether Y is a game in ordinary contexts, we do not *care* whether it shares some unifying feature with other cases of games.¹⁴

This thought experiment reveals an important difference between ‘water’ and ‘game’. The fact that we revise our water-judgments when we learn that X does not share some unifying feature with other water-like samples suggests that ‘water’ expresses a property with a unified nature. But the fact that we feel no similar pressure to revise our game-judgments suggests that ‘game’ does not express a property with a unified nature.¹⁵

21ff) for discussion). To speak more precisely: P 's truth presupposes that X shares some unified nature with the other water-like samples around us *conditional on the supposition that these other samples (generally) share a unified nature*. I will leave this precisification tacit because it will not affect the arguments ahead.

¹²For example, perhaps we become convinced that A upholds more of our our intuitive judgments than any other comparatively simple analysis.

¹³By “ordinary context”, I mean: contexts where we aren’t engaged in the philosophical task of analyzing “gamehood”. An example of such a context might be: a competition where players quickly write down the names of objects within various categories beginning with a given letter. If someone wrote down “multiplication tables” as their response to the category “game” and the letter “M”, we would protest.

¹⁴Note that nothing in this argument hinged on the choice of Q as an example; we wouldn’t feel pressure to change *any* of our determinate game judgments in order to make them conform to some neat analysis.

¹⁵Might the difference in revisability between P and Q instead be explained by a difference in our confidence in these judgments? For example, might our unwillingness to revise our judgment that Q reflect the fact that, unlike in the water case, we are more confident in Q than in any proposed analysis conflicting with

To capture this difference, I will say that game judgments are *epistemically secure* in a way that water judgments are not: our judgment that X is a game is not threatened by the possibility that X fails to share some unifying feature with other games.¹⁶

2.3.2 Epistemic rigidity

The term ‘water’ is metaphysically rigid: it refers to the same substance across metaphysical possibilities. But ‘water’ is epistemically non-rigid: it refers to different substances across epistemic possibilities. For example, since the dominant water-like substance in our actual environment turned out to be H_2O , the term ‘water’ refers to H_2O in the actual world. But if the dominant water-like substance in our actual environment had turned out to be XYZ , the term ‘water’ would have referred to XYZ .¹⁷

The epistemic non-rigidity of the term ‘water’ explains the sense in which an analysis of water involves substantive discovery. Before we did chemistry, there were many open epistemic possibilities about what ‘water’ refers to; perhaps it refers to H_2O , perhaps it refers to an element, etc. But by performing experiments, we learned which substance ‘water’ actually refers to. This result closes epistemic space and is justifiably considered to be a substantive discovery.

In contrast, the term ‘game’ seems epistemically rigid. Although we can imagine

it?

In response: while it may be true that we are more confident in Q than any analysis conflicting with it, this difference between P and Q potentially obscures a more important difference between them. The more important difference is that, when judging that X is water, we *care* (at least implicitly) that X shares some unifying feature with other water-like samples — this is why we revise our judgment that P upon learning that X has some different chemical structure. But when making game judgments, we do *not* care whether the given practice shares some unifying feature with other games.

This difference — a difference in what we care about — is the real explanation of why game-judgments cannot be threatened in the same way as water judgments. Indeed, this explanation shows that it would be a mistake to think of our game-judgments as being weighed against theories of gamehood in the same way that our water-judgments are (apparently) implicitly weighed against theories of water.

¹⁶Of course, this is not to say that game judgments are epistemically secure *simpliciter*. For example, we might mistakenly judge that X is a game because we are not fully aware of the details of X (its rules, its aims, its history, etc.).

¹⁷For discussion of epistemic rigidity, see Chalmers (2012, E14).

“twin-worlds” where functional and phenomenal duplicates of us use the term ‘water’ to refer to XYZ, we cannot imagine twin-worlds where functional and phenomenal duplicates of us use the term ‘game’ to refer something other than games.¹⁸ So unlike the water case, there are no discoveries for us to make about what ‘gamehood’ refers to in the actual world. Given this disanalogy, it is unclear in what sense an analysis of gamehood could involve substantive discovery.

2.3.3 A test

Both ‘water’ and ‘game’ are famous examples of the failure of traditional conceptual analysis. But only in the case of ‘water’ does the alternative project of metaphysical analysis seem well-motivated. I’ve explained this intuition by identifying two semantic differences between the terms ‘water’ and ‘game’. Because of the epistemic security of game judgments, there is no reason to think that ‘gamehood’ refers to a property with a *unified* nature. And because this term is epistemically rigid, there is no reason to think that it refers to a property with a *discoverable* nature.

This discussion provides a test for when metaphysical analysis is appropriate. Consider any philosophically-interesting term ‘*X*’ (e.g., ‘cause’, ‘free’, ‘law’, etc.). If we determine that *X*-judgments are epistemically secure and that the term ‘*X*’ is epistemically rigid, it is inappropriate to ask for a metaphysical analysis of *X*.

2.4 ‘cause’ vs. ‘water’

To illustrate this test, I will consider the term ‘cause’. I will argue that, when we compare the term ‘cause’ to terms like ‘game’ and ‘water’, the close analogy is with the term ‘game’.

¹⁸Of course, we can imagine worlds where speakers use the term ‘game’ to refer to other types of things: granite, trees, bikes, etc. But these worlds wouldn’t be *twin*-worlds.

2.4.1 Epistemic security

As discussed in 2.2.2, metaphysical analyses are not required to agree with our intuitive judgments across all possible cases. For example, on Aronson's (1971) transference theory of causation, it is incorrect to say that the ice's melting caused the water to cool (424-425). On Dowe's (2000) conserved quantity theory, causation by omission (e.g., 'John's failure to take the medicine caused his illness') is not genuine causation at all (124ff). Paul & Hall (2013) argue that metaphysical analyses need not uphold our causal intuitions about exotic possible cases, such as those involving magical spells (40-41).

The common problem with these proposals is that our causal judgments are not the types of things that can be falsified through philosophical theorizing. To be sure, we often revise our causal judgments in response to receiving more *ordinary* evidence; for example, we would revise our judgment $R \equiv$ 'The melting ice caused the water to cool' upon learning that there wasn't actually any ice. But we would never revise this judgment simply because a philosophical theory of causation conflicted with it.

For example, suppose we become convinced that the best theory of causation (on whatever desiderata for theory choice one prefers) is Aronson's transference theory. Even if this were the case, we would feel no pressure *in ordinary contexts* to revise our judgment that R . We would continue (in ordinary contexts — say, when swimming in a cold lake) to assert R just as we always had. Similar remarks apply to *any* of our determinate causal judgments. We would never revise our robust causal judgments just to make them conform with some attractive theory of causation. This is because, in ordinary contexts, we do not *care* whether our causal judgments align with any theory. Again, it is worth contrasting this case with the case of our water judgments.

Of course, philosophers sometimes make provisions for cases where ordinary judgments conflict with their preferred theory. For example, Dowe (2000, ch. 6) claims that, while judgments like $V \equiv$ 'John's failure to take the medicine caused his illness' do not express genuine cases of causation, it is still correct to make such judgments since they are

pragmatically useful. I agree with Dowe that sentences like *V* are often correctly assertible, but there are better and worse explanations of *why* they are correctly assertible. On Dowe's explanation, *V* is assertible because it paraphrases sentences that describe "real" causation. But a better explanation is that the term 'cause' doesn't express a relation with a unified nature in the way that Dowe supposes.

When arguing that our intuitive causal judgments are defeasible, Paul & Hall (2013, 41) claim: "[when considering intuitions about cases], you should reflect on whether intuition has been set up as an arbiter of questions it may not be competent to judge." But the above thought experiment suggests the opposite result: at least in the case of causation, metaphysical analyses are not competent to judge the truth of our ordinary judgments. A philosophical theory could have authority over our ordinary causal judgments only if we were inclined to defer to that theory in everyday contexts. But we aren't: we feel no pressure to revise our ordinary causal judgments to conform to any theory. So metaphysical analyses cannot "reveal" that any of our ordinary intuitions about causation are misguided.

(Of course, we can imagine speakers who *are* inclined to conform their causal judgments to a philosophical theory. For example, we can imagine speakers who, upon accepting Aronson's theory of causation, no longer judge (in ordinary contexts) that the ice's melting causes the water to cool. For these speakers, 'cause' would express a relation with a unified nature. But this is not how *we* use the term 'cause'.)

Use and reference magnetism

It is plausible that use has at least some role in determining what our linguistic expressions refer to. Some theorists have appealed to this meta-semantic principle in order to criticize theories of causation that depart too radically from ordinary usage.¹⁹ The intuitive objection is that, if a theory *T* conflicts with our ordinary causal judgments across a large range of cases, *T* doesn't deserve to be called a theory of *causation* (as opposed to a theory

¹⁹See, e.g., Schaffer (2004).

of something else).

While I find this style of argument convincing, the above thought experiment suggests that it does not go far enough. It isn't just that use makes *some* contribution to determining the relation expressed by the term 'cause'; the thought experiment suggests that use makes the *entire* contribution.²⁰ So it is not enough to reject theories of causation that *substantially* conflict with our intuitions. We must reject theories that conflict with *any* our robust intuitive judgments.

Proponents of *reference magnetism* will resist this conclusion.²¹ According to reference magnetism, certain types of properties are more natural than others, and this naturalness helps determine the extensions of our linguistic expressions. If reference magnetism applies for the term 'cause', then this term will express whatever natural relation best fits our use. So causation may have a unified nature even if our causal judgments themselves do not line up with any natural relation.

My response is that a semantic theory is adequate only to the extent that it accords with our linguistic behavior. It is part of our linguistic behavior that, when we learn that a water-like sample *X* has a different chemical structure than other samples, we deny that *X* is water. Insofar as reference magnetism explains this result, it is a plausible theory for the term 'water'. But the situation is different when we consider terms like 'game' and 'cause'. As explained earlier: in these cases, it is not part of our linguistic behavior to revise our judgments so that they conform to some unified nature. So even if there *is* some unified nature in the vicinity of our judgments about games and causes, reference magnetism isn't a plausible semantic theory for terms like 'game' and 'cause'.

²⁰Of course, this does not mean that all of our causal judgments are correct. For example, we might falsely judge that *x* causes *y* because of ignorance about the basic empirical facts of a case. See section 2.2.5 for further discussion.

²¹For discussion, see Sider (2011, 3.2).

2.4.2 Epistemic rigidity

In the literature, it is not uncommon to use nomologically impossible cases as counterexamples to theories of causation. For example, Earman's (1976, 24) counterexample to Aronson's transference theory is a possible world where collisions do not conserve energy. Similarly, Schaffer's (2000) counterexample to counterfactual theories of causation involves a "wizard world" where magical laws govern the casting of spells. In offering these cases, Earman and Schaffer implicitly assume that causation is the same kind of thing across the space of epistemic possibilities.

Other philosophers deny this assumption. For example, Aronson (1982) claims that his transference theory "is intended to make sense of how causation takes place in *this* world, ... not in some alien universe where the laws of physics do not in the least resemble ours" (302). Paul & Hall (2013) also claim that the nature of causation might differ from world to world (41-42).

The above difference amounts to a disagreement over whether the term 'cause' is epistemically rigid: Earman and Schaffer endorse the rigid view, while Aronson, Paul, and Hall endorse the non-rigid view. I'll now present an objection to the non-rigid view.

On the non-rigid view, 'causation' is supposed to be like 'water': just as 'water' would refer to something different if the water-like stuff in our actual environment turned out to be XYZ, so too 'causation' would refer to something different if the actual world were Schaffer's wizard world. But this proposed analogy breaks when we compare the following cases:

(A) Suppose that the water-like stuff in our local environment turns out to be H₂O. But in some distant part of the universe, there is a twin-world *P* where the water-like stuff is XYZ.²²

(B) Suppose that the physical laws are just as we normally think them to be. But there is one exception: in some distant part of the universe, there is a

²²This is Putnam's (1975) twin earth thought experiment.

planet P^* where wizards cast spells according to magical laws (as in Schaffer's (2000) example).²³

In both cases, we are supposing that an isolated region *of the actual world* is different from our local environment. But there is an intuitive difference between the cases. In the case of (A), we judge that P does not contain water; it merely contains a substance that resembles water.²⁴ But in the case of (B), we do not similarly judge that spells in P^* are not causes. For example, suppose a wizard in P^* mutters a spell and, because of the laws of magic, a window shatters immediately thereafter. We judge this to be just as much a case of causation as one billiard ball striking another. This example shows that, unlike the truth of our water judgments, the truth of our causal judgments does not depend on facts about our actual environment.²⁵ This in turn suggests that the term 'cause' does not express different relations across the space of epistemic possibilities.²⁶ And since 'cause' is epistemically rigid, it is unclear how an analysis of causation could involve any substantive discovery.

²³This example may worry philosophers (e.g., Lange (2009)) who believe that fundamental natural laws cannot have exceptions. To assuage this worry, we might stipulate that the laws, while universal, are different than we think in such a way as to permit spells. But as it happens, these spells are instantiated only in some distant part of the universe.

²⁴Or at least, this will be the judgment of anyone who agrees with Putnam (1975).

²⁵Schaffer (2004, 207) notes that, in a metaphysically possible world governed by magical laws, we do not hesitate to use the term 'cause' to describe spells in such a world. So Schaffer concludes, contra theorists like Aronson (1982, 302), that it is legitimate to appeal to possible cases when investigating the nature of the causal relation.

Schaffer's argument has one shortcoming: opponents can accommodate Schaffer's case by denying that 'cause' is metaphysically rigid. On this response, causal sentences are true in worlds different from ours, but this is because the causal relation is different in those worlds. So Schaffer's argument is unlikely to convince his opponents.

Case (2) amends Schaffer's argument by locating P^* not in some other possible world, but in some distant part of the actual world (on a certain epistemic possibility). This amendment rules out the possibility that 'cause' expresses different relations depending on what the actual world is like.

²⁶There are two ways to resist this last step. First, one could argue that the term 'cause' expresses a different relation on the epistemic possibility that the actual world includes P^* than it does on the epistemic possibility that it does not. But this is implausible: we do not think the identity of the causal relation depends on what's happening in some distant region of the universe. Second, one could argue that in judgments like 'The spell caused the shattering', we employ a different sense of the term 'cause'. But there is no evidence for this proposal. From the sentences 'The spell caused a shattering' and 'John's throw caused a shattering', we could legitimately infer 'Both the spell and John's throw caused a shattering'.

2.4.3 Summary

The above discussion suggests that the term ‘cause’ is more similar to the term ‘game’ than the term ‘water’. The epistemic security of causal judgments and the epistemic rigidity of the term ‘cause’ together support the following thesis:

Thesis: The term ‘cause’ does not have the semantic role of expressing a relation with a discoverable, unified nature.

(*N.b.*: There are two arguments from the literature on causation that, if successful, would provide independent support for the above thesis. So as not to disrupt the main flow of the chapter, I discuss these arguments in appendix A.)

As discussed in 2.2.3, the project of metaphysical analysis presupposes that the item under analysis has a discoverable, unified nature. So the above thesis rules out the possibility of providing a metaphysical analysis of causation.

My aim in considering the above test case has been to illustrate how one might challenge assumptions implicit in the project of metaphysical analysis. Of course, the above discussion does not show that this project is *never* viable; whether it is viable will depend on the specific case. But it does suggest a methodological lesson: before engaging in the project of metaphysical analysis, we should first check whether this project is compatible with the semantic role of the relevant term.

Due to limitations of space, I will not consider any further cases. But my own view is that the above heuristic can be used to motivate analogous theses for a variety of philosophically-interesting items. Other cases to consider include: ‘knowledge’, ‘free will’, ‘desire’, ‘chance’, ‘law of nature’, and ‘goodness’.

2.5 A deflationary alternative

Suppose we conclude that a certain philosophically-interesting item X has no discoverable, unified nature. Is it then possible to give any precise analysis of X ? For example,

is it possible to give any precise analysis of causation? In this section, I will provide such an analysis by appealing to the linguistic dispositions of competent speakers.

As discussed in 2.2.1, competence with the term ‘cause’ plausibly involves the ability to make causal judgments across various possible cases. For example, competent speakers are able to immediately judge that Suzy’s throw causes the shattering in the case described in 2.2.1. The same goes for the many other cases discussed in the causation literature. Taken together, these cases suggest the following: when we are told sufficient information about a possible situation, we can often trivially judge whether X causes Y in that situation.

Now, if ‘cause’ expressed a relation with a unified nature, we should not expect any neat correspondence between these judgments and genuine instances of causation.²⁷ But the arguments of section 2.2.4 suggest that ‘cause’ does not have this role. This motivates the following deflationary characterization of the causal relation:

Causal Deflationism: x causes y in a possible case C iff actual subjects would (ideally) judge that the predicate ‘causes’ applies to x and y when given an appropriate description of C .

Intuitively: C is a case of causation if and only if we are inclined to call C a case of causation. Here are a few remarks on how to interpret this analysis.

(i) *Actual subjects:* The above analysis should *not* be interpreted as saying that x causes y in some possible case C iff subjects *in* C would judge that the predicate ‘causes’ applies to x and y . On this reading, the analysis would be obviously false; it would imply, for example, that any world without human subjects is a world without causation. The correct interpretation is: x causes y in some possible case C iff we ourselves — here in the actual world using our concepts as we actually do — would judge that x causes y when given a description of C . For example, since we judge that Suzy’s throw causes the shattering in the section 2.2.2 case, the deflationary analysis predicts that Suzy’s throw

²⁷For example, consider the case of ‘water’. In ordinary life, we often judge that certain liquids are water. But because water has a unified nature, we should not expect a neat correspondence between our water-judgments and genuine samples of water.

causes the shattering in these cases.²⁸

(ii) “*Appropriate description*”: The description in the above analysis should specify all of the facts about *C* that a competent speaker needs to make a fully-informed causal judgment. For example, the description might include information about the relevant matters of particular fact, information about the laws of nature, etc.²⁹

(iii) *Idealization*: As I discussed earlier, the fact that the term ‘cause’ does not express a relation with a unified nature means that we should expect a close link between our causal judgments and genuine instances of causation. But of course, there will be cases where the two come apart. For example, we can imagine possible cases that are too complex for any human to form a judgment about. Similarly, we can imagine cases where subjects are mistaken in their causal judgments due to insufficient reflection on the case. To account for such cases, the analysis requires an idealization on judgments that abstracts away from our contingent cognitive limitations.³⁰

(iv) *Explanatory power*: One might worry that the deflationary analysis isn’t appropriately explanatory. But the deflationist will claim that there is nothing the analysis needs to explain. Since the term ‘cause’ probably doesn’t have a definition (see 2.2.2), there is no need to explain how the term ‘cause’ is built from other terms. Nor does an analysis need to explain what unites all cases of causation: there isn’t any natural feature that unites them. Nor does an analysis need to explain how we use the term ‘cause’: as competent speakers,

²⁸What about cases where we have no determinate intuitions about whether causation occurs? In such cases, the causal deflationist should say that it is indeterminate whether *x* causes *y*.

Could there be a case *C** where two communities *A* and *B* of (fully-informed) subjects have conflicting intuitions over whether causation occurs? This would be unsurprising; after all, we see exactly this type of disagreement with other terms, such as the term ‘knows’ (see Weinberg, Nichols, & Stich (2001)). We might initially be tempted to say that there is a fact of the matter about whether causation occurs in *C**. But if we accept that the term ‘cause’ does not express a relation with a unified nature, it becomes much more plausible to say that *A* and *B* simply use the term ‘cause’ in slightly different ways. So the causal deflationist will say that, in case *C**, ‘*x* causes *y*’ will be true in the mouths of *A*-speakers but not *B*-speakers (or vice versa).

²⁹One important question is whether the description can be entirely specified using non-causal language. That is: can subjects make causal judgments without antecedently knowing anything else about the causal structure of the case? I suspect that they can, but this position is controversial (see Cartwright (2004) and Schaffer (2007) for discussion).

³⁰See Chalmers (2012, 63-71) for an example of an idealization that would work in this context.

we already know how to use this term.

(v) *Other cases*: If we conclude that other philosophically-interesting items have no discoverable unified nature, we can give deflationary analyses for those items as well. For example, here is how such analyses would look for parthood and dispositions:

Parthood Deflationism: x is a part of y in a possible case C iff we would (ideally) judge that the predicate ‘is a part of’ applies to x and y when given an appropriate description of C .

Disposition Deflationism: x has disposition y in a possible case C iff we would (ideally) judge that the predicate ‘has disposition y ’ applies to x when given an appropriate description of C .

2.5.1 The corresponding metaphysical picture

If we adopt a deflationary analysis for an item like the causal relation, what metaphysical view should we take toward that item? Here are two attractive possibilities.

First, we might identify the causal relation with a *set-theoretic* entity. For example, we might identify the causal relation with: the set of ordered pairs $\langle x, y \rangle$ such that we would (ideally) judge that the predicate ‘causes’ applies to x and y when given an appropriate description of the (possible) case.

Philosophers like Armstrong (1978) have raised various objections to set-theoretic reductions of properties. But most of these objections apply to views where *all* properties are identified with sets. In contrast, the current proposal only applies to properties and relations that do not have a discoverable, unified nature.

A second possibility is to view the causal relation as a *lightweight* entity. According to theorists like Schiffer (1996) and Thomasson (2001), properties and relations are mere “shadows of predicates”: ontologically thin entities with no discoverable nature for metaphysics to discover. On this conception, there is nothing true of properties other than what is correctly assertible of them in ordinary discourse (Schiffer (1996, 159)).

Schiffer suggests that we should view *all* properties in this lightweight manner. It is

outside the scope of this chapter to assess this view. But whatever its status as a global theory, a lightweight view seems very natural for items like the causal relation which lack a discoverable, unified nature.

2.6 Conclusion

In this chapter, I developed a test to determine whether a philosophically-interesting item *X* can be given a metaphysical analysis. I argued that, if our *X*-judgments are epistemically secure, and if the term ‘*X*’ is epistemically rigid, then no such analysis is available for *X*. To illustrate this test, I considered the term ‘cause’, ultimately concluding that this term does not express a relation with a discoverable, unified nature.

3 THE CONTEXT PRINCIPLE AND ONTOLOGESE GAMBITS

3.1 Introduction

Here is a familiar dialectic between an ontologist and a deflationist:

O: I grant that there are particles arranged “table-wise”, but I deny the existence of tables.

D: If you accept that ‘There are particles arranged table-wise’ is true, you cannot deny ‘There is a table’. In ordinary English, the second sentence is trivially entailed by the first.

O: I’m willing to grant that you are correct about ordinary English. But when I deny the existence of tables, I do not mean to be speaking ordinary English. Instead, I mean to use a special “heavyweight” notion of existence: **existence***. I deny that tables **exist***.

Following Sider (2014), we can call the third step of this dialectic an *Ontologese gambit*. With such a gambit, the ontologist introduces a new metaphysically-privileged quantifier from the language of “Ontologese” in order to resist deflationary pressures from ordinary language. In this chapter, I will offer a criticism of this gambit by defending the following thesis:

Thesis: If the deflationist offers the correct explanation of the triviality¹ of a given *ordinary* existence statement, then there is no substantive question to ask about the truth of the corresponding *existence** statement

For example: if we give the ordinary existence of tables a deflationary treatment, then there is likewise no substantive question about the *existence** of tables. Similarly, if we

¹*N.b.*: Throughout this chapter, when I say that assertions like ‘The table exists’ are trivial truths in ordinary language, I mean that these sentences are trivially true conditional on the empirical assumption that there are particles arranged table-wise.

give the ordinary existence of properties a deflationary treatment, then there is likewise no substantive question about the existence* of properties.

The basic form of the argument is as follows. If the deflationist offers the correct semantic treatment of ordinary existence statements, then expressions like ‘the table’, ‘2’, and ‘redness’ have a specific kind of semantic role in our language. But I will argue that to apply the existence* quantifier to terms with this semantic role involves a category mistake. If this is correct, then there are no substantive² questions to ask about the existence* of things like ordinary objects, numbers, and properties. So the ontologist cannot simply retreat from ordinary language in order to defend the substantivity of ontological debates.

3.2 Background

There is a vigorous debate over the existence of material objects like tables and trees. Nihilists claim that their existence would lead to various troublesome metaphysical consequences, such as causal overdetermination, collocated entities, and metaphysical vagueness, while realists have offered counter-arguments to each of these objections.³

But deflationary theorists like Thomasson (2007) and Hirsch (2011) have argued that there is something misguided about appealing to these types of “metaphysical” arguments to settle whether tables exist. It seems that, in ordinary language, the sentence ‘The table exists’ has the status of a trivial truth (on the assumption that there are particles arranged table-wise). So deflationists claim that the composition debate can be trivially resolved in favor of realism simply by reflecting on how we use ordinary English. Deflationists have

²On the usage of this chapter, an ontological question is *non-substantive* if, as deflationists suppose, it can be decided merely by reflecting on the ordinary use of our linguistic expressions (in the sense discussed in the next section). In contrast, an ontological question is *substantive* if it instead should be decided by evaluating “metaphysical” arguments like the ones typically offered by ontologists (see section 3.3.2). So, for example, to say that the question over the existence* of tables is non-substantive is to say that this question is not to be decided by, e.g., arguments concerning metaphysical vagueness or causal overdetermination. Note that, on this usage, a question can be non-substantive without its answer being *obvious*; to say that a question is non-substantive is just to say that it should not be decided in the way that ontologists typically suppose.

³See van Inwagen (1990) and Merricks (2001, ch. 3) for examples of arguments for nihilism. See Elder (2011, chs. 3-6) and Lewis (1986, 211-213) for examples of arguments for realism.

made similar claims about other areas of ontology as well.⁴

Earlier in the literature, many ontologists resisted the deflationist's claim that assertions like 'The table exists' are often trivially true in ordinary language.⁵ But more recently, some ontologists have claimed that there can still be substantive debates in ontology *even if* deflationists are correct about ordinary language.⁶ The claim is that, even if it is trivially true in ordinary English that tables exist, there is still a substantive debate over whether tables *really exist*.

What is "real existence"? Here, ontologists appeal to the idea that the world has a "privileged ontological structure": it is naturally carved into a certain set of objects. The goal for ontologists is to figure out how the world is carved. This question has to do with the *world*; it doesn't depend on the use of language.

If the quantifiers in ordinary English do not express real existence, how can we talk about the world's privileged structure? Here, it has been suggested that we think of ontologists as speaking a special language called "Ontologese". Ontologese is much like ordinary English except that the ordinary existential quantifier is replaced with a special "existence* quantifier" that is stipulated to correspond to the world's most natural carving. Whether or not 'The table exists*' is true does not depend on how speakers use this expression; it depends only on whether the table is a member of the world's privileged domain. Following Sider (2014), we can call the proposed shift to Ontologese the *Ontologese gambit*.

Some deflationists have worried that the notion of an existence* quantifier is unintelligible.⁷ But in this chapter, I will raise an independent objection. I will argue that, even if we grant that *some* existence* questions are substantive, there are no substantive questions to ask about the existence* of things like ordinary objects, numbers, and properties – things

⁴For example, Schiffer (2003, 2.3) argues that we can trivially establish the existence of properties by looking to the ordinary use of property terms.

⁵See Sider (2001, xix-xxiv) for this type of response.

⁶See, e.g., Cameron (2010).

⁷See, e.g., Hirsch (2011, 195).

whose *ordinary* existence is given a deflationary treatment. More precisely, I will defend the following thesis:

Thesis: If the deflationist offers the correct explanation of the triviality⁸ of a given *ordinary* existence statement, then there is no substantive question to ask about the truth of the corresponding existence* statement

For example: if we give the existence of ordinary objects a deflationary treatment, then there is likewise no substantive question about the existence* of ordinary objects. Similarly, if we give the existence of properties a deflationary treatment, then there is likewise no substantive question about the existence* of properties. (In contrast, the thesis does not challenge the substantivity of debates about the existence* of superstrings, since the existence of superstrings is not trivial in ordinary language.)

To defend this thesis, I will first explain a difference in how ontologists and deflationists typically think about language (section 3.3.3). This discussion will help clarify the dispute between ontologists and deflationists and will serve as the foundation for the later arguments. In section 3.3.4, I will defend the main thesis. In section 3.3.5, I will consider a response on behalf of the ontologist.

3.3 Two pictures of language, two pictures of the world

In this section, I'll sketch two views on the relative explanatory priority of truth and reference: the *truth-priority* view and the *reference-priority* view. I'll explain why deflationists tend to adopt the truth-priority view while ontologists tend to adopt the reference-priority view. Consider the following sentence:

- (1) 7 is prime.

On the traditional reference-priority view, we begin with a meaningful referential expression like '7': this term purports to refer to a certain entity. Referential expressions

⁸*N.b.*: Throughout this chapter, when I say that assertions like 'The table exists' are trivial truths in ordinary language, I mean that these sentences are trivially true conditional on the empirical assumption that there are particles arranged table-wise.

combine with meaningful expressions from other grammatical categories to form meaningful sentences with truth values. The truth of a sentence like (1) is then explained by the fact that ‘7’ successfully refers and its referent satisfies the predicate ‘is prime’. In this sense, the question of whether ‘7’ refers is explanatorily prior to the question of whether (1) is true.

But some theorists have claimed that, at least for arithmetical sentences like (1), truth is actually explanatorily prior to reference. Consider Dummett (1978, 40-41):

If a word functions as a proper name, then it *is* a proper name. ... If its syntactical function is that of a proper name, then we have fixed the sense, and with it the reference, of a proper name. [W]e can determine whether the name has a reference by finding out, in the ordinary way, the truth-value of the corresponding sentence ‘There is one and only one x such that Fx ’. There is no further philosophical question whether the name *really* stands for something or not.⁹

Similar remarks are made by Wright (1983, 51):

the question whether a particular expression is a candidate to refer to an object is entirely a matter of the sort of syntactic role which it plays in whole sentences. If it plays that sort of role, then the truth of appropriate sentences in which it so features will be sufficient to confer on it an objectual reference

In these passages, the order of explanation is reversed. We start with a discourse of arithmetic that is governed by certain norms of assertibility. What it is for an arithmetical sentence like (1) to be true just is for it to be correctly assertible within that discourse. And what it is for the term ‘7’ to refer just is for this term to have a certain syntactic role in true sentences like (1).

The guiding inspiration for these theorists is Frege’s (1953) *context principle*. What does the meaning of our number terms consist in? Frege’s suggestion was the context principle: “it is only in the context of a proposition that words have any meaning” (73). Frege

⁹It should be said that Dummett’s views on using the context principle to justify the existence of mathematical entities have shifted over the years. See Dummett (1978, xlii-xliii) for discussion.

thought that we have no grip on the meaning of the term ‘7’ apart from our grip on how ‘7’ features in mathematical discourse. This is why, for Frege, the truth of mathematical sentences is explanatorily prior to the reference of number terms.¹⁰

As a second example, consider (2):

(2) Mt. Everest is tall.

On the traditional reference-priority view, the truth of a sentence like (2) is explained by the fact that ‘Mt. Everest’ successfully refers and its referent satisfies the predicate ‘is tall’. But theorists have argued that truth is constitutively prior to reference in the cases like (2) as well. For example, says Hirsch (2009, 248):

The insight [into the nature of language] is that “only within the context of a sentence does a word have meaning.” What must be given up is a picture of language in which the characters at the level of sentences are generated by some underlying referential mechanisms at the level of words. This “bottom-up” picture is misguided because the references of words depend upon the characters of sentences.

Here again we have a reference to Frege’s context principle. Hirsch specifically views the order of explanation in the following way: first, principles of charity determine the coarse-grained truth conditions of sentences (i.e., those truth conditions that obtain on the most charitable interpretation of a language). The meaning of sub-sentential expressions is then constituted by how these expressions contribute to forming sentences with these truth conditions.¹¹

One upshot of Hirsch’s view is that if two groups of speakers agree on which coarse-grained truth conditions obtain and yet disagree on the truth values of sentences like (2),

¹⁰There are other competing interpretations of the context principle. For example, Milne (1986, 494-495) argues that the context principle was not a thesis about reference, but was only required because Frege wanted sentences to determine whether a sign stands for its content or for itself. Without taking a stand on this exegetical issue, I will simply assume a link between the context principle and the truth-priority view, since this is the interpretation most relevant to contemporary deflationists.

¹¹See, e.g., Hirsch (2008, 213): “Charity to use is an external constraint constitutive of interpretation [of a language].”

it follows automatically that these speakers are not using terms like ‘Mt. Everest’ and ‘is tall’ with the same meaning (beyond these terms having similar syntactic roles).¹² This is because, for Hirsch, the (fully-informed¹³) use of our sentences determines their truth conditions, which in turn determines the meanings of the expressions *in* those sentences.¹⁴

3.3.1 Priority and metaontology

How do one’s views on priority relate to metaontology? As it happens, theorists who endorse truth-priority are also deflationists. This correlation is no accident. Suppose you endorse truth-priority. On this view, what it is for a sentence like $S \equiv$ ‘John has the property of tallness’ to be true just is for it to be properly assertible within a discourse. And what it is for the term ‘the property of tallness’ to refer just is for this term to feature in certain types of properly assertible sentences. So if S is correctly assertible, it is trivial that ‘the property of tallness’ refers, and it is therefore trivial that the property of tallness exists. So any debate about the existence of this property is misguided.

Contrariwise, ontologists endorse reference priority (at least when they are doing ontology). For example, if you think that there is a substantive question about whether number terms refer, you cannot endorse a view where what it is for a number term to refer just is for it to feature in sentences that are correctly assertible within arithmetical discourse. Ontology requires a more heavyweight notion of reference, which we might distinguish with the term ‘reference*’.

¹²See Hirsch (2009, 230-231). Hirsch also adopts this stance towards quantifier expressions. Says Hirsch (2011, xiv): “I need to emphasize that I attach no importance to claiming any similarity [in the meaning of quantifier expressions in different languages] beyond ... formal-syntactic similarity.”

¹³The qualification here (“fully-informed”) is important. Hirsch does not think that charity requires us to interpret *everything* a speaker asserts as true (and, relatedly, to interpret every disagreement as merely terminological). Rather, charity requires us to consider many aspects of linguistic behavior, such as whether a speaker would be inclined to retract their assertions in response to receiving further evidence or upon hearing further arguments. What Hirsch denies is that there can be substantive disagreement “when all is said and done.” For discussion, see Hirsch (2005, 149-152).

¹⁴For a third example of a truth-priority view, see Schiffer (2003, ch. 2), who cites Frege’s context principle when defending a truth-priority view of discourse about properties and propositions.

Of course, ontologists can still accept the context principle in *some* form. For example, according to some ontologists, patterns of usage may help *select* which of the world's privileged constituents links up with a given term.¹⁵ So there is at least a sense in which ontologists can grant that use determines meaning. But deflationists endorse the stronger claim that the use of a term is *constitutive* of its meaning.

3.3.2 The Hirsch-Sider dispute

The above discussion helps clarify the dispute between Hirsch and Sider over the Ontologese gambit. This dispute is sometimes characterized as a disagreement over whether there is a single most natural way to carve up the world (Sider's view) or whether instead "reality lacks ontological structure" (Hirsch's view).¹⁶ In other words, it is a debate about what the world is like.

But the above discussion shows that there may be a more basic dispute between Hirsch and Sider: the dispute over the relative priority of truth and reference. As discussed above, for Hirsch, it is part of the nature of language that two groups of fully-informed speakers that assert seemingly inconsistent sentences in ordinary conditions cannot be using terms with the same meanings. This is the most basic reason why Hirsch doesn't think there can be a substantive dispute over 'There exists* a table': the meaning of the expression 'there exists*' will always depend on what sentences a theorist ends up asserting "when all is said and done" (i.e., when the theorist is fully-informed about which coarse-grained truth conditions obtain and has considered all of the relevant arguments – see footnote 12).¹⁷ So if two ontologists end up asserting different things when all is said and done, *that*

¹⁵See, e.g., Sider (2001, xix-xxiv).

¹⁶See Sider (2011, vii) for this kind of characterization of the dispute.

¹⁷Of course, the arguments that influence the use of existence* statements may very well include the "metaphysical" arguments discussed by ontologists. But even if this were so, it would not imply that Hirsch views existence* questions as substantive (on the usage of this chapter – see footnote 2). Hirsch would still deny that existence* questions should be decided by *evaluating* metaphysical arguments. These arguments are only indirectly relevant, in the sense that how theorists are disposed to respond to such arguments is a part

very fact is proof enough that the existence* quantifier has a different meaning for each of them.¹⁸ When we recognize this underlying disagreement about language, we see why the Ontologese gambit will not be persuasive to a theorist like Hirsch.

This is not to say that the Ontologese gambit doesn't have an important dialectical role. After all, a theorist could be skeptical that there is a single most natural way to carve up the world even without endorsing a global truth-priority view of language. These remarks suggest that the Ontologese gambit actually requires two assumptions: (i) that reference priority is coherent and (ii) that the world has a privileged ontological structure. A theorist who rejects (i) will probably also reject (ii), but it is possible to reject (ii) without rejecting (i).

In the next section, I'll raise a third type of objection to the Ontologese gambit. For the purposes of this argument, I will grant the ontologist the assumptions (i) and (ii). In so doing, I'm effectively granting the ontologist that at least *some* existence* questions are substantive. But as will be seen, these assumptions do not guarantee that *every* existence* question is substantive. Indeed, I will argue that existence* questions about items like ordinary objects, properties, and numbers involve a type of category mistake.

3.4 A new objection

A *category mistake* is a “semantic or ontological error in which things belonging to a particular category are presented as if they belong to a different category” (Blackburn (1994, 54)). One of Ryle's (1949, 16) famous examples is a visitor who, after being shown the colleges and the library, asks: “But where is the University?” This question is misguided because it rests on a semantic confusion: the visitor mistakenly thinks that the term ‘University’ has the same type of semantic role as a term like ‘library’ (i.e., the role of referring to a specific building).

of linguistic use.

¹⁸For a clear statement of this point, see Hirsch (2009, 230-231).

Ryle's examples of category mistakes typically involve infelicitous property ascriptions (e.g., trying to ascribe a specific spatial location to a university). But it seems there can also be category mistakes involving quantifiers.¹⁹ For example, consider the following speech:

O: I grant that, in ordinary English, 'There is a lawyer' trivially entails 'There is an attorney'. But I'm interested in the following substantive question: on the assumption that there exists* a lawyer, does there also exist* an attorney?

Even if we grant that there are substantive questions about the existence* of certain kinds of things, it is clear that this particular gambit is misguided. Intuitively, this is because of the semantic role of the term 'attorney'. Just as it is a category mistake to ask where the university is after having been shown the university's buildings, so too it is a category mistake to ask about whether an attorney exists* after granting the existence* of a lawyer. The question presents attorneys as belonging to a different category than lawyers, but in fact 'attorney' is just a synonym for 'lawyer'.

For a second example, suppose an ontologist asked: "Do sakes exist*?" Again, this gambit seems misguided. This is because, while expressions like 'John's sake' are syntactically singular terms, their semantic role isn't to refer to anything. So to try to ask a substantive question about the existence* of sakes involves a category mistake.

In this section, I will make a similar point for terms like 'the table' and '2'. Even if there are substantive questions about the existence* of certain kinds of things²⁰, there are no substantive questions to ask about the existence* of things like ordinary objects, numbers, and properties – things whose *ordinary* existence is given a deflationary treatment. The form of the argument is simple. On the assumption that the deflationist is correct about

¹⁹For the purposes of this chapter, it is irrelevant whether the examples ahead technically count as category mistakes on Ryle's usage. I will call them category mistakes due to the close analogy with Ryle's own examples, but the reader can use an alternative term if that is preferred.

²⁰I.e., things whose ordinary existence is not trivial, such as superstrings or God.

truth priority in ordinary language²¹, expressions like ‘the table’ and ‘2’ have a specific kind of semantic role. But, as I will explain in 3.4.1, to apply the existence* quantifier to terms with this semantic role involves a category mistake. If this is correct, then there are no substantive questions to ask about the existence* of things like ordinary objects, numbers, and properties.

3.4.1 The tifleron example

To intuitively illustrate the category mistake I have in mind, it will be useful to first consider a toy case involving a discourse where truth is *clearly* prior to reference.

Suppose there is a community *C* whose language is just like English except that it also includes three extra singular terms (‘tifleron’, ‘jeren’, and ‘miresa’) and three extra predicates (‘is dessel’, ‘is fessel’, and ‘is gessel’). *C*-speakers use these terms in such a way that sentences involving these terms are trivially inferable from certain “ordinary” sentences.²² These trivial inferences are described in the following table, where $P \succ Q$ means that the inference from *P* to *Q* is trivial for members of *C* (*n.b.*: the English sentences in the table below were chosen randomly, so one should not worry about looking for an explanation of why *C*-speakers make these particular inferences).

Grass is green. \succ Tifleron is dessel.

John is tall. \succ Tifleron is fessel.

Ally is running. \succ Tifleron is gessel.

It is raining. \succ Jeren is dessel.

A window is open. \succ Jeren is fessel.

There is a brown table. \succ Jeren is gessel.

²¹This assumption is appropriate since I am defending a conditional thesis: “If the deflationist offers the correct treatment of a given ordinary existence statement, then ...”. In section 3.3.5, I will consider whether the ontologist can preserve the substantivity of ontological debates by denying this antecedent.

²²When I say that an inference from *P* to *Q* is trivial, I mean that it has the same status as the inference from ‘John is tall’ to ‘John has the property of tallness’ or the inference from ‘John has two hands’ to ‘The number of John’s hands is two’.

Mary is in pain. $\gamma\gamma$ Miresa is dessel.
Birds are singing. $\gamma\gamma$ Miresa is fessel.
The car is blue. $\gamma\gamma$ Miresa is gessel.

We can suppose that the *C*-speakers apply logical operators to the above sentences with their standard inferential roles. So, for example, *C*-speakers are inclined to infer ‘Tifleron is dessel’ from ‘Tifleron is dessel and jeren is fessel’, and they are inclined to infer ‘There is something that is dessel’ from ‘Tifleron is dessel’. In addition, *C*-speakers are disposed to infer ‘The term ‘tifleron’ refers’ and ‘It is true that tifleron is dessel’ from sentences like ‘Tifleron is dessel’. Furthermore, *C*-speakers embed the above sentences in ‘that’-clauses in the usual ways (for example, *C*-speakers who assert ‘Tifleron is dessel’ are inclined to assert ‘I believe that tifleron is dessel’, and so on).

Summing up: the above sentences are stipulated to have the same kinds of inferential roles as any other subject-predicate sentences in our language.²³ But because these sentences are stipulated to have such strange truth conditions, there is almost no temptation to think that reference is prior to truth in this area of discourse.²⁴ On the contrary, it is much more natural to say that ‘tifleron’ is just a term that contributes in a certain syntactic way to sentences with certain coarse-grained truth conditions (as on the truth-priority view).

(If one is accustomed to the reference-priority view of language, one might be tempted to go further and say that the term ‘tifleron’ does not refer at all. But this would be a mistake. What matters for present purposes is that, from the standpoint of the truth priority view, the term ‘tifleron’ *does* refer. Remember: on the truth priority view, what it is for the term ‘tifleron’ to refer just is for this term to have a certain syntactic role in correctly

²³There are various details left unspecified in this example. For example, I haven’t specified what speakers are inclined to say about sentences like ‘That car is fessel’ or ‘Tifleron is tall’. I think we can imagine these details filled out in different ways (perhaps *C*-speakers are inclined to view such sentences as indeterminate, or perhaps *C*-speakers are inclined to deny such sentences, etc.) without it affecting the present argument.

²⁴One might try to say ‘tifleron’ refers to a set-theoretic entity, such as the set {grass, John, Ally}. To rule out this possibility, we can suppose that *C*-speakers are inclined to assert ‘Tifleron is not identical to the set {grass, John, Ally}’.

assertible sentences like ‘Tifleron is fessel’.²⁵)

Now suppose an ontologist were to say: “I grant that the sentence ‘Tifleron exists’ is trivially true in ordinary language when grass is green. But I want to ask the substantive question: does tifleron exist*? That is: does ‘tifleron’ refer* to one of the world’s privileged constituents?” I think it is intuitively obvious that such a gambit would be misguided. We can explain the problem with this gambit as follows.

For ‘Tifleron exists*’ to be true, it must be that ‘tifleron’ links up with one of the world’s privileged constituents. To use the terminology from 3.3.1, ‘tifleron’ must refer in the heavyweight sense (i.e., refer*). But if truth priority holds for tifleron discourse, heavyweight reference is completely unrelated to the actual type of contribution the term ‘tifleron’ makes to the language. As discussed above, the semantic role of ‘tifleron’ is merely to contribute in a certain syntactic way to sentences that express coarse-grained truth conditions. So to ask whether ‘tifleron’ links up with one of the world’s privileged constituents involves a category mistake: ‘tifleron’ just isn’t a term whose role involves (potentially) linking up with one of the world’s privileged constituents.

3.4.2 A few clarifications

It is worth explicitly heading off a few mistaken interpretations of what I am claiming is defective about ‘Tifleron exists*’. First, the problem has nothing to do with the existence* quantifier’s being a new introduction to the language; it is perfectly permissible to introduce new expressions to a discourse with truth priority. For example, there is nothing stopping *C*-speakers from introducing the predicate ‘is tessel’ to the language and using the sentence ‘Tifleron is tessel’ to express certain coarse-grained truth conditions. Such introductions are completely in line with the semantic role of ‘tifleron’ and generate no category mistakes.

²⁵Furthermore, I have stipulated that the inference from ‘Grass is green’ to ‘The term ‘tifleron’ refers’ is trivial for *C*-speakers. So we should at least grant that ‘tifleron’ refers in a deflationary sense.

Nor is the problem attributable to any vagueness in the term ‘tifleron’. For one thing, I noted in footnote 22 that ‘tifleron’ may have a very determinate inferential role on which other atomic sentences like ‘Tifleron is tall’ are always regarded as false. On this possibility, there wouldn’t be anything semantically defective about ‘Tifleron is tall’ or ‘Tifleron is negatively charged’. But even if such sentences lacked determinate truth conditions, this would not by itself suggest the type of category mistake I identified in 3.4.1. Perhaps, in this case, there would be a sense in which ‘Tifleron is tall’ is semantically defective, but it wouldn’t be the same sense in which ‘Tifleron exists*’ is semantically defective.

Nor is the problem the result of the term ‘tifleron’ having a very *simple* inferential role. By “randomly” assigning truth conditions to further atomic ‘tifleron’-sentences, one could make the inferential role of ‘tifleron’ arbitrarily complex. Even so, the sentence ‘Tifleron exists*’ would still involve the category mistake outlined in 3.4.1.

In contrast: the real problem with ‘Tifleron exists*’ is that ‘tifleron’ just isn’t a term whose role involves (potentially) linking up with one of the world’s privileged constituents. Instead, its role is merely to contribute in a certain syntactic way to sentences that express coarse-grained truth conditions.²⁶ This is the reason why asking whether ‘tifleron’ links up with one of the world’s privileged constituents involves a category mistake.

3.4.3 The original examples

For the reason just described, no actual ontologist would ever think to give serious arguments for or against the existence* of tifleron. But here is the crucial point: from the standpoint of the deflationist, ‘tifleron’ and terms for numbers, properties, and ordinary objects are on a par. For example, consider ‘David’, the name of Michelangelo’s statue. While ‘David’ may be embedded in a more complex linguistic practice than ‘tifleron’, both terms’ role in the language is merely to contribute in a certain syntactic way to sentences

²⁶As discussed in 3.4.1, any temptation to think that ‘tifleron’ has some *other* role, such as the role of heavyweight reference, is counteracted when we consider the strange truth conditions of sentences involving this term.

with certain coarse-grained truth-conditions. In other words, the deflationist will say that ‘David’ refers in the exact same sense that ‘tifleron’ refers.

On the assumption that neither ‘tifleron’ nor ‘David’ has the semantic role of (potentially) linking up with the world’s privileged constituents, what happens when we try to apply an existence* quantifier to these terms? Perhaps we should say that ‘Tifleron exists*’ and ‘David exists*’ are trivially false, or perhaps we should say that they are indeterminate. But this is a matter for semantic decision, not a matter for substantive philosophical argument.²⁷

Of course, ontologists will think that it *does* make sense to ask whether David exists*. The ontologist might even say: if the truth-priority view of ordinary object discourse treats ‘tifleron’ and ‘David’ on a par, then so much the worse for the truth-priority view.²⁸ I am not unsympathetic to this line of response. But it must be remembered: there is a strong motivation for adopting the truth-priority view. Deflationists adopt this view because it explains why the sentence ‘David exists’ is trivial in ordinary language (on the assumption

²⁷One might worry: given that the term ‘David’ in the sentence ‘David exists*’ is an Ontologese term (and not an English term), why should it matter what semantic role the term ‘David’ has in English?

(This objection may seem to be supported by the fact that, in the literature, theorists have suggested that replacing ordinary quantifiers with existence* quantifiers induces a shift in meanings throughout the rest of the language (see, e.g., Sider (2007, 217-219)). But, in fact, the meaning-shifts discussed in the literature are different. While it is outside the scope of this chapter to present the details, suffice to say that when Sider discusses the meaning-shifts induced by changing quantifiers, he is assuming a reference-priority view of both English and Ontologese. But the current objection requires a much more radical type of meaning shift: the term ‘David’ in Ontologese would have a completely different *type* of semantic role than it does in English.)

To see the problem with this suggestion, consider the analogous response: “I know that in the *C*-speakers’ language, the semantic role of the term ‘tifleron’ is merely to contribute in a certain syntactic way to sentences with certain coarse-grained truth conditions. But in Ontologese, it has a different semantic role. So there is a substantive question about the existence* of tifieron.” We would be unable to make any sense of this speech. The ontologist is evidently using the term ‘tifleron’ in a way that is completely unrelated to its ordinary use. So we would have no idea what the ontologist is talking about when they use this term.

Of course, one might think that this response makes more sense for a term like ‘David’. But remember: under the assumption of the truth-priority view, ‘tifleron’ and ‘David’ are on a par.

²⁸To be sure, there are many disanalogies between the terms ‘tifleron’ and ‘David’. For example, one difference is that ‘David’ has a more complex inferential role than ‘tifleron’. But as discussed in 3.4.2, the complexity of an expression’s inferential role is unrelated to the incompatibility between truth-priority terms and the existence* quantifier. To avoid the present worry about category mistakes, a different kind of disanalogy is needed: ‘David’ must be a reference-priority term instead of a truth-priority term like ‘tifleron’.

that there are particles arranged David-wise).²⁹

In conclusion: perhaps it makes sense to ask questions about the existence* of certain types of things, but there is no substantive question about the existence* of David. This is because, if we allow that the deflationist is correct about ordinary discourse, applying the existence* quantifier to the term ‘David’ involves a category mistake. Similar remarks would apply for anything else whose ordinary existence is given a deflationary treatment. So this argument supports the following conditional thesis:

Thesis: If the deflationist offers the correct explanation of the triviality³⁰ of a given *ordinary* existence statement, then there is no substantive question to ask about the truth of the corresponding existence* statement

3.4.4 The relevance of ordinary language

One might think that the truth of Ontologese sentences depends on facts about the world, not facts about the use of our language. But the tiferon example reveals a difficulty with this suggestion. It would be silly to stipulate that we do not need to consider the ordinary use of the term ‘tiferon’ when asking whether tiferon exists*; ordinary use shows that tiferon isn’t the kind of thing you can ask interesting existence* questions about.

The lesson is that Ontologese assertions do not merely depend on the world; they also presuppose that the relevant term (or predicate) has an appropriate semantic role. When this presupposition fails, existence* assertions will involve a category mistake (and their truth will be a matter for semantic decision).

In the next section, I will consider a possible response to the category mistake objection on the behalf of the ontologist.

²⁹In response, the ontologist could try to offer some alternative explanation of this assertion’s triviality. I will consider this possible response in section 3.3.5.

³⁰*N.b.*: Throughout this chapter, when I say that assertions like ‘The table exists’ are trivial truths in ordinary language, I mean that these sentences are trivially true conditional on the empirical assumption that there are particles arranged table-wise.

3.5 Denying the antecedent

Section 3.4 establishes a conditional thesis: *if* the deflationist offers the correct account of a given ordinary existence statement, then the truth of the corresponding existence* statement is a matter for mere semantic decision. One natural way to try to preserve the substantivity of ontological debates would be to deny the antecedent of this conditional. If the deflationist offers an incorrect treatment of ordinary language, then the category mistake objection loses its relevance.

One way to reject the antecedent would be to deny that the ordinary existence statements in question have the status of (conditionally) trivial truths. But since the point of Ontologese gambits is to *grant* the assumption that ordinary existence statements are trivial, I will set this proposal aside.

The other way to deny the antecedent would be to reject the deflationist's specific explanation of the triviality of ordinary existence statements. If the ontologist could explain the triviality of ordinary existence statements without truth priority, the difficulties of section 3.4 would be avoided. In this section, I'll consider several alternative semantic proposals.

But first, a dialectical observation: even if the ontologist *can* provide an alternative semantic proposal, the current proposed response shifts the terms of the debate. Usually, the dispute between ontologists and deflationists is thought to hinge on whether or not the world has a privileged ontological structure. But on the current proposal, the ontologist must also engage the deflationist in a dispute over the proper semantic treatment of ordinary language.

3.5.1 Paraphrase

One alternative way to accommodate the triviality of 'David exists' would be to say that the latter is a paraphrase of the sentence 'There are particles arranged David-wise'. On this treatment, 'David' is syntactically a singular term but it doesn't function semantically

as a singular term.

But this proposal is no help to the ontologist. If the current proposal is right, then asking ‘Does David exist*?’ is akin to asking ‘Does the average professor exist*?’ Such a question is clearly misguided. Perhaps we should say that ‘David exists*’ is trivially false, or perhaps we should say it is ungrammatical. But this is a matter for semantic decision, not a matter for substantive philosophical argument.

An ontologist might reply: “This doesn’t show that debates about David’s existence* are non-substantive because it isn’t *obvious* that the sentence ‘David exists’ involves paraphrase.” But on my usage (see footnote 2), a question is non-substantive when it isn’t to be decided by evaluating the types of “metaphysical” arguments typically offered by ontologists. In the present case, we are supposing that the paraphrase story is adopted to explain the triviality of the sentence ‘David exists’. So this makes debate about the existence* of David non-substantive according to the usage of this chapter.

3.5.2 Composition as identity

Some theorists have claimed that wholes are identical to their parts (see, e.g., Baxter (1988)). This view faces an immediate objection: how can there be an identity between these entities given that the whole is one and the parts are many? Still, this view has one nice advantage: if David and its parts are identical, it is no surprise that the inference from ‘There are particles arranged David-wise’ to ‘David exists’ is trivial.

Unlike with the paraphrase approach, there is nothing ungrammatical about the sentence ‘David exists*’ with composition as identity, since ‘David’ is a genuine singular term. But this proposal is still no help to the ontologist. If ‘David’ in ordinary English is just a term that refers to the same thing as ‘the particles’, then it is trivial that David exists* (assuming we’ve granted, as most ontologists do, that the particles arranged David-wise exist*). So on this case, too, the Ontologese gambit doesn’t generate a substantive

metaphysical dispute.³¹

3.5.3 Fictionalism

Some ontologists have suggested that we can accommodate the trivial truth of ‘David exists’ by appealing to fictionalism. The basic idea is that, when speakers assert ‘David exists’, they are really asserting: *within the fiction of ordinary mereology, David exists.*³²

I think fictionalism is one of the ontologist’s better responses to the category mistake argument. If ordinary speakers are pretending that David exists, then the triviality of existence questions in ordinary language would not in and of itself tell against the substantivity of existence* questions in the ontology room.

This being said, there are serious worries about fictionalism as a semantic treatment of ordinary object discourse. One very basic worry is that it does not *seem* that we are engaged in a fiction when we ordinarily assert ‘There is a table’. So if fictionalism is true, it introduces “a novel and quite drastic form of failure of first-person authority over one’s own mental states” (Stanley (2001, 47)). As a second objection, many philosophers (such as Thomasson (2013)) have worried about the coherence of viewing an entire area of ordinary discourse as fictional. It seems that, in order to make sense of a fictional use of a sentence like ‘There is a table’, we need to be able to distinguish a non-fictional use of this sentence. But if ordinary assertions of ‘There is a table’ are fictional, we may be unable to draw this distinction.

Unfortunately, it is outside the scope of this chapter to discuss fictionalism in any depth. If the above concerns can be overcome, fictionalism may provide the ontologist a response to the category mistake objection. But suffice to say that there are concerns

³¹Again, a theorist might object that it is not obvious that the identity view of composition is correct. But I am supposing that we adopt this story in order to accommodate the (conditional) triviality of the ordinary sentence ‘David exists’. So once again, reflection on language settles the question of whether David exists*, which is sufficient for a debate to count as non-substantive on the usage of this chapter.

³²Different versions of fictionalism offer different accounts of the assertoric content of fictional utterances; these differences won’t affect the current discussion.

about whether fictionalism can provide an adequate semantic treatment of ordinary object discourse.

3.6 Conclusion

My purpose in this chapter has been twofold. First, I have suggested that one basic source of disagreement between ontologists and deflationists is over the relative priority of truth and reference in ordinary language. When we recognize this difference, we can understand why Ontologese gambits are unlikely to be persuasive to a truth-priority theorist like Hirsch.

Second, I have raised a new type of objection against Ontologese gambits. I've argued that, if truth-priority holds for ordinary discourse, then there are no substantive questions to ask about the existence* of things like tables, numbers, and properties. This is because, if truth-priority holds for ordinary discourse, terms like 'table', '7', etc. do not have the semantic role of (potentially) linking up with the world's privileged constituents. So asking questions about the existence* of such items involves a category mistake.

4 A NEW EPISTEMIC ARGUMENT FOR HUMEAN LAWS

4.1 Introduction

Many philosophers have worried about the epistemology of non-Humean laws.¹ The worry is that, if laws do not supervene on the Humean base, it is not clear how we could ever be empirically justified in our beliefs about the laws. This argument is inconclusive; philosophers have offered a variety of responses to defend the epistemology of non-Humean laws.² But in this chapter, I offer a new type of epistemic argument for Humeanism to which these standard responses do not apply.

After providing background on the debate over Humeanism (section 4.2), I will present the new epistemic argument in sections 4.3 and 4.4. In sections 4.5-4.7, I will sketch how the new epistemic argument can also be used to deflect certain objections to Humeanism found in the literature.

4.2 Background

The debate between Humeans and non-Humeans over the laws of nature can be interpreted as a debate over the following thesis³:

Humean Supervenience about Laws (HS): two possible worlds cannot differ on what is a law of nature unless they also differ in their Humean base.

Intuitively, the Humean base will include particular facts about the existence of physical objects, their physical properties, and their spatiotemporal relations to one another. It will

¹See Mellor (1980, 108), Earman & Roberts (2005), and Roberts (2008, ch. 4).

²See Armstrong (1983, 107-110), Carroll (1994, 102-116), and Carroll (2008).

³See, e.g., Carroll (1994, 58) and Loewer (1996).

exclude facts that involve laws of nature, causation, counterfactuals, or dispositions. There are different ways to precisify the notion of a Humean base, but this intuitive characterization will suffice for the purposes of this chapter.

4.2.1 The traditional epistemic argument

The denial of HS raises an epistemic puzzle. It is clear how we learn about the Humean base; at least in many cases, we directly observe and measure it. But if the laws are something over and above the Humean base, it is not clear how we could ever be empirically justified⁴ in our beliefs about the laws. There are various ways to make this worry precise. But for ease of presentation, I will focus on a specific form of the argument given by Earman & Roberts (2005). Let T be any scientific theory that posits at least one law and which is formulated as follows:

T : L is a law of nature, and X

Here, X stands for whatever content T has over and above the lawhood of L . Earman & Roberts define a rival theory T^* as follows (256):

T^* : L is true but is not a law, and X

T^* agrees with T that L is a true regularity; the two theories differ only on L 's status as a law. Earman & Roberts' argument then proceeds as follows (257):

Traditional Epistemic Argument for HS

Premise 1: If HS is false, then no empirical evidence can favor T or T^* over the other.

Premise 2: If no empirical evidence can favor T or T^* over the other, then we cannot be justified on empirical grounds in believing that T is true.

3: If HS is false, we cannot be justified on empirical grounds in believing that

⁴One is empirically justified in believing that P just in case "empirical evidence-statements, together with the norms of the empirical sciences, can be used to offer a positive justification for believing that P " (Earman & Roberts (2005, 258)).

T is true. (from 1,2)

4: If HS is false, we cannot be justified on empirical grounds in believing of any proposition P that it is a law of nature. (from 3)

To defend premise 1, Earman & Roberts note (given some plausible background assumptions that non-Humeans about laws typically embrace) that T and T^* are empirically equivalent in the following strong sense: every possible world where one of these theories is true shares its Humean base with a world where the other is true (263). They then argue that, since T and T^* are empirically equivalent, no empirical evidence could confirm one over the other.⁵

To defend premise 2, Earman & Roberts claim that the norms of science do not justify taking pointless epistemic risks: risks that can never conflict with experience. But if no possible empirical evidence favors T over T^* , to endorse T over T^* would be to take a pointless epistemic risk. So, if there is no empirical evidence favoring T over T^* , we are not empirically justified in believing that T (259-260).

4.2.2 Shortcomings of the traditional argument

While I am sympathetic to the above argument, non-Humeans have resisted it various ways. One strategy is to challenge premise 1 by claiming that empirical evidence supports our law judgments through inference to the best explanation. For example, some philosophers claim that we need to posit non-Humean laws in order to *explain* certain striking empirical regularities.⁶

Non-Humeans have also appealed to contextualism to resist the argument.⁷ Perhaps, in a context where we actively consider it, the hypothesis T^* *does* threaten the justification

⁵Without presenting the details, I note that Earman & Roberts consider a variety of ways in which evidence can favor one theory over another, and conclude that none favor T over T^* (263-272).

⁶See Dretske (1977, 261-262), Armstrong (1983, 52-59), and Carroll (2008, 4.2). Earman & Roberts (2005, 257) and Roberts (2008) argue that we do not need non-Humean laws to explain such regularities.

⁷See Carroll (2008, 4.3).

of our law judgments. But in ordinary scientific contexts, T^* is not salient. So, just as evil demon scenarios do not threaten our beliefs about material objects in ordinary contexts, so too T^* does not threaten our belief that T in scientific contexts.⁸

It is outside the scope of this chapter to assess these objections. Instead, my aim is to present a new type of epistemic argument for HS to which these objections do not apply.

4.2.3 A new epistemic argument

The new epistemic argument also appeals to rival law hypotheses, but in a different way. Earman & Roberts argue that our *actual* empirical evidence does not favor our law judgments over rival law hypotheses. But in the new epistemic argument, I consider possible situations in which our evidence conclusively *favors* a rival law hypothesis. I argue that, even in these possible cases where — by the non-Humean’s lights — we learn that our law judgments are false, scientists would continue to talk about laws just as they always had. I then argue that the best explanation of this behavior is that, in fact, scientists are not talking about non-Humean laws. Here is the argument step by step:

New Epistemic Argument for HS

Premise 1: Even if scientists were to learn that a rival law hypothesis H obtained, they would not alter their law discourse.

Premise 2: If scientists would not alter their law discourse upon learning that H obtains, scientists are not referring to non-Humean laws when they use the term ‘law’ in ordinary scientific contexts.

3: Scientists are not referring to non-Humean laws when they use the term ‘law’ in ordinary scientific contexts. (from 1,2)

Corollary: two possible worlds cannot differ on what is a law of nature unless they also differ in their Humean base.

I will defend the two premises in the next two sections.

⁸Earman & Roberts (2005, 274-278) consider this objection, interpreting it as a threat to premise 2. But according to Carroll (2008, 4.3), we should view the contextualist as granting that premise 2 is true in certain contexts, but maintaining that this fact does not threaten the justification of law judgments in *ordinary* scientific contexts.

4.3 Defending premise 1

In this section, I will consider two thought experiments in which scientists receive evidence that — by the non-Humean’s lights — reveals their law judgments to be false. I will argue that scientists would not alter their law discourse in response to this evidence, thereby establishing premise 1.

4.3.1 Laws in scientific practice

Since this section makes a claim about the linguistic behavior of scientists, it will be useful to first review the role of laws in scientific contexts. Here, we can view scientific contexts as contexts where (i) our ultimate evidence is from observations and empirical measurements and (ii) reasoning involves inductive, abductive, and statistical inferences from that evidence (Roberts (2008, 264)).

-Fixed points in counterfactual reasoning: Lange (2000, ch. 2) and Roberts (2008, chs. 5-7) claim that laws have a special role in scientific counterfactual reasoning. Intuitively, laws of nature are held fixed in counterfactual reasoning in ways that mere regularities are not. More precisely, Lange and Roberts defend the principle of Nomological Preservation (NP)⁹:

NP: $\forall Q\forall P$ (if Q is consistent with the lawhood of all and only the actual laws of nature, and the lawhood of all and only the actual laws of nature logically entails P , then: if Q had been the case, then P would still have been the case)

It is controversial whether NP holds in *all* contexts¹⁰, but there is a strong argument that NP is operative in any *scientific* context. In any activity that deserves the name of “empirical science”, evidence must ultimately stem from observations and measurements. But Roberts (2008, 273-291) argues that, in order to recognize something as an observation or measurement, one must assume the truth of the counterfactual conditionals described by NP. This is

⁹This formulation is from Roberts (2008, 191). Lange (2000, 53) calls his formulation Λ -preservation.

¹⁰Lange (2000, ch. 2) defends this claim, while Roberts (2008, ch. 6) denies it.

because we cannot distinguish conditions under which a measurement procedure is reliable without holding the laws fixed in our counterfactual reasoning.

-*Supporting induction*: Laws of nature also have a special role in scientific *inductive* reasoning. Says Lange (2000, 21): “we can regard the observed instance as confirming the hypothesis “inductively” — roughly, as confirming, of any unexamined case, that it accords with the hypothesis — only if we believe that the hypothesis may state a law.”¹¹ Lange offers the following example: because it would be a mere coincidence that all coins received as change today are pennies, we do not regard receiving a penny as change as evidence that the next received coin will be a penny. In contrast, because we think it follows (or, at least, may follow) from the laws, the hypothesis that all samples of a compound boil at temperature C is thought to be inductively confirmed by an observation of a given sample of that compound boiling at C .¹²

-*Foundation of important scientific distinctions*: Scientists appeal to laws, but not other empirical regularities, in order to determine what is possible. Maudlin (2007, 7-8) offers the following example: because a closed universe and an open universe are both consistent with Einstein’s gravitational law, physicists believe that both types of universe are possible. Roberts (2008, 12-16) offers the example of statistical mechanics, where the laws are used to distinguish the dynamically possible trajectories through a system’s state space from the merely logically possible trajectories.

Laws are also relevant to determining when further explanation of a phenomenon is called for. Roberts (2008, 17) presents the example of the striking regularity that all planets and moons in the Solar System orbit in the same direction and roughly in the same plane of motion. Because scientists do not consider this widespread regularity to be a consequence of the natural laws, it is seen as requiring further explanation in a way that regularities

¹¹Lange (2000, 143-156) precisifies this characterization in order to avoid certain counterexamples, but I will set these details aside.

¹²For further discussion, see Dretske (1977, 261-262) and Armstrong (1983, 52-59).

following from the laws do not.

-*Objects of scientific discovery*: Finally, laws are objects of scientific discovery. Scientists do not merely investigate specific matters of particular fact; from these particular fact, they infer claims about general laws. In the literature, this point is made with the claim that “laws are confirmed by their instances.”¹³

4.3.2 Preliminaries

Here are some final preliminary notes on the thought experiments.

(a) *The hypotheses*: In Earman & Roberts’ (2005) argument, the rival law hypothesis was T^* : L is true but not a law, and X . In the thought experiments below, the rival law hypotheses are more specific. For example, one such hypothesis is $H_1 \equiv$ ‘The world’s fundamental ontology consists of Humean facts and nothing else’. According to the non-Humean, it is very unlikely that a hypothesis like H_1 is true. But the non-Humean will grant that such hypotheses are at least *possible*.¹⁴ In the thought experiments, I consider how scientists would respond to evidence conclusively favoring this hypothesis.

(b) *The Oracle*: Non-Humeans will probably deny that ordinary scientific evidence could ever support a hypothesis like H_1 over our actual law judgments. So in the thought experiments, I assume that scientists have *non-scientific* evidence in favor of the rival hypotheses instead. Specifically, I assume (in each case) that an all-knowing, completely trustworthy Oracle *tells* us that the rival hypothesis obtains. One advantage of this strategy is that, since the Oracle is assumed to be completely trustworthy, we can assume that scientists have (near-enough) conclusive evidence in support of the rival hypothesis.¹⁵

¹³See Lange (2000, 2.4) for discussion.

¹⁴For example, Armstrong (1983, 71-72) and Tooley (1987, 28-29) grant the *possibility* of a Humean world.

¹⁵Given the focus on ordinary scientific practice in 4.3.1, one might worry that this appeal to an Oracle is somewhat fanciful. But, in fact, the Oracle does no essential work in the argument ahead. To establish premise 1, we need to consider situations where scientists accept a hypothesis H that — according to non-Humeans — falsifies their law judgments. The Oracle provides a vivid way of illustrating this type of situation. But

(c) *Scientific contexts*: In each thought experiment, I ask how *scientists* would react to evidence that — according to the non-Humean — falsifies their law judgments. I focus on scientists (as opposed to laypersons or philosophers) because the term ‘law’ is a term from scientific discourse.

We can distinguish scientists’ reaction to the Oracle’s testimony immediately after receiving it from their “long-term” reaction (i.e., their judgments once they have returned to ordinary scientific work). I will now explain why only the latter reactions are relevant to this chapter.

At a general level, I want to leverage facts about the ordinary epistemology of law judgments into an argument for HS. So, to find out about this epistemology, we need to consider contexts where the term ‘law’ is used in its ordinary way. Since ‘law’ is a term from scientific discourse, these ordinary contexts will be scientific contexts: contexts where we engage in inductive reasoning from evidence obtained through observation and measurement (see 4.3.1). But the context immediately following the Oracle’s testimony is not an ordinary scientific context; it is a context where a completely different type of evidence (i.e., testimony from an Oracle) is salient. For this reason, scientists’ reactions immediately after the Oracle’s testimony are less relevant to ordinary epistemology than scientists’ reactions once they return to scientific work.

Focusing on long-term reactions also helps avoid complications that arise with immediate reactions. To assess the latter would probably require a poll. And we have no reason to expect scientists would respond to such a poll in any uniform way. After all, the ordinary norms of use governing the term ‘law’ are not operative in Oracle-testimony contexts.

But for long-term reactions, no polls are needed. This is because we already know a lot about the role of law judgments in scientific discourse (see 4.3.1). By considering this role, we can make confident predictions about scientists’ behavior upon returning to

for the purposes of the argument itself, it doesn’t matter how scientists end up accepting *H*. If one prefers, one can instead suppose that scientists accept *H* because they hear a philosopher provide some persuasive argument for *H*.

scientific work.

(d) *Theological descriptions*: One might worry that, even if we restrict attention to scientific contexts, scientists' reactions to the Oracle's testimony will not be relevant to the ordinary epistemology of law judgments. After all, most scientists are not familiar with the terminology of the debate over HS. If scientists do not fully understand the Oracle's testimony, their reactions to this testimony (even in scientific contexts) will tell us little about how they use the term 'law'.

To finesse this issue, I will invoke the conceit of a divine lawgiver. We can imagine God performing two tasks when creating the world. First, God assigns all of the particles initial conditions. Second, God issues a set of decrees (e.g., "Massive bodies attract one another with a force $F_G = \frac{Gm_1m_2}{d_{1,2}}$ ") that the particles must obey throughout all history. Of course, most non-Humeans do not posit an actual divine lawmaker.¹⁶ But non-Humeans should allow that, in a possible world where there *is* a divine being issuing decrees, the (non-Humean) laws of nature supervene on those decrees.

This (limited) link between non-Humean laws and divine decrees will allow me to describe rival law hypotheses without using technical language. Most ordinary people have an intuitive grip on the idea of a divine lawmaker. Indeed, this is why non-Humeans sometimes appeal to this idea when intuitively motivating the "governing" conception of laws.¹⁷ So by framing the rival law hypotheses in terms of a divine lawgiver, we can set aside worries about whether scientists understand the Oracle's testimony.

4.3.3 Case 1: the Humean world

Suppose we travel to the Oracle to learn about the fundamental metaphysical structure of the world. There, we hear the following speech:

¹⁶For an exception, see Foster (2004).

¹⁷See Carroll (1994, 17-18) and Lange (2000, 51). See also Beebe (2000, 580-581) and Loewer (1996, 115) for discussion from a Humean perspective.

“At the fundamental level, there is a vast mosaic of particular matters of fact, and that is all. There are certain regularities in this mosaic; for example, massive particles attract one another according to the equation $F = \frac{Gm_1m_2}{d_{1,2}}$. But there is nothing that *explains* why these regularities obtain. For example, it is not as if God issued a command that particles *must* conform to the equation $F_G = \frac{Gm_1m_2}{d_{1,2}}$. Particles just happen to move around in these patterns, as a matter of brute fact.”

If scientists heard this testimony, how would it affect their law judgments? It is difficult to say how scientists would *immediately* react (see 4.3.2, note (c)). Some scientists would not worry about the Oracle’s testimony at all. Others might find the Oracle’s speech troubling, perhaps saying things like “So there aren’t really any laws of nature after all!”

But in the long term, even the latter group would return to making law judgments just as they did before. I base this prediction on the central role that laws have within scientific practice (see 4.3.1). Given its centrality, it is unlikely that scientists would abandon the distinction between laws and non-laws as a result of hearing the Oracle’s testimony. To support this claim, we can consider the specific roles of the laws:

(i) *Fixed point in counterfactual reasoning*: As discussed in 4.3.1, recognizing something as a measurement presupposes the truth of the counterfactuals described by NP. So if scientists were to give up the ordinary distinction between laws and non-laws, they would have to give up the practice of taking measurements. Immediately after the Oracle’s testimony, we can imagine certain scientists doing exactly this: “Why bother using the cloud chamber? We have no reason to think its measurements are reliable.” But I do not think we cannot seriously suppose that scientists would persist in this attitude. Scientists would not give up the practice of taking measurements just because of some testimony about the fundamental structure of the world.

(ii) *Supporting induction*: After the Oracle’s testimony, we can imagine certain scientists exclaiming: “Hume was right! There is no reason to think that the ball will roll down the inclined plane the next time we release it.” But very soon, scientists would return to

making inductive inferences just as they did before. This is because Hume was also right about our psychology: it is part of our psychological nature to reason inductively.¹⁸

(iii) *Foundation of important distinctions in scientific practice*: As discussed in 4.3.1, the law/non-law distinction is the foundation of other important distinctions in scientific practice. Scientists would still need these distinctions even after the Oracle's pronouncement. So this is another reason to expect that scientists would continue to distinguish laws and non-laws when in scientific contexts.

(iv) *Objects of scientific discovery*: Perhaps, in the aftermath of the Oracle's testimony, certain scientists would succumb to defeatist attitudes: "Why bother taking measurements with the particle accelerator? After all, there aren't any laws to discover anyway." But this attitude would not persist. To give up the search for lawlike regularities would be tantamount to giving up the practice of science itself.¹⁹ But scientists would never give up the practice of science simply because they learned some facts about the world's fundamental metaphysical structure.

4.3.4 Case 2: the fragile world

I will now consider a second possible Oracle proclamation. In this example, let D_0, D_{r_1}, \dots be the total momentary physical states of our universe at times $t = 0, t = r_1, \dots$, and let $\{D_0, D_{r_1}, \dots\}$ be the total set of such states across all times t .

"At the beginning of time, God assigned the Universe initial state D_0 . Since that time, the Universe has always conformed to Newton's equations. But this is not because God decreed that $f = ma$, that $F_G = \frac{Gm_1m_2}{d_{1,2}}$, etc. Instead, it is because he issued the following *conditional* decree:

-if the universe is in one of the states from the set $\{D_0, D_{r_1}, D_{r_2}, \dots\}$,

¹⁸Says Hume (1999, 120): "Nor need we fear, that this philosophy ... should ever undermine the reasonings of common life, and carry its doubts so far as to destroy all action, as well as speculation. ... If the mind be not engaged by argument to make [inferences from experience], it must be induced by some other principle of equal weight and authority; and that principle will preserve its influence as long as human nature remains the same."

¹⁹Or so many philosophers have argued; see Roberts (2008, ch. 1) for discussion.

then: $f = ma$, $F_G = \frac{Gm_1m_2}{d_{1,2}^2}$, ...
-else: all matter annihilates.”

According to the non-Humean, the above testimony describes a rival law hypothesis. Rather than there being no laws at all (as in 4.3.3), this is a case where the laws are different from what we suppose them to be. The most noticeable difference is with the supported counterfactuals. The non-Humean will say that this is a world where, if the universe were to enter into any state other than one of its actual states, all matter would annihilate.

How would this testimony affect scientific discourse? Rather than considering all the roles a second time, I will just consider counterfactual reasoning. We can imagine that, in the short term, certain scientists might say things like: “So if we had released the ball on the inclined plane, it would not have rolled down. Instead, all matter would have annihilated!” After all, this seems to be the counterfactual supported by the (conditional) divine decrees.

But these scientists would soon return to reasoning counterfactually just as they had before. This is because using the divine decrees to assess counterfactuals would be completely useless; it would be just as useless as not reasoning counterfactually at all. But scientists would never abandon counterfactual reasoning simply because of facts about the world’s fundamental metaphysical structure; counterfactual reasoning is much too important to be threatened by facts about what divine decrees are operating behind the scenes.

4.3.5 Summary

Once one has seen the basic form of the thought experiments, it is easy to generate additional examples. These cases establish premise 1 (see 4.2.3):

Premise 1: Even if scientists were to learn that a rival law hypothesis H obtained, they would not alter their law discourse.

I have defended premise 1 by considering the role of laws within scientific practice. Because of their central role, abandoning law discourse in response to Oracle’s testimony would amount to abandoning scientific practice itself. But scientists would never give up

scientific inquiry just because they learned certain about facts about the world's empirically inaccessible metaphysical structure.

4.4 Defending premise 2

Premise 1 raises a puzzle. Ordinarily, when we receive evidence E that we think conclusively falsifies our judgment that P , we abandon our judgment that P . But in the above thought experiments, scientists do not alter their law discourse (in scientific contexts) after hearing the Oracle's testimony. What explains this behavior?

In this section, I will consider some solutions to this puzzle. I will defend my preferred solution to the puzzle in 4.4.3, which will establish premise 2 (see 4.2.3).

4.4.1 Fictionalism

One possible explanation of the thought experiments is *fictionalism*. I will use the term fictionalism to encompass views on which scientists' law judgments do not aim at the literal truth, but instead involve fiction, pretense, or non-literal speech.²⁰ If law judgments do not aim at the literal truth, then it is no surprise that scientists continue talking about laws even after the Oracle's testimony.

One problem with this proposal is that there is no independent evidence for fictionalism about law discourse. For example, if someone says "He has a heart of stone." and a child asks "What type of stone?", the original speaker will clarify that she was not speaking literally.²¹ The same goes for all other clear cases of non-literal or fictional discourse. But in contrast, scientists have no inclination to retract their law judgments in response to queries like "Is Schrödinger's Equation *really* a law?"

A second worry is that fictionalism fails to use the term 'non-literal' with its ordinary

²⁰To be more precise: this is *hermeneutic fictionalism*; I focus on hermeneutic fictionalism because I think it provides the best response to the puzzles of section 4.3. See Stanley (2001, 36) for related discussion.

²¹See Burgess & Rosen (1997, 532-534).

meaning. In ordinary use, this expression serves to demarcate judgments of a certain, clear type: ‘He has a heart of stone’, ‘She was kept in the dark’, etc. So the worry is that, by viewing *all* of the judgments in a certain area of discourse as non-literal, the fictionalist is simply failing to use the distinction between literal and non-literal discourse in the ordinary way.²²

While fictionalism deserves more careful consideration, the above shortcomings should motivate us to look for a better response.

4.4.2 Conceptual change

Suppose that, in our sleep, we are magically transported to Twin-Earth. Upon waking up, and still unaware of our journey, we jump into a swimming pool and say ‘This water is really cold!’ Suppose that the Oracle then tells us about our journey, and tells us that the liquid in the pool is XYZ, not H₂O. We might react by saying things like ‘So this isn’t water after all!’

But if we were to continue living on Twin-Earth, we would probably return to using the expression ‘water’ just as we had before. After all, we would need to communicate with the Twin-Earthlings using this term.

The Twin-Earth case seems very similar to the examples from section 4.3. In each case, subjects initially retract their judgments in response to the Oracle’s testimony, but later return to speaking as they did before. In the Twin-Earth example, it is natural to diagnose this as a case of conceptual change: our term ‘water’ first referred to H₂O, but later referred to XYZ. It is worth considering whether this response might also apply to the section 4.3 cases.

The problem with this proposal is that there is no independent evidence for conceptual change. Two main factors thought relevant to reference determination are the speaker’s environment and usage. A shift in environment explains why the term ‘water’ shifts reference

²²Similar remarks apply to proposals that view law discourse as involving pretense or fiction.

after spending time on Twin-Earth. But in the original thought experiments, we assume that scientists remain in the same environment. As for usage: I have argued that the Oracle's testimony would *not* affect scientists' use of the term 'law' in ordinary scientific contexts. So the standard types of evidence for conceptual change seem absent from the cases in section 4.3.²³

Just as with fictionalism, the conceptual change proposal deserves careful consideration. But I will set it aside to present what my own preferred response to the Oracle thought experiments in section 4.3.

4.4.3 A different semantic role

I think what the Oracle cases *really* show is that non-Humeans are mistaken about the semantics of law discourse. The non-Humean supposes that the truth of law judgments hinges on facts about whatever non-Humean items are behind the scenes governing the empirical regularities. But when we consider how scientists actually use the term 'law', there is no evidence that law judgments are actually hostage to fortune in this way.

The main lesson from the Oracle thought experiment is that, in scientific contexts, scientists do not care about whatever non-Humean items are behind the scenes governing empirical regularities. This is why scientists would continue to make judgments about the laws even after receiving the Oracle's testimony. But if this is right, why would we ever think that the truth of these judgments hinges on facts about non-Humean items operating behind the scenes? Such facts could only threaten law judgments if scientists *cared* about the world's empirically inaccessible metaphysical structure. But they don't: in scientific contexts, scientists make judgments about laws in complete indifference to such structure.

What the term 'law' refers to depends on how scientists use the term 'law', and how scientists use the term 'law' depends on their interests and concerns. But I've argued that,

²³Speakers' referential intentions are also thought relevant to reference determination. Does this factor suggest conceptual change? For ease of presentation, I will set this proposal aside until 4.4.3 (see fn. 24).

when making judgments about laws in scientific contexts, scientists do not care about empirically inaccessible non-Humean items. And since scientists do not care about these non-Humean items, it becomes most plausible to say that the laws supervene on the Humean base.

Of course, it may initially *seem* like the Oracle's testimony threatens scientists' law judgments. This is because many of us assume that lawhood requires more than the Humean base. But this assumption is not borne out when we consider the actual role of law judgments in scientific practice.²⁴

4.4.4 Summary

In this section, I have argued that the best explanation of the Oracle thought experiments is that scientists are not referring to non-Humean laws. This establishes premise 2:

Premise 2: If scientists would not alter their law discourse upon learning that *H* obtains, scientists are not referring to non-Humean laws when they use the expression 'law' in ordinary scientific practice.

Together with premise 1, we can infer (3):

3. Scientists are not referring to non-Humean laws when they use the expression 'law' in ordinary scientific practice.

This conclusion has the following corollary:

Humean Supervenience about Laws (HS): two possible worlds cannot differ on what is a law of nature unless they also differ in their Humean base.

²⁴ I'll now consider the proposal from fn. 23: that our (implicit) referential intentions would change after the Oracle's testimony. I've argued in this section that, in scientific contexts, scientists are completely indifferent to empirically-inaccessible non-Humean items. For this reason, I think that all of the linguistic dispositions that actually matter to the ordinary use of the term 'law' would remain the same after scientists received the Oracle's testimony.

To sum up: reflection on scientific law discourse suggests that law judgments are not hostage to fortune in ways that non-Humeans suppose. This is because, when making judgments about laws, scientists do not care about whatever non-Humean items may exist behind the scenes.

4.4.5 An objection: illegitimate focus on the term ‘law’

The above argument focuses on the inferential role of the term ‘law’ in scientific discourse. But one might worry that it is inappropriate to draw metaphysical conclusions from facts about how scientists use the term ‘law’.²⁵

There are different forms this objection might take. For example, one might worry that metaphysical theories do not concern our linguistic expressions; instead, they are about what is *out in the world*.²⁶ But even if this is correct, it does not imply that we can ignore the inferential role of the term ‘law’ when theorizing about lawhood. This is because the inferential role of the term ‘law’ places constraints on what can count as a law of nature. If a theory of lawhood is incompatible with the inferential role of the term ‘law’, that theory is simply failing to talk about *the laws*: the things that scientists try to discover.

One might instead argue that our metaphysical theories should not consider how scientists *actually* use the term ‘law’; instead, they should consider how scientists *ought* to use this term. For example, one might think that scientists’ failure to modify their law discourse in response to the Oracle’s testimony merely betrays a failure of imagination or a failure of nerve. One might insist that the *proper* response to the Oracle’s testimony would be for scientists to abandon their law judgments altogether.

In response: it is difficult to see why scientists should use the term ‘law’ any different

²⁵There is a narrow sense in which this objection is well-founded. Which propositions are *explicitly* labeled ‘laws’ in scientific practice is largely a matter of historical accident; for example, the axioms of quantum mechanics are not typically labeled as ‘laws’, while Bode’s Law is. But this type of “explicit” use has not been the focus of my argument; instead, I have focused on a broader conception of use which includes, e.g., how scientists would respond if asked whether the axioms of quantum mechanics are laws, etc.

²⁶*Cf.* Swoyer (1982, 221-222).

than they actually do. The Oracle thought experiments show that scientists do not *care* about whatever non-Humean items might be governing the regularities behind the scenes. But then, given these interests and concerns, there is no reason why scientists should abandon their law judgments after receiving the Oracle's testimony.

4.4.6 The path ahead

In sections 4.3 and 4.4, I have used the Oracle thought experiments to provide a new epistemic argument for HS. But these thought experiments may also be useful to Humeans in another way. Non-Humeans have offered several powerful arguments against HS. In the next three sections, I will show how the Oracle thought experiments can help the Humean deflect these arguments.

4.5 The explanatory work argument

Some philosophers motivate non-Humean laws using inference to the best explanation. For example, it has been claimed that Humean laws do not support counterfactuals, do not support inductive inferences, and do not explain regularities. It is claimed that we need to posit non-Humean laws in order to perform these important types of explanatory work.²⁷

There are two ways one might interpret this argument. On one reading, non-Humean laws are posited to perform certain types of explanatory work *within scientific practice*. On a second reading, non-Humean laws are posited to perform certain types of explanatory work that *metaphysicians* require of the laws.²⁸

The latter form of argument is misguided. A philosopher cannot come from the outside and pronounce that, because her metaphysical theory requires non-Humean laws, this is

²⁷See, e.g., Dretske (1977, 255-256) and Armstrong (1983, 39-52).

²⁸See Loewer (1996, 176-177), who argues that Humean laws perform all the work needed for science but not all the work desired by metaphysicians.

what *scientists* mean by ‘law’. When scientists use the term ‘law’, they are not giving a global metaphysical theory. So whether Humean laws can solve the puzzles that interest metaphysicians is neither here nor there.

So now consider the first reading of the argument: are non-Humean laws required to perform explanatory work within scientific practice itself? The Oracle thought experiments suggest that this is not the case. For example, I argued in 4.3.3 that scientists would continue to reason counterfactually even after learning that the world was Humean. So within scientific practice, Humean laws apparently *do* support counterfactuals. Similarly, scientists would continue to make inductive inferences even after learning the world was Humean. So within scientific practice, Humean laws apparently *do* support induction. Similar remarks apply to the other kinds of explanatory work scientists assign to laws.

In fact, the thought experiments flip the non-Humean’s argument around; they show that non-Humean laws do *not* perform the work required of them by scientific practice. Consider the fragile world from 4.3.4. If the non-Humean laws in this world supported counterfactuals, scientists would (in scientific contexts) say things like ‘If the ball was released down the inclined plane, all matter would annihilate’. But of course, scientists would never reason this way. Similar remarks apply to the other types of explanatory work relevant to scientific practice. So it is actually *deniers* of HS who face difficult explanatory shortcomings.

The non-Humean might object: “Even if *scientists* reason counterfactually using the Humean laws, non-Humean laws are still needed to settle what would *really* happen if the ball were released down the inclined plane.” In response: even if we grant that non-Humean items are needed to perform certain “extra-scientific” explanatory work, this has no bearing on the question of what the laws are (when using the term ‘law’ in its ordinary sense). Evidently, scientists do not care about this extra-scientific work when making law judgments. So it remains true that the laws — the things scientists try to discover — are Humean.

4.6 The argument from counterexamples

A second way to argue against HS is to provide counterexamples: cases where we intuitively think that there is a difference in the laws without a difference in the Humean base. There are many alleged counterexamples to HS in the literature²⁹, but for simplicity I will focus on a simple counterexample considered by Roberts (2008, 10.3).

It is possible for the laws of nature to be Newtonian, and given these laws, it is nomically possible for nothing to exist except for a single particle traveling through space at a constant velocity. It is also possible for the laws of nature to be Newtonian except that the law $f = ma$ is replaced by the law $f = ma^2$. And given these modified laws, it is again nomically possible for nothing to exist except for a single particle traveling through space at a constant velocity. So we seem to have two possible worlds which agree on the Humean base but which have different laws.

Roberts (2008, 357-361) provides a strong Humean response to this argument. According to Roberts, the truth of law statements depends on which scientific theory is contextually salient. For example, when asked to consider a single-particle world with Newtonian laws, one enters a context where Newton's theory is salient. In such a context, the statement ' $f = ma$ is a law' is true. But when asked to consider a single-particle world with modified Newtonian laws, the salient theory changes and the statement ' $f = ma^2$ is a law' is true. So on this account, there is a single possible world that we can consider from two perspectives. By distinguishing these contexts, the Humean need not reject any of our intuitions.

The success of this response depends on the plausibility of a contextualist semantics for law statements. To motivate this view, Roberts (2008, 96-105) offers the following thought experiment. Let M be some value of mass that is greater than the total mass of all the matter in the universe. Assume that both of the following regularities obtain in the

²⁹See, e.g., Tooley (1977) and Maudlin (2007, 67).

actual world:

$$P: f = ma$$
$$P^*: f = \Phi(m)a, \text{ where } \Phi(m) = \begin{cases} m & \text{if } m < M \\ 2m - M & \text{otherwise} \end{cases}$$

P and P^* are two possible laws of nature; they are incompatible because of their conflicting predictions about the behavior of bodies with mass greater than M . Now suppose that human scientists endorse the sentence ‘ P is a law’ but alien scientists endorse the sentence ‘ P^* is a law’ (here, we can suppose that the aliens have different cognitive faculties so that P^* seems much more natural to them than it does to us). Roberts’ intuition is that, in such a case, both communities would be speaking correctly; he accounts for this intuition by offering a contextualist semantics of law statements.

To respond to Roberts’ arguments, the non-Humean may insist that there is a fact of the matter about who is right about the laws in the above case. But the Oracle thought experiments provide support for Roberts’ position.

After talking to the aliens, we can imagine human scientists worrying: “What basis do we have for thinking that P is a law that the aliens do not equally have for thinking that P^* is a law?” But for the same reasons that scientists would return to their law discourse after the Oracle’s testimony, scientists would return to asserting ‘ P is a law’ when back in ordinary scientific contexts. Our law discourse is too important to abandon just because some other community makes law judgments slightly differently than we do. If the aliens are relevantly similar to us, then analogous remarks will apply to their law discourse as well.

So we have two communities that agree on all of the relevant evidence, and neither is moved to change their judgments even after dialogue with the other. The best explanation

of this situation is that the term ‘law’ is context-dependent in the way Roberts describes.³⁰ As mentioned above, this provides the Humean with an attractive response to alleged counterexamples to HS.

4.7 The argument from the failures of analysis

Proponents of HS often attempt to *analyze* laws statements in non-nomic terms. For example, here are three Humean analyses from the literature:

(1) A true, contingent generalization P is a law iff P is confirmable by less than complete induction. (*cf.* Goodman (1983, 23))³¹

(2) A true, contingent generalization P is a law iff P appears as a theorem in each of the true deductive systems that achieves the best combination of simplicity and strength. (Lewis (1973b, 73))

(3) ‘ P is a law of nature’ is true at world w in context k iff P is a contingent logical consequence of the set of reliability conditions of all the legitimate measurement methods of a theory T that is true in w and salient in k . (Roberts (2008, 324-325))³²

In (1)-(3), the right side of the biconditional does not employ nomic vocabulary. So in any worlds sharing a Humean base, these analyses predict identical laws. So philosophers endorsing these analyses are committed to HS.

There are two common types of objections lodged against analyses like (1)-(3). One strategy is to provide counterexamples. For example, Hall (manuscript, 5.8) offers the following counterexample to (2): “Suppose it turns out that there are exactly 2^{64} particles in our world. Then a statement to that effect buys a lot of [strength] at a negligible cost

³⁰Alternatively, we might say that humans and aliens employ slightly different law concepts. There is probably no substantive difference between these proposals.

³¹This characterization of Goodman’s analysis is given by Carroll (1994, 40-41).

³²Since the details of this proposal are not relevant to the discussion ahead, there is no need to precisify the terminology of Roberts’ analysis.

in simplicity. [But] it seems quite wrong to think that ... it ought to count as nomically necessary that there are 2^{64} particles.”

A second common objection is that, in at least many cases, Humean analyses are too closely linked to our epistemic practices. For example, many philosophers have worried that what counts as “simple” or as a “best balance” may vary across cultures, making (2)’s predictions about the laws too subjective.³³

These objections are typically directed against specific Humean analyses of lawhood. But the difficulties of providing a successful Humean analysis may constitute an indirect challenge to HS itself.³⁴ For example, one might think that the reason it has proved so difficult to provide an adequate Humean analysis is that there just *isn’t* any definition of law statements in non-nomic terms. Since proponents of HS have traditionally relied on such definitions to explain the epistemology of law judgments, the unavailability of such definitions constitutes a threat to HS. And even if one does not view the past failures of analysis as evidence against HS, one might still think that the Humean has a burden to provide such an analysis.³⁵

4.7.1 A deflationary analysis

Despite their shortcomings, the Oracle thought experiments suggest that there is something right about (1)-(3). In particular, the thought experiments suggest that (1)-(3) are correct in recognizing that whether a regularity counts as a law depends on its role within actual scientific practice.

Where these proposals go wrong is in their attempt to give an *informative analysis* of this role. Traditionally, many philosophers endorsed the view that non-primitive linguistic expressions can be given precise conceptual analyses. But this view has largely been

³³Armstrong (1983, 67) and Carroll (1994, 49-54) offer criticisms in this spirit.

³⁴See Carroll (1994, 55-56).

³⁵Says Roberts (2015, section 6): “unless some detailed account of exactly how the laws can somehow emerge out of the primordial soup that is the Humean base, Humeanism is at best a promissory note.”

abandoned by philosophers of language and cognitive scientists.³⁶ Since very few (non-stipulative) terms from human language have informative conceptual analyses, there is no reason to expect a precise analysis for ‘law’ either.

Does the unavailability of a precise analysis for law statements spell doom for HS? Not at all: it was a mistake to think that Humeans ever needed to provide such an analysis. Instead of trying to offer a definition of the law/non-law distinction, Humeans should simply defer to how scientists *themselves* draw the distinction:

Humean Deflationism (HD): P is a law of nature in a possible world W iff (actual) scientists would (ideally) judge that the predicate ‘is a law of nature’ applies to P when given an appropriate description of the Humean base at W .

Here is the intuitive picture. Imagine that scientists are “magically afforded a god’s eye glimpse of the entire Humean base of the universe, with supernatural secretarial help for organizing it” (Roberts (2015, section 6)). Looking over this vast mosaic, scientists would in principle be able to identify certain regularities P_1, P_2, \dots as the ones that “most look like” laws of nature. According to HD, P_1, P_2, \dots just *are* the laws of nature. Put simply: P_i is a law of nature if and only if scientists fully-informed about the Humean base would be inclined to call P a law of nature.

Hall (manuscript, 4.3) also uses the idea of a fully-informed scientist to motivate the Humean view of laws. After presenting a very similar illustration, Hall says: “What remains is for the [Humean] to supply a specific hypothesis about what the standards are upon which [the fully-informed scientist] relies” (4.4). For example, Hall views (2) as one (unsatisfactory) attempt to capture these standards. Given the counterexample mentioned earlier, Hall thinks the Humean must provide an improved analysis that accurately explains scientists’ law judgments.³⁷

³⁶For discussion, see Chalmers (2012, 10-12).

³⁷Hall (manuscript, 6.1-6.2) offers an analysis that avoids the problems with (2), but ultimately concludes that it suffers problems of its own.

But if ‘law’ is like most other terms in our language, scientists are not following any explicit standard when making law judgments. So the Humean is under no burden to provide such a standard. (Compare: it is doubtful that there are irreducible facts about games. This position is not threatened by the fact that we cannot provide an explicit standard explaining the game/non-game distinction.)

With HD, the Humean resists the impulse to provide a precise analysis of law judgments. Instead, HD lets scientific practice itself determine the law/non-law distinction. Since HD completely defers to fully-informed scientists, it will never face counterexamples. For example, since scientists would not judge that ‘There are 2^{64} particles’ is a law in the possible world described by Hall (manuscript), HD correctly predicts that it is not a law that there are 2^{64} particles in this world.

4.7.2 Clarifications

Here are a few remarks on how to interpret the above analysis.

(i) “*Actual subjects*”: HD should *not* be interpreted as saying that P is a law in some possible world W iff scientists *in* W would (ideally) judge that P is a law. On this interpretation, HD would make lawhood very subjective; it would imply, for example, that in any world W where there are no scientists, there are also no laws of nature. The correct reading is: P is a law of nature in a possible world W iff *actual scientists* — using their concepts as they actually do — would judge that P is a law of nature when given a description of W .

(ii) *Correspondence between truths and judgments*: HD assumes that truths about the laws do not outstrip scientists’ (fully-informed, idealized³⁸) law judgments. In this sense, HD assumes that law judgments are similar to judgments about games. Suppose that we were given all of the relevant information about the rules, aims, history, etc. of a practice X . Suppose that, on the basis of all of evidence, we judge that X is a game. It is implausible

³⁸I explain these qualifications in notes (iii) and (iv).

that, nonetheless, X could fail to be a game. This motivates the following deflationary analysis of gamehood:

Game Deflationism (GD): A practice X is a game iff (actual) subjects would (ideally) judge that the predicate ‘is a game’ applies to X when given an appropriate description of the practice in question.

Similarly, HD asserts that, if scientists were told all the information in the Humean base, and thereby judged that P is a law, it could not be the case that P nonetheless fails to be a law.

This correspondence between law truths and law judgments is supported by the Oracle thought experiments. As discussed in 4.4.3, these cases indicate that “hidden” non-Humean facts are irrelevant to ordinary scientific practice. So we should not expect the truth of law statements to outstrip what we could learn from observing and measuring the Humean base.

Of course, HD does not guarantee that scientists’ *actual* law judgments are correct; I discuss this point in the next two notes.

(iii) “*Appropriate description of the Humean base*”: One reason why truth and judgment diverge is that scientists only have access to limited evidence. For example, 19th-century Newtonian physicists made false law judgments because they were unaware of, e.g., the gravitational deflection of light. This is why HD appeals to the judgments of scientists who are *fully-informed* about the Humean base.³⁹

(iv) *Idealization*: Even when assuming full information, we can still imagine law truths outstripping scientists’ law judgments. For example, a full description of the Humean base may be too complex for scientists to fully process. Similarly, scientists may make

³⁹Two further notes on this point. (i) The restriction to full information about the *Humean base* is important because HD would be trivial if the evidential base included facts about the laws themselves. This is also why HD appeals to an “appropriate description” of the Humean base: the base must not be described in a way that builds in information about the world’s nomic facts. (ii) One might worry that, since scientists are never presented with the *entire* Humean mosaic, the entire mosaic will not be relevant to determining which regularities count as laws. If this is a legitimate concern, one can modify HD so that scientists are instead presented with some restricted portion of the Humean mosaic (e.g., the portion of the mosaic that is observable or measurable by human subjects).

mistaken judgments about the laws due to careless reflection on the evidence. To account for such cases, the judgments relevant to HD require a cognitive idealization. For example, the idealization should allow subjects to entertain thoughts of arbitrary complexity, should idealize away from missteps in reasoning, etc.⁴⁰

(v) *HD vs. conceptual analyses*: HD should not be viewed as a conceptual analysis of law statements. Traditional conceptual analyses must meet various criteria of adequacy; common criteria include that the definition be necessary, analytic and/or *a priori*. But HD meets none of these criteria. Instead, HD relies on the correspondence between law truths and scientists' (fully-informed) law judgments to give an extensionally adequate characterization of law statements.

(vi) *Mistaken metaphysical interpretations of HD*: HD says that the regularities that fall under the predicate 'is a law' are the ones that fully-informed scientists judge to fall under that predicate. In contrast, HD does not say that law facts are *constituted by, metaphysically grounded in, made true by, or reducible to* facts about the epistemic practices of scientists.⁴¹ (Compare: what property we express by the predicate 'is spherical' is determined by how ordinary speakers use the term 'is spherical'. But it would be a confusion to say that whether something is spherical *metaphysically* depends on how we use the term 'is spherical'.)

4.7.3 Objections

I will conclude by considering some possible objections to HD.

Objection 1: "Why suppose that it is the judgments of *human* scientists that determine which propositions count as laws? Why not the scientists of some other alien community?"⁴²

⁴⁰See Chalmers (2012, 63-71) for an idealization that would work for HD.

⁴¹This may be a point where I disagree with Hall (manuscript, 4.6), who claims that scientists' implicit standards for judging lawhood are "constitutive" of lawhood.

⁴²This objection is a modified form of Carroll's (1994, 53) objection to Lewis' (1973b) account of laws.

Response: To see the problem with this objection, it is useful to apply it to the case of games. Why is it that the game judgments of subjects in *our* community determine which practices count as games? Why not the judgments of subjects in some *other* community at other times?

The response is that GD is a thesis about how *we* use the term ‘game’, not how some other community uses the term. Similarly, the reason HD appeals to human scientists is because the term ‘law’ is a term used by scientists in *our* community. (Of course, objection 1 would be a much greater concern if HS was an attempt at either conceptual or metaphysical analysis- see 4.7.2).

Objection 2: “HD isn’t appropriately explanatory. It doesn’t explain what all the laws have in common. Nor does it explain *why* scientists draw the law/non-law distinction the way that they do.”

Response: I have already addressed the issue of what the laws have in common in 4.7.1. Most likely, there isn’t any unifying feature that all and only the laws have in common. Most terms from natural language do not have neat analyses, so we shouldn’t expect a neat analysis of law statements either.

As for why scientists draw the distinction they do: there are different types of explanations we might give. We could give a pragmatic explanation: scientists draw this distinction because it is (apparently) useful for accomplishing the aims of science. Or we could give a historical explanation: maybe the distinction derives from a now-abandoned picture where God’s decrees govern the universe.

These may not be the types of explanations the objector has in mind. But the proponent of HD will deny that there is any “deeper” explanation available. On this point, it is useful to again consider the term ‘game’. We can give pragmatic or historical explanations of why humans draw a distinction between games and non-games in the way they do. But there is no further “deep” explanation of this distinction: we can imagine communities using the term ‘game’ in a slightly different way. So too we can imagine communities that use the

term ‘law’ in a slightly different way.⁴³

4.8 Conclusion

In this chapter, I have presented a new epistemic argument for Humeanism about laws of nature. Standard epistemic arguments for HS attempt to show that actual empirical evidence does not justify our law judgments over certain rival law hypotheses that are coherent if HS is false. But I have argued that, even if scientists were to learn that such a rival hypothesis obtained, they would continue talking about laws just as they did before. I then argued that the best explanation of this behavior is that scientists are actually talking about Humean laws. To conclude the chapter, I discussed how the Humean might use the new epistemic argument to deflect certain objections to HS from the literature.

⁴³Hall (manuscript, 6.2) raises an objection to HS that is very similar to objection 2. Hall worries that, on a Humean view, it would be just as informative for scientists to learn about regularities in the initial conditions as it would be to learn about the regularities we typically consider to be laws. So by the Humean’s lights, there is no explanation of why scientists do not count such regularities in the initial conditions to be laws.

In response: Hall’s observation only shows that scientists do not use ‘law’ as a blanket term for all regularities worth knowing. And why don’t they? Well, we might provide a pragmatic explanation, or a historical explanation, or . . .

5 METAPHYSICAL AND CONCEPTUAL GROUNDING

5.1 Introduction

Recently, many theorists have claimed that the world has an ordered, hierarchical structure.¹ Entities at lower ontological levels are said to *metaphysically ground* entities at higher ontological levels. It has also recently been claimed that our language has an ordered, hierarchical structure.² Semantically primitive sentences are said to *conceptually ground* less primitive sentences. It is often emphasized that metaphysical grounding is a relation between things out in the world, not a relation between our sentences. But I will argue that not enough care has been taken to distinguish these two types of grounding. Conflating these relations is easy to do, given that both types of grounding are expressed by non-causal “in-virtue-of” claims.

The purpose of this chapter is to clarify the relation between metaphysical and conceptual grounding. In section 5.2, I’ll argue that conceptual grounding is independent from metaphysical grounding. In sections 5.3-5.4, I’ll argue that conceptual and metaphysical grounding are exclusive: if a given in-virtue-of claim involves conceptual grounding, then it does not involve metaphysical grounding. In section 5.5, I’ll give some heuristics for deciding which type of grounding is relevant in a given case. These heuristics suggest that many proposed cases of metaphysical grounding may not involve metaphysical grounding at all. I’ll conclude by explaining why these results should interest both supporters and detractors of the study of metaphysical grounding.

¹See, e.g., Schaffer (2009), Audi (2012a).

²See Chalmers (2012, 452-460).

5.2 Distinct types of grounding

I'll begin by describing metaphysical and conceptual grounding and the explanatory work each is supposed to perform.

5.2.1 Metaphysical grounding

Theorists often introduce metaphysical grounding with examples:³

1. The fact that there are chemicals arranged in a certain way obtains in virtue of the fact that there are particles arranged in a certain way.
2. {Socrates} exists in virtue of the fact that Socrates exists.
3. x is roughly spherical in virtue of its having determinate shape R .
4. x is fragile in virtue of its molecular arrangement and the physical laws.
5. x 's action is wrong in virtue of its being done with the sole motive to cause harm.
6. x is in pain in virtue of the fact that x is in brain state P .

For example, [3] is said to correspond to a metaphysical grounding relation between the fact x 's *having determinate shape R* and the fact x 's *being roughly spherical*.

These examples have an important role in the literature because they supposed to provide us with an intuitive grip on the notion of metaphysical grounding.⁴ They are also used to motivate two types of explanatory work that metaphysical grounding is supposed to perform. First, metaphysical grounding is supposed to underwrite cases of *metaphysical explanation*. For example, in [1], we explain the fact that there are chemicals arranged in a certain way by appealing to the fact that there are particles arranged in a certain way. It is claimed that, just as we need the causal relation to underwrite cases of causal explanation,

³For ease of presentation, I have adjusted these examples to give them a common form. The examples are from (in order): Schaffer (2012, 125), Fine (1995, 271), Schaffer (2012, 126), Rosen (2010, 110), Fine (2012b, 1), and Clark & Liggins (2012, 812).

⁴For discussion, see Schaffer (2009, 375-376).

so too we need metaphysical grounding to underwrite cases of metaphysical explanation.⁵

Second, metaphysical grounding is posited to accommodate intuitions about metaphysical priority.⁶ For example, it intuitively seems that the individual Socrates is “more fundamental” than the singleton set {Socrates}. But we cannot accommodate this intuition using familiar tools like supervenience, since Socrates and {Socrates} supervene on each other. Accordingly, it has been argued that metaphysical grounding is needed to capture the fine-grainedness of metaphysical dependence.

For ease of presentation, I will adopt two assumptions about metaphysical grounding. First, I will assume the standard view that metaphysical grounding relates facts (i.e., obtaining states of affairs).⁷ Facts are individuated by the objects and properties that compose them. Second, I will assume that metaphysical grounding is unitary, i.e., that there is a single dependence relation corresponding to all cases of metaphysical explanation.⁸ Of course, there is one sense in which I am a “pluralist” about grounding: I will argue that metaphysical and conceptual grounding are independent relations. But this is consistent with the assumption that all cases of *metaphysical* dependence are unified. (In this sense, the pluralism I defend is different from the pluralist views of Wilson (2014) and Koslicki (2015).)

5.2.2 Conceptual grounding

Metaphysical grounding relates items on different ontological levels; it concerns the structure of the *world*. In contrast, conceptual grounding relates items on different semantic

⁵See Audi (2012a, 687-688) and deRossett (2013, 2-3) for this view. One might instead say that metaphysical grounding is just *identical* to metaphysical explanation (see Trogdon (2013, section 3) for discussion). The distinction between these views will not be relevant to the arguments ahead.

⁶See Clark & Liggins (2012, 813).

⁷See, e.g., Rosen (2010, 114) and Audi (2012a, 693). Other theorists, such as Schaffer (2009, 375-376), claim that metaphysical grounding takes different types of entities as relata. Other theorists, such as Correia (2010) and Fine (2012a), prefer to express metaphysical grounding claims using sentential operators.

⁸See Trogdon (2013, section 2) for discussion.

levels; it concerns the meanings of our linguistic expressions. I will assume that conceptual grounding takes sentences as its relata.

Just as with metaphysical grounding, instances of conceptual grounding are expressed by non-causal in-virtue-of claims:

- 1'. x is a vixen in virtue of the fact that x is a female fox.
- 2'. x is a piece of furniture in virtue of fact that x is a chair.
- 3'. x is bald in virtue of the fact that x has 20 hairs.
- 4'. x is an electron in virtue of the fact that x has nomic role R .⁹

For example, [1'] corresponds to a conceptual grounding relation between the sentences 'x is a female fox' and 'x is a vixen'.

Intuitively, a sentence A is conceptually grounded by a sentence B when the expressions in B are semantically prior to those in A and the sentence 'If B , then A ' is a conceptual truth. For the purposes of this chapter, it will be fine to rely on this intuitive characterization, just as metaphysical grounding was left intuitive in 5.2.1.

But there are various ways to make the notion of conceptual grounding more precise. For example, Chalmers (2012, 464-465) appeals to the idea that certain linguistic expressions have inferential roles that are constitutive of the meanings of those expressions. For example, suppose that 'vixen' is individuated by the obvious inferential links to 'female' and 'fox'. Then we can say that the inference from ' x is a female fox' to ' x is a vixen' is *conceptually warranted* by these inferential links. We can then say that a sentence S is *conceptually grounded* by a set of sentences T when the constitutive inferential roles of the expressions of S and T provide a competent speaker a conceptual warrant for asserting S on the supposition of the conjunction of the sentences in T .

Conceptual grounding does *not* require explicit definition. For example, let $\neg S$ be the sentence 'It is not the case that Smith knows that: either Jones owns a Ford or Brown is in

⁹[4'] involves conceptual grounding on the common view that natural kind terms like 'electron' refer to whatever item fills a certain nomic role.

Barcelona'. Let D be the conjunction of the following sentences:

Smith is justified in believing that Jones owns a Ford. Originally, Smith has no beliefs about Brown's location. By making a logical inference from his belief that Jones owns a Ford, Smith forms the belief: *Jones owns a Ford or Brown is in Barcelona*. In fact, Jones does not own a Ford. But in fact, Brown happens to be in Barcelona.

It seems that competent speakers can trivially judge that $\neg S$ is true when presented with D . The same goes for all other cases in the Gettier literature: the entire progress of this literature depended on our ability to make these trivial judgments when presented with descriptions of cases. What can explain our ability to make these judgments? Here's one very plausible explanation: it is partially constitutive of the meaning of the term 'knows' that one is disposed to judge that $\neg S$ when presented with D (and similarly for other cases). This suggests that, even if the term 'knowledge' cannot be given a definition, there is still a conceptual link between 'knowledge'-sentences and sentences describing subjects' belief states.

Conceptual grounding is supposed to perform analogous theoretical work to metaphysical grounding. First: conceptual grounding is needed to underwrite cases of conceptual explanation.¹⁰ For example, in order to account for the explanatory force of [1'], we might say: "what it *means* for x to be a vixen just is for x to be a female fox"; this explanation seems semantic, not metaphysical or causal.¹¹ Second, conceptual grounding is needed to accommodate intuitions about semantic priority (see Chalmers (2012, 315-316)). For example, even if 'knowledge' cannot be given an explicit definition, there is an intuitive sense in which 'knowledge'-sentences seem semantically derivative from sentences describing beliefs.

¹⁰For discussion of conceptual explanation, see Schnieder (2006, 405-406).

¹¹To see the difference between semantic explanation and metaphysical explanation, contrast [1'] with a case like [1]. We wouldn't say that "what it *means* for there to be chemicals arranged in a certain way just is for there to be particles arranged in a certain way."

To head off any potential confusion, it is worth contrasting the claim that [1]-[4] involve conceptual grounding from two other claims encountered in the literature.

First: conceptual grounding is unrelated to the dispute over whether metaphysical grounding claims should be expressed using relational predicates or using sentential operators.¹² This is a debate about the logical form of *metaphysical* dependence claims; in contrast, conceptual grounding concerns the semantic links between our sentences.

Second: proponents of metaphysical grounding sometimes distinguish “conceptual” and “worldly” views of facts; these views disagree over whether, e.g., *x’s being water* and *x’s being H₂O* are distinct facts.¹³ But this is a question about the fine-grainedness of the *metaphysical* grounding relation, not a question about conceptual grounding.¹⁴ To claim that there is conceptual grounding is not to claim that the metaphysical grounding relation takes conceptual facts (or alternatively: sentences) as its relata.

5.2.3 Two distinct types of grounding

I’ve emphasized that metaphysical and conceptual grounding are two independent relations. One concerns the metaphysical structure of the world while the other concerns the meanings of our sentences. In addition, I’ve noted that these relations are posited to perform different types of explanatory work.

Nonetheless, some philosophers might still be skeptical that there are two independent relations underwriting non-causal in-virtue-of claims. To convince such skeptics, it will suffice to give examples of such claims that clearly do not involve metaphysical grounding. Here is the simplest example of this type:

¹²See Correia & Schnieder (2012, 3.1) for discussion. Rosen (2010) and Audi (2012b) endorse the predicate view, while Correia (2010) and Fine (2012a) endorse the operator view.

¹³Proponents of worldly facts include Correia (2010, 258-259) and Audi (2012b, 3.5). Rosen (2010) and Fine (2012a) seem to adopt a finer-grained conception of facts.

¹⁴For example, Rosen (2010, section 10) endorses a very fine-grained view of facts, but he emphasizes that metaphysical grounding is not a semantic phenomenon.

5'. x is a bachelor in virtue of the fact that x is an unmarried male.¹⁵

As it happens, [5'] is sometimes cited as a case of metaphysical grounding in the literature.¹⁶ But I think that, once conceptual grounding is recognized as a live option, this view no longer seems attractive. Here is a simple argument to push this intuition.

Suppose a community is just like our community except that they do not possess the expression 'bachelor': they always use the expression 'unmarried male'. So these speakers never form the belief that x is a bachelor.¹⁷ Do we think these speakers are missing something about the world's structure insofar as they lack this belief? Of course not: these speakers have just as complete a metaphysical picture as we do. We just have another way of speaking. This suggests that there is nothing metaphysical about [5'].¹⁸ (Of course, [5'] isn't a very interesting case. But for the present, my aim is just to make the weak point that conceptual and metaphysical grounding are independent.)

Besides failing to respect our intuitions in the above thought experiment, anyone who insists on viewing [5'] as involving metaphysical grounding must either reject (a) the claim that '*being a bachelor*' and '*being an unmarried male*' are just two names for a single property or (b) the claim that metaphysical grounding is irreflexive.¹⁹ But with conceptual

¹⁵I intend for [5'] to be distinguished from the following case of "conjunctive grounding": [5*] $\equiv x$ is unmarried and male in virtue of the fact that x is unmarried and the fact that x is male. [5*] is explicitly distinguished from [5'] in the literature (see, e.g., Chalmers (2012, 454)). This seems appropriate, since [5*] and [5'] have different explanatory force: in [5'] the explanatory emphasis is on 'bachelor', while in [5*] the emphasis is on 'and'. I claim that, in order to accommodate this distinctive explanatory force, we need to countenance conceptual grounding. This is true even if someone insists on viewing [5'] as a case of conjunctive grounding.

¹⁶See, e.g., Rosen (2010, 124).

¹⁷Here, I am assuming a fine-grained categorization of beliefs on which the belief that x is a bachelor is distinct from the belief that x is an unmarried male.

¹⁸Note: this argument stands even on a deflationary account of facts and of the metaphysical grounding relation. See 5.4.4.

¹⁹For an example of the first response, see Rosen (2010, 124). For discussion of the second response, see Jenkins (2011, 169).

grounding on the table, there is no need to accept either of these consequences.²⁰

Of course, there is nothing stopping us from using from using ‘metaphysical grounding’ as a catch-all term that applies in any case of non-causal explanation (see, e.g., Fine (2012b)). But why try to make room for [5'] under the banner of metaphysical grounding? To insist on grouping these cases together doesn’t somehow unify them; it merely obscures an important distinction between two very different phenomena.²¹

One might wonder: why not just say that conceptual grounding is a form of metaphysical grounding that relates facts *about* sentences? In response: if asked about the metaphysical grounds of facts involving the sentence ‘*x* is a bachelor’, we might have pointed to facts about its constituent expressions, or perhaps facts about our linguistic practices. But we wouldn’t have said such facts are metaphysically grounded by facts about another *sentence* (i.e., ‘*x* is an unmarried male’). This is because we don’t think that the sentence ‘*x* is a bachelor’ is on a different ontological level than the sentence ‘*x* is an unmarried male’. These sentences are certainly linked, but the link is semantic, not metaphysical.

(None of this is to say that sentences do not also stand in *metaphysical* grounding relations. As I mentioned, it’s plausible that facts about sentences are metaphysically grounded by facts about sub-sentential expressions. Similarly, it is possible that facts about sentences or linguistic practices metaphysically ground other types of facts.²² So it is best to say that sentences can be involved in two *different* types of grounding relations.)

²⁰This is not to deny that there may be *independent* reasons to deny (say) the irreflexivity of metaphysical grounding. But philosophers who endorse irreflexivity (e.g., Schaffer (2009, 364)) should welcome the distinction between conceptual and metaphysical grounding.

²¹Could this be a verbal dispute? Might theorists who reject (a) or (b) be using the term ‘metaphysical grounding’ to *include* cases of conceptual grounding? I think the answer is “no”. For example, Rosen (2010, section 10) adopts a very fine-grained view of facts, but he explicitly denies that metaphysical grounding involves semantic links.

²²For example, perhaps facts about fictional characters are partially metaphysically grounded by facts about the sentences in the relevant fictional works.

5.3 The relation between metaphysical and conceptual grounding

In the last section, I argued that conceptual grounding is independent from metaphysical grounding. This shows that we need to carefully distinguish which type(s) of grounding are relevant in a given case. In this section, I will consider whether we can establish any *general* results about the relation between metaphysical and conceptual grounding. I'll first briefly consider a proposal from Chalmers (2012). I'll then defend the view that metaphysical and conceptual grounding are exclusive.

5.3.1 The Conceptual/Metaphysical Thesis

Chalmers (2012, 453) claims that metaphysical and conceptual grounding correspond over a certain restricted range of cases:

Conceptual/Metaphysical (C/M) Thesis: Suppose an in-virtue-of claim V involves only super-rigid expressions. Then V involves metaphysical grounding iff it involves conceptual grounding.

Roughly, an expression is *super-rigid* when it takes the same extension across all epistemic and metaphysical possibilities. For example, Chalmers suggests that the expressions 'zero', 'wise', and 'cause' are super-rigid (366-369). In contrast, the expression 'water' is clearly non-super-rigid (since, on the epistemic possibility that the water-like liquid in our environment turned out to be XYZ, 'water' would have referred to XYZ).

Without the super-rigidity restriction, there would be a clear class of counterexamples to C/M. For example, consider [4']: 'x is an electron in virtue of the fact that x has a property with nomic role R '. Since 'is an electron' expresses whatever property happens to fill a certain nomic role R , the fact x 's being an *electron* is plausibly identical to the fact x 's being a *property with nomic role R*. So [4'] plausibly involves conceptual but not metaphysical grounding (see 5.2.3). Speaking more generally: in-virtue-of claims with non-super-rigid terms often involve two different ways of describing the same worldly fact and so do not involve metaphysical grounding.

Because metaphysical grounding is supposed to be independent of our language, many theorists will immediately worry about counterexamples in the left-to-right direction: cases of metaphysical grounding without conceptual grounding. For this reason, Chalmers' defense of C/M focuses on counterexamples of this sort. But upon reflection, we see that there are clear counterexamples in the right-to-left direction: cases of conceptual grounding without metaphysical grounding. For example, the bachelor example from 5.2.3 is one such case.²³

5.3.2 The Grounding Exclusion Thesis

To exclude cases like [5'], one might try to restrict C/M further. But I think that the pressures against viewing [5'] as a case of metaphysical grounding actually extend much more generally. In fact, I will defend the opposite view that conceptual and metaphysical grounding are exclusive:

Grounding Exclusion (GE) Thesis: If an in-virtue-of claim V involves conceptual grounding, then V does not involve metaphysical grounding.

Whereas C/M is most naturally paired with a deflationary approach to metaphysical grounding, GE supports a "cautious" approach: before jumping to conclusions about metaphysical structure, we should first check whether we can explain the phenomenon in semantic terms.

5.3.3 Preliminary notes

Here are three notes on the arguments for GE that I will present in the next section.

Substantive metaphysical grounding: On the standard view, there are substantive truths to discover about what metaphysically grounds what. On an alternative deflationary conception, truths about metaphysical grounding are merely conceptual truths (see

²³This case falls within the scope of C/M because Chalmers (2012) considers 'bachelor', 'unmarried', and 'male' to be super-rigid terms (453-454). I note that [5'] will be a counterexample to C/M even on a deflationary conception of metaphysical grounding — see 5.3.3.

Chalmers (2012, 458)). In the arguments ahead, I assume a non-deflationary conception of metaphysical grounding since this is the most common view in the literature. I will consider the alternative deflationary conception in 5.4.4.

Subject-predicate form: In my arguments, I'll restrict attention to cases of conceptual grounding with the form $V \equiv 'x \text{ is } \beta \text{ in virtue of the fact that } x \text{ is } \alpha'$. In such cases, we can call the property expressed by 'is β ' a *c-grounded property*, and we can call the property expressed by 'is α ' a *c-basic property*.²⁴ So, for example, *being bald* is c-grounded while *having 20 hairs* is c-basic (*n.b.*: one should not read any implications about metaphysical fundamentality into these terms). This restriction will simplify presentation since I will only have to consider cases where, intuitively, the focus is on properties. But later, I'll explain why the arguments for GE are extendable to other cases.

Heavyweight status: In the arguments ahead, I will appeal to some implicit restrictions on how we must view the objects and properties involved in metaphysical grounding claims. In this note, I will explain these restrictions. Focusing on properties first, consider the following proposed case of metaphysical grounding:

3. x is roughly spherical in virtue of the fact that x has determinate shape R

We can distinguish four ways of thinking about the property *being roughly spherical*: eliminativism, (class or predicate) nominalism, deflationism, and "heavyweight" views (where "heavyweight" is a catch-all term for any view not covered in the other categories). I'll now explain why the first three of these views are incompatible with viewing [3] as a case of metaphysical grounding.

(i) Eliminativism: If the property *being roughly spherical* doesn't exist, there are no rough sphericity facts to be related by metaphysical grounding. So eliminativism is incompatible with viewing [3] as a case of metaphysical grounding.²⁵

²⁴I note that a property's status as c-grounded will be relative to the in-virtue-of claim under consideration; this complication won't arise in the discussion ahead.

²⁵For discussion, see Schaffer (2009, 356-363)

(ii) Deflationism: According to deflationary theorists, properties are mere “shadows of predicates”: there is nothing true of properties other than what is correctly assertible of them in ordinary language.²⁶ In particular, there is no room for metaphysical theorizing to *discover* that a deflationary property is involved in certain metaphysical grounding relations. But this is in direct conflict with the stated goal of (non-deflationary) metaphysical grounding theorists, who aim to discover substantive patterns of dependence. For this reason, deflationary properties are incompatible with viewing [3] as a case of metaphysical grounding (as the relation is standardly conceived).²⁷ (For further discussion, see Schaffer (2009, 360), who also claims that we should reject a deflationary view of the entities involved in grounding relations.)

(iii) Class or predicate nominalism: Suppose we identify *being roughly spherical* with a certain set of individuals $\{x_1, x_2, \dots, x_n\}$.²⁸ Then to say that [3] involves metaphysical grounding is to say that *x's having a certain determinate shape R* metaphysically grounds *x's being a member of the set $\{x_1, x_2, \dots, x_n\}$* .²⁹ But this seems wrong. It isn't obvious what metaphysically explains facts about *x's* membership in sets, but it certainly isn't explained by the fact that *x* has a certain shape. Of course, the class nominalist can accept *some* instances of metaphysical grounding; my claim is merely that someone who views the property *being roughly spherical* as a mere set will not view [3] itself as a case of metaphysical grounding. Similar remarks apply to other “reductive” versions of nominalism.³⁰

²⁶Says Schiffer (1996, 159): “there’s nothing more to the nature of properties ... than is determined by our [property-hypostatizing] linguistic practices. What we can learn about them is what our linguistic practices license us to learn about them.”

²⁷Some deflationists claim that there is a sense in which properties are derivative from our linguistic practices (see Schiffer (1996, 161)). So one might adopt a view on which deflationary properties are metaphysically grounded in our linguistic practices. But even if this is correct, the deflationist will still deny that *x's being roughly spherical* is metaphysically grounded by *x's having determinate shape R* (which is what is needed for [3] to involve metaphysical grounding).

²⁸See, e.g., Lewis' (1983) account of abundant properties.

²⁹Since some nominalists do not countenance facts, we should perhaps view the metaphysical grounding relation in some other way for present purposes. This technicality does not affect the current point.

³⁰For example, suppose properties reduce to predicates. We wouldn't say that *x's falling under a certain*

The above discussion suggests that the properties involved in metaphysical grounding claims must be “heavyweight” entities. I use this label as a catch-all term for any view not covered above. It is only on a heavyweight conception that it makes sense to try to discover relations of metaphysical dependence.

Analogous remarks apply to objects. There are eliminativist and deflationist views of objects, and these views are incompatible with metaphysical grounding for the same reasons given above. In summary: the properties and objects involved in cases like [3] must be heavyweight if we are to view such cases as involving metaphysical grounding.³¹ I’ll appeal to this result in the arguments that follow.

5.4 Arguments for Grounding Exclusion

Schaffer (2009, 357-358) claims that metaphysics should focus on fundamentality questions because existence questions are trivial. For example, the following “pleonastic argument” is said to trivially establish the existence of the property *knowing that p*:

- 1*. John knows that *p*.
- 2*. John has the property *knowing that p*. (“pleonastic inference” from 1)
- 3*. Therefore: the property *knowing that p* exists. (generalization from 2)

While this style of argument is controversial, I agree with Schaffer that it successfully establishes the existence of a certain property. But I disagree with Schaffer that the above argument specifically establishes the existence of a *heavyweight* property (see Schaffer (2009, 357-358)). Indeed, the standard view in the literature on properties is that the existence of heavyweight properties is *not* trivial.³² So in order to decide whether a given

predicate metaphysically explains the fact that *x* falls under some other predicate.

³¹Audi (2012a, 708-709) similarly claims that grounded facts must be something “over and above” grounding facts. While Audi’s focus is on showing that eliminativism is incompatible with metaphysical grounding, I’ve argued that deflationism and (class and predicate) nominalism are likewise incompatible.

³²See Swoyer (1999) for discussion.

property is involved in metaphysical grounding relations, further work is required to determine whether it should be viewed as heavyweight.

As it happens, deflationary theorists have claimed that pleonastic inferences *themselves* tell against a heavyweight view of properties.³³ It has been said, for example, that we can make sense of the trivial inference from (1*) to (2*) if ‘*knowing that p*’ refers to a deflationary entity. But how could this inference be trivial if ‘*knowing that p*’ referred to a heavyweight entity?

If it is true that pleonastic arguments for an item *x* support a deflationary view of *x*, this might threaten the entire project of metaphysical grounding. This is because pleonastic arguments are available for many types of items in our ontology, and deflationism is incompatible with metaphysical grounding (see 5.3.3).

But in fact, I think this deflationary argument is too quick. This is because certain linguistic expressions may themselves carry heavyweight ontological commitments. For example, it is at least plausible that ‘*x* has spin 1/2’ is only true if *x* has a certain heavyweight microphysical property. If this is right, then the pleonastic inference from this sentence does not threaten the heavyweight status of *having spin 1/2*.

Still: even if we set pleonastic inferences aside, I think that there are specific reasons for doubting the heavyweight status of c-grounded properties. In the next two sub-sections, I give two arguments for this claim. The first is a semantic argument: I claim that names for c-grounded properties do not have the semantic role of referring to heavyweight properties. The second is more metaphysical: I argue against heavyweight c-grounded properties directly.

5.4.1 The triviality argument

I’ll illustrate the triviality argument by considering the case of [6’]. I’ll assume that [6’] involves conceptual grounding, since there is almost certainly a conceptual link between

³³See, e.g., Thomasson (2001, 320) and Schiffer (2003, ch. 2).

the sentence $F \equiv 'x \text{ has the property } \textit{having a mass of } 2g'$ and the sentence $F' \equiv 'x \text{ has the property } \textit{having a mass}'$.

6'. x has a mass in virtue of the fact that x has a mass of 2g.

Let's grant, as is plausible enough, that x 's property *having a mass of 2g* is heavyweight (as is required to view [6'] as a case of metaphysical grounding). Does x also instantiate a heavyweight property *having a mass*? As explained above, establishing that a heavyweight property is instantiated is something that requires argument. But here is the puzzle: within ordinary language, it is trivial to infer that x has the property *having a mass* from the fact that x has the property *having a mass of 2g*.

This raises an epistemic tension for the theorist who would view [6'] as a case of metaphysical grounding. Given the triviality of the inference from F to F' , why would we think that the term '*having a mass*' even purports to refer to a heavyweight entity? This semantic role is in direct tension with the epistemology of F' (since establishing the instantiation of a heavyweight property requires substantive argument). We can give all the arguments for heavyweight determinables we want, but there is no reason to think that a heavyweight property is what we are actually talking about when we use the term '*having a mass*' in ordinary discourse.³⁴

In contrast, suppose *having a mass* is identified with (say) the set of things falling under the predicate 'has a mass'. Then there is no tension: it is trivial in ordinary language for a subject who knows that x has a mass of 2g to infer that x is a member of the set of things falling under the predicate 'has a mass'. Similar remarks apply on a deflationary view where *having a mass* is a mere shadow of a predicate. Given their compatibility with ordinary epistemology, it is most plausible to say that '*having a mass*' refers to one of these types of "lightweight" properties. And given the discussion of 5.3.3, this in turn suggests

³⁴Of course, if we had a faculty for intuiting connections between heavyweight properties, this argument would be unsuccessful. But it is doubtful we have such a faculty; this is why establishing the instantiation of heavyweight properties is thought to require substantive argument. (Of course, I allow that we can trivially infer that *lightweight* properties are instantiated, as I discuss in the next paragraph).

that [6'] does not involve metaphysical grounding. Of course, the same form of argument would apply with any other c-grounded property.

Someone might object: “Even if the triviality argument is successful, it merely yields a conclusion about our *concepts*. It could still be true that heavyweight c-grounded properties exist and stand in metaphysical grounding relations.” This objection fails because, in [6'], the predicate ‘has a mass’ is a predicate from ordinary language. Accordingly the intuitions of priority we associate with [6'] are intuitions tied to the use of this predicate. So metaphysical grounding is not relevant to accommodating the non-causal explanation in [6'].

5.4.2 The explanatory work argument

The second argument also challenges the heavyweight status of c-grounded properties. But the emphasis is different: while the triviality argument focused on the semantics of property terms, the explanatory work argument focuses on c-grounded properties themselves.

As discussed above, establishing the existence of heavyweight properties requires substantive argument. The typical arguments for positing these properties is that they are needed to perform important explanatory work. In this section, I'll argue that heavyweight c-grounded properties are either unnecessary or unable to perform this explanatory work. The upshot will be that there are no reasons to posit heavyweight c-grounded properties, which will in turn support GE.

Of course, it is outside the scope of this chapter to address *every* argument for positing heavyweight properties. For this reason, I have tried to select examples that are representative of the arguments typically given in the literature.

Truthmaking: Heavyweight properties are often posited to serve in accounts of the truthmakers for our sentences.³⁵ For example, it has been claimed that we need to posit the

³⁵See, e.g., Armstrong (1997).

property of negative charge in order to explain the truth of sentences like ‘*X* is negatively charged’. But whatever the status of this argument in general, heavyweight *c-grounded* properties are not needed for truthmaking. Since sentences expressing *c-grounded* properties are conceptually entailed by sentences expressing *c-basic* properties, we only need the corresponding *c-basic* properties to account for the truth of our sentences.

Scientific practice: Theorists sometimes argue that heavyweight *c-grounded* properties are needed to account for various aspects of scientific practice. For example, Wilson (2012, 5) notes that determinable properties like *being in a low entropy state* figure crucially in scientific explanations.³⁶ Scientists explain the final state of a system by noting that systems naturally proceed from low entropy to high entropy states. Wilson argues that we can only make sense of this practice if we posit properties like *being in a low entropy state* to serve as the “ontological ground” of this explanation.³⁷

While Wilson’s argument may support the existence of the property *being in a low entropy state*, it doesn’t support the claim that this property is heavyweight. In fact, there is reason to think this property can’t be heavyweight. In her argument, the reason Wilson posits heavyweight determinables is so that they can serve as the denotations of certain property terms used in scientific theories and explanations. But here’s the problem: within scientific discourse, ‘*being in a low entropy state*’ is a *c-grounded* property term. And the discussion of 5.4.1 shows that such terms do not have the semantic role of referring to heavyweight entities. For this reason, the heavyweight property Wilson posits cannot perform the explanatory work intended for it.

Of course, Wilson’s argument is just one example of a scientific argument for positing *c-grounded* properties. But the response given above will be applicable to any argument

³⁶While Wilson’s argument is directed at determinables in general, I have chosen a specific example of such a property (*being in a low entropy state*) to make her argument concrete.

³⁷Note that, because the sentence ‘*X* is in a low entropy state’ is arguably conceptually grounded by sentences describing the positions of the system’s particles, *being in a low entropy state* is plausibly a *c-grounded* property.

in which c-grounded properties are posited in order to serve as the denotation of property terms used in scientific theories and explanations.

Resemblance: Heavyweight properties are often invoked to explain similarity.³⁸ But even if these arguments are successful in certain cases, we don't need heavyweight *c-grounded* properties to explain resemblance. To illustrate this, I'll continue with the entropy example from before. Suppose that *X* and *Y* are both in a low entropy state. How do we best explain this similarity between them? One possible explanation is that *X* and *Y* both instantiate some *sui generis* heavyweight property, and this heavyweight property explains their similarity. But with conceptual grounding, we have a better explanation. Conceptual grounding suggests that the similarity in virtue of which we apply the predicate 'is in a low entropy state' to both *X* and *Y* is a similarity that is "already present" in the facts described by the more basic sentences (i.e., the facts about the relative positions of the particles, etc.). In other words, it is because of a similarity in the c-basic properties of *X* and *Y* that we are able to judge to apply 'is in a low entropy state' to both *X* and *Y* *on the basis* of the basic sentences. So we don't need to appeal to a heavyweight c-grounded property to explain this similarity.

Causal powers: Suppose Sophie the pigeon is trained to peck at anything red. Now suppose Sophie pecks at something scarlet. What causes Sophie's pecking: the instance of scarlet or the instance of red? The intuitive answer is supposed to be: the instance of red (since Sophie would have picked at *anything* red). This suggests that *redness*, which is plausibly c-grounded, has causal powers.³⁹ And since it is often thought that heavyweight properties are needed to serve as the bearers of causal powers⁴⁰, this may seem to generate an argument for heavyweight c-grounded properties.

³⁸See Swoyer (1999, 107)

³⁹This argument is from Shoemaker (2001, 78-81).

⁴⁰See Swoyer (1999, 107).

The response to this argument should be the same as the response to Wilson’s argument above. Notice that the Sophie example relies on our ordinary intuitions about the cause of the pecking in the described case. In other words: when we judge that redness causes the pecking, we are employing the ordinary expression ‘redness’. But if redness is a c-grounded property, then term ‘redness’ does not have the semantic role of referring to a heavyweight entity (see 5.4.1). So even if the Sophie case supports the claim that c-grounded properties have causal powers, it does not support the claim that c-grounded properties are *heavyweight*.⁴¹

To sum up: the standard arguments for positing heavyweight properties seem to fail in the case of c-grounded properties. While the above arguments do not definitively establish this result, they at least put the burden of proof on the metaphysical grounding theorists invoking such properties to show that they are heavyweight.

5.4.3 Summary

I have given two arguments suggesting that c-grounded properties are not heavyweight. Given the implicit restrictions on properties involved in metaphysical grounding relations (see 5.3.3), this supports the GE thesis.

For ease of presentation, I’ve focused on in-virtue-of claims with the form ‘ x is β in virtue of the fact that x is α ’. But analogous arguments should apply to other cases as well. For example, Thomasson (2007, 164-165) claims that the sentence ‘There is a chair’ is conceptually entailed by the sentence ‘There are particles arranged chairwise’. If she is right, then [7] will be a case of conceptual grounding:

7. There is a chair in virtue of the fact that there are particles arranged chairwise.

Does [7] also involve metaphysical grounding? Thomasson (2009, 467) appeals to the

⁴¹This might seem puzzling: how can we make sense of redness having causal powers if it isn’t heavyweight? I suspect the answer is that the causal powers in question are plausibly deflationary causal powers.

triviality of the above inference to argue that items like chairs have no “real metaphysical nature” for metaphysics to discover (this is just a version of the triviality argument given in 5.4.1). But if chairs have no real metaphysical nature to discover, then debates about whether parts metaphysically ground wholes or wholes metaphysically ground parts are misguided. So if [7] involves conceptual grounding, then it is not a case of metaphysical grounding.

5.4.4 Objections

I’ll now consider two ways a theorist might resist GE. It is possible to adopt a deflationary stance where truths about metaphysical grounding are mere conceptual truths (see Chalmers (2012, 458)). So in arguing for GE, a deflationist may object that I’m trying to deny conceptual truths. My response to this worry is that I intend to use ‘metaphysical grounding’ in the standard, non-deflationary way it is used in the literature. Typically, theorists who study metaphysical grounding are not deflationists: their stated goal is to *discover* substantive truths about metaphysical dependence.

A second way to resist GE would be to insist that, in fact, it *is* trivial to establish that *heavyweight* c-grounded properties are instantiated. For example, Schaffer (2009, 360) says: “I take entities [involved in grounding claims] to be full-blown “heavyweight” entries on the roster of entities, and merely add that their existence is *obvious*”.

But in response, I want to re-emphasize that there is nothing in the arguments given for the trivial existence of (say) properties that suggests that these items are heavyweight. The existence of heavyweight properties isn’t considered trivial in the literature⁴², and theorists like Schaffer (2009) have not provided any arguments to the contrary. So anyone who wants to reject GE has the burden of showing that c-grounded property terms refer to heavyweight properties instead of deflationary properties, sets, etc.. Similar remarks apply to other items in our ontology.

⁴²See, e.g., Swoyer (1999).

5.5 Heuristics

If GE is true, it becomes important to distinguish metaphysical and conceptual grounding. Conflating these relations may lead to mistaken conclusions about metaphysical structure and mistaken conclusions about the metaphysical grounding relation itself. In this section, I will consider two heuristics for distinguishing each type of case.

5.5.1 The Scrutability Heuristic

I'll illustrate the scrutability heuristic by considering the following alleged case of metaphysical grounding:

8. x knows that p in virtue of facts about the causes, evidence, truth, etc. of x 's belief that p (Fine 2012a, 53)⁴³

In 5.2.2, I made the following observation: when we are told sufficient information about a subject's belief state, we are (across a variety of ordinary cases) able to trivially judge whether or not that subject has knowledge. With this epistemic result in hand, we can use inference to the best explanation to support conceptual grounding in the case of [8]. What explains the fact that we can often trivially judge whether x knows that p when given a description of x 's belief state? If [8] involves conceptual grounding, we have an elegant explanation: it is constitutive of competence with the term 'knows' that one is disposed to make these judgments. This motivates the following heuristic:

Scrutability heuristic: Consider a (genuinely explanatory) in-virtue-of claim $V \equiv 'S_1$ in virtue of the fact that S_2' . If sentences involving the same family of vocabulary⁴⁴ as S_1 are trivially inferable from sentences involving the same family of vocabulary as S_2 , this is evidence that V involves conceptual grounding.

⁴³For ease of presentation, I've adjusted the form of this example.

⁴⁴The intuitive distinctions between "families of vocabulary" will directly mirror the distinctions drawn between domains of facts in the literature on metaphysical grounding.

So, for example, since ‘knowledge’ sentences are trivially inferable from sentences describing belief states, the scrutability heuristic suggests that, in fact, [8] involves conceptual grounding.

It is worth noting that not all trivial inferences suggest conceptual grounding. For example, ‘ $2+2=4$ ’ is trivially inferable from ‘John is tall’, but this is only because ‘ $2+2=4$ ’ is trivial *simpliciter*. The restriction to “genuinely explanatory” in-virtue-of claims helps to exclude such cases. More generally, scrutability evidence should be viewed as defeasible; conceptual grounding may not provide the best explanation of scrutability in all cases.⁴⁵

I call this the “scrutability heuristic” because of recent work from Chalmers (2012) on *scrutability theses*. A scrutability thesis is a claim that sentences of a certain family of vocabulary are trivially inferable from sentences of another family of vocabulary: exactly the type of result relevant to the scrutability heuristic.

5.5.2 The Vagueness Heuristic

I will illustrate the second heuristic by considering the following alleged case of metaphysical grounding:

3. x is roughly spherical in virtue of the fact that x has determinate shape R

I will argue that the vagueness of the predicate ‘is roughly spherical’ supports the view that, in fact, [3] involves conceptual grounding.

Suppose that it is indeterminate whether x is roughly spherical when x has particular shape R_i . On the standard linguistic theory of vagueness, this indeterminacy is attributable to linguistic imprecision. So to eliminate the indeterminacy, we *stipulate* whether or not

⁴⁵One interesting case to consider is ‘ $\exists xFx$ in virtue of the fact that Fa ’. While ‘ $\exists xFx$ ’ is trivially inferable from ‘ Fa ’, it is not obvious that conceptual grounding provides the best explanation of scrutability in this case; for example, some theorists have argued that logical inferences are instead justified by rational intuitions (see, e.g., Dogramaci (2013)). So this may be a case where the support provided by the scrutability heuristic is defeated. (On the other hand, we might also say that ‘ $\exists xFx$ ’ and ‘ Fa ’ involve the same family of vocabulary, so perhaps the scrutability heuristic doesn’t apply to this case anyway.)

the predicate ‘is roughly spherical’ applies to shape R_i . But if whether R_i is roughly spherical merely depends on whether we decide to *call* R_i roughly spherical, this suggests that ‘rough-sphericity’-sentences are conceptually linked to ‘determinate shape’-sentences. This in turn supports viewing [3] as a case of conceptual grounding, since [3] employs terms from these two families of vocabulary.

The above argument does not show that *all* vagueness indicates conceptual grounding. For example, consider [6] \equiv ‘ x is in pain in virtue of the fact that x is in brain state P ’. In both [6] and [3], we have a claim of the form ‘ S_1 in virtue of the fact that S_2 ’, with a vague expression in S_1 . In both cases, we would precisify S_1 by stipulating its truth value in an indeterminate case meeting description C . What separates [6] and [3] is the vocabulary employed by C . In [3], C (i.e., ‘ x has determinate shape R_i ’) employs the same family of vocabulary that S_2 employs. This is why our ability to stipulatively settle S_1 in the case described by C is relevant to whether [3] involves conceptual grounding.

Contrast this with [6]. The normal way to precisify ‘pain’ would not be to stipulate which specific brain states count as painful. Instead, we would stipulate which specific phenomenal states count as painful.⁴⁶ In other words, in case [6], C would employ *phenomenal* vocabulary: terms that pick out conscious states directly in terms of their intrinsic phenomenal character. But if this is right, then our ability to stipulate the truth of S_2 given description C has no bearing on whether [6] involves conceptual grounding, since the right side of [6] *doesn’t* employ phenomenal vocabulary.

Of course, if we know that subjects in a certain borderline pain state are in brain state P_i , we *could* precisify ‘is in pain’ by stipulating that P_i is a case of pain. But this stipulation is only possible if we possess empirical knowledge about the connections between brain states and conscious states. For this reason, the possibility of such stipulations doesn’t suggest conceptual grounding in [6].

⁴⁶Here, I remain neutral whether physical and phenomenal states are identical. If they are identical, the present point is that, on the normal way of precisifying ‘is in pain’, we would refer to these states using phenomenal descriptions, not neuroscientific descriptions.

The above discussion motivates the following heuristic:

Vagueness heuristic: Consider a (genuinely explanatory) in-virtue-of claim $V \equiv 'S_1$ in virtue of the fact that S_2' . If:

- (a) S_1 is indeterminate in some situation L due to a vague expression in S_1 and
- (b) a subject with no further empirical information could precisify S_1 by stipulating its truth when given a description of L that only employs vocabulary from the same family as in S_2 , then this is evidence that V involves conceptual grounding.

For example, in [3], S_1 is indeterminate in the situation described by $C \equiv 'x$ has determinate shape R_i' . Since a subject can simply stipulate that R_i is roughly spherical without needing any further empirical information, the vagueness heuristic suggests that [3] involves conceptual grounding. In contrast, the vagueness in [6] does not suggest conceptual grounding because of condition (b).

5.5.3 A test case

I'll illustrate the heuristics with the following case:

9. x causes y in virtue of facts about the Humean mosaic and laws of nature.⁴⁷

There have been many attempts to analyze the term 'cause'. But every proposal seems to face counterexamples. These failures have led certain philosophers to suggest that we reorient our approach to theorizing about causation. Instead of focusing on the term 'cause', we should instead focus on the causal relation *itself*, investigating its patterns of metaphysical dependence. Here is a representative quotation from Schaffer (2007):

I suspect that many philosophers have really been interested in a conceptual analysis of causation because they thought the issue was of ontological moment. ... [But the] conceptual order the order of definitions in our minds need not match the ontological order the order of dependencies in nature. (873)

⁴⁷Schaffer (2007, 873-874) considers this possible example of metaphysical grounding (although he doesn't endorse it).

But the move from the failure of conceptual analysis to the study of the metaphysical grounds of causation may be premature. This is because, even if ‘cause’ cannot be given a definition, there is still strong support for the claim that causal sentences are conceptually grounded. I will support this claim with the scrutability and vagueness heuristics.

Scrutability heuristic: The very counterexamples that tell against the analyzability of the term ‘cause’ actually support the claim that ‘cause’ stands in trivial inferential connections to more basic terms. For example, let E be the sentence ‘Suzie’s throw caused the bottle to shatter’. Let F be the conjunction of the following sentences:

“Billy and Suzy throw rocks at a bottle. Suzy throws first, or maybe she throws harder. Her rock arrives first. The bottle shatters. When Billy’s rock gets to where the bottle used to be, there is nothing there but flying shards of glass. Without Suzy’s throw, the impact of Billy’s rock on the intact bottle would have [shattered the bottle]. But, thanks to Suzy’s preempting throw, that impact never happens.” (Lewis (2004, 82))

It seems that competent speakers can trivially judge that E is true when presented with F . The same goes for other cases in the literature on causation (e.g., preemption cases, overdetermination cases, etc.). The entire progress of this literature depended on our ability to make trivial judgments about what causes what when presented with descriptions of cases. Taken together, these cases suggest that: when we are told sufficient information about a situation without using the term ‘cause’, we can often trivially judge whether x causes y .

What explains our ability to make these trivial judgments? With conceptual grounding, we have an elegant explanation: it is constitutive of competence with the term ‘cause’ that one is disposed to make these judgments. In contrast, with metaphysical grounding, one must say that speakers intuit a connection between heavyweight facts. Conceptual grounding seems to provide the much better explanation.

Vagueness heuristic: There are many cases where we lack firm intuitions about whether x causes y . For example, let G be the conjunction of the following sentences: ‘Two assassins, Captain and Assistant, are on a mission to kill Victim. Upon spotting Victim, Captain yells “Fire!”, and Assistant fires. Overhearing the order, Victim ducks and survives unscathed.’⁴⁸ In the case described by G , we lack firm intuitions about $P \equiv$ ‘The captain’s yelling “Fire!” caused Victim to survive’.

One might think that there is still an objective fact about the truth of P in this case. But this can be resisted with a thought experiment. Imagine two communities A and B that agree with us on almost all of our ordinary causal judgments. But, while we are undecided about P , A -speakers have robust intuitions that P is true while B -speakers have robust intuitions that P is false. What should we say about the dispute between A -speakers and B -speakers over P ? It seems most plausible to say that this dispute is merely verbal: A -speakers and B -speakers simply use the term ‘cause’ in slightly different ways, such that P is true for A -speakers and false for B -speakers. But if this is right, it suggests that P is indeterminate on *our* use of the term ‘cause’. So condition (a) of the vagueness heuristic is met.

To precisify P , we would simply stipulate its truth given the description G of the case; no further empirical information would be required. So it is plausible that condition (b) is also met and that the vagueness heuristic supports viewing [9] as a case of conceptual grounding.

Summary: Both heuristics suggest that, if [9] involves grounding at all, the grounding in question is conceptual. So metaphysical grounding isn’t the proper methodological approach for theorizing about causation.

⁴⁸This example is from Hitchcock (2003, 10), who discusses many similar cases.

5.5.4 How widespread is conceptual grounding?

It is outside the scope of this chapter to apply the heuristics to further cases. But my own view is that many other alleged cases of metaphysical grounding are better interpreted as involving conceptual grounding. Examples I've discussed in this chapter include [3], [8], and [9]. From the original list of examples, I'm inclined to say that [4] and [5] involve conceptual grounding as well. In contrast, the best candidates for metaphysical grounding are [1], [6], and perhaps [2]. But these examples are controversial and deserve fuller discussion.

5.6 Conclusion: philosophical payoffs

In this chapter, I have argued that metaphysical and conceptual grounding are exclusive and have offered two heuristics to identify which type of grounding is operative in a given case. I'll now mention some payoffs of the above discussion.

First, and most importantly, I've argued that metaphysical grounding is not the only way to make sense of non-causal in-virtue-of claims. Deflationist and reductionist views can equally well account for cases of non-causal explanation by appealing to conceptual grounding. Of course, as I mentioned before, there is nothing stopping us from using 'metaphysical grounding' as a catch-all term that applies in any case of non-causal explanation. But to group these views together doesn't somehow unify them; it merely obscures the important distinctions between them.⁴⁹

Second, the above discussion shows that before we ask questions of the form 'Does *X* ground *Y*?', we first need to ask: 'Is there a semantic link between the expressions '*X*' and '*Y*'?' In answering this question, we find that many alleged cases of metaphysical grounding actually involve conceptual grounding.

Finally, the above discussion should be of interest to theorists who are skeptical of

⁴⁹For related discussion see Wilson (2014), who claims that talk of metaphysical grounding obscures distinctions between relations like functional realization, the determinate-determinable relation, etc. This chapter has instead focused on the distinction between metaphysical and conceptual versions of non-causal explanation.

metaphysical grounding. One way to object to metaphysical grounding is to challenge proposed examples of it.⁵⁰ And with the GE thesis, we have a general strategy for challenging such cases: use the heuristics to show that a given in-virtue-of claim actually involves conceptual grounding. In this chapter, I've used these heuristics to challenge several alleged cases of metaphysical grounding. It has been outside the scope of this chapter to apply these heuristics to further cases. But my own view is that *most* proposed cases of metaphysical grounding are actually cases of conceptual grounding. If this is correct, the heuristics may help justify skepticism about the notion of metaphysical grounding itself.

⁵⁰See Hofweber (2009) for an example of this strategy. Raven (2012) defends certain alleged examples of metaphysical grounding.

6 EDENIC IDEALISM

6.1 Introduction

In our experience, we seem to be directly acquainted with objects located in a three-dimensional spatial arena. These objects seem to instantiate primitive, vivid colors and seem to be perfectly solid. We can call the world of objects presented to us in experience the *world of the manifest image*.¹

Of course, the world presented in experience does not perfectly align with the *external world*: the mind-independent reality that gives rise to those experiences. For example, there are strong reasons for denying that external objects actually have primitive, vivid colors or are perfectly solid. Perhaps more surprisingly, there are also reasons to doubt that external space resembles the space presented to us in experience.

The discrepancies between the manifest world and the external world pose a challenge: how do these two worlds fit together? One common proposal is to identify these worlds through a strategy called *functional identification*. The basic idea of functional identification is that, even if the external world does not contain *primitive* redness, it does contain a physical property that fills the “redness role”; by identifying redness with this property, we can preserve the truth of our ordinary color judgments. Similarly, we can identify solidity with whatever physical property fills the solidity role in order to preserve the truth of our ordinary solidity judgments.

In this chapter, I will present a series of puzzles for functional identification. The puzzles are cases where it is very difficult to match the objects and properties presented in experience with corresponding items in the external world.

¹The term “manifest image” is from Sellars (1963b, 6).

One possible response to these puzzles would be to reject the manifest world as an illusion or a fiction. A second possible response would be to reject the puzzles' implicit assumption that there is a mind-independent external world. But in this chapter, I defend a middle view *edenic idealism* on which the external and manifest worlds are *both* real and on which each is metaphysically independent of the other. In contrast to many traditional idealists, the edenic idealist acknowledges the existence of a mind-independent external world. But in contrast to the realist, she maintains that our ordinary object judgments are about the manifest world: the world of primitive objects and properties presented to us in experience.

6.2 Threats to the manifest image

To provide background for the puzzles, I will first review the reasons why the external world probably does not qualitatively resemble the world presented in experience, starting with the familiar case of colors.²

6.2.1 Color properties

In ordinary visual experience, we seem to be directly acquainted with simple, intrinsic, vivid color properties. Following Chalmers (2006, 49-50), we can call these properties *edenic color properties*.³ Many of us naively assume that external objects instantiate edenic colors. But there are powerful arguments against this view.⁴

²Throughout this chapter, I use the term “presented” because our experience has a presentational phenomenology: we seem to be directly acquainted with objects and their properties. In using this term, I do not mean to deny the possibility of falsidical experiences.

³This term derives from the following fable: in the Garden of Eden, objects instantiated primitive colors. But then we ate from the “tree of the knowledge of science” and the “tree of illusion.”

⁴See Cohen (2009, 65-67) and Maund (2012, section 6.2) for overviews of arguments against edenic (i.e., “primitive”) colors. Note that edenic colors should be distinguished from other properties we might identify with colors, such as dispositional, microphysical, or relational properties. The arguments below only threaten the claim that external objects instantiate *edenic* colors; they do not threaten realist views on which colors are identified with something other than edenic properties.

Initial doubts are raised by the fact that objects sometimes seem to have different colors at different times, even though we do not think the object itself has changed. In addition, we learn from science that our color experience is the result of a long, complex causal chain. Both these facts suggest that edenic colors may not be the real cause of our color experiences.

But the strongest reasons to doubt edenic colors are (i) the *argument from incompatible experiences* and (ii) the *argument from science*. As for (i): it seems that subjects could have incompatible color experiences of the same object without there being reason to think that anyone is suffering an illusion. For example, suppose roses look red to humans but green to Martians. There would be no reason to think that either party was mistaken in their perceptions. One could insist that there is a fact about which color is *really* instantiated, but it is more plausible to say that there are no edenic colors at all.⁵ As for (ii): we know from physics that different properties cause our color experiences in different circumstances. So, contrary to how it seems in experience, there is not a single intrinsic property of redness common to all red things.

6.2.2 Spatial properties

Next consider spatial experience. Just as objects seem to instantiate primitive colors, so too objects seem to instantiate primitive spatial properties. For example, some objects appear primitively square-like or primitively spherical. Objects seem to stand in primitive (relative) distance relations. More generally, objects seem to populate a vast three-dimensional Euclidean spatial arena. We can say that objects appear to have *edenic spatial properties* and appear to populate a three-dimensional *edenic space*.⁶

The same reasons for skepticism about edenic colors also apply to edenic space. Initial

⁵In fact, we don't even need thought experiments. According to Neitz & Jacobs (1986), there are experimentally-detectable differences between the color experiences of males and females.

⁶For discussion, see Chalmers (2012, 7.5).

doubts are raised by spatial illusions and by the recognition that our spatial experience is the result of a complex causal chain. These facts suggest that edenic spatial properties may not be the actual cause of our spatial experiences.

And just as with colors, doubts about edenic space are supported by (i) the argument from incompatible experiences and (ii) the argument from science. As for (i): it seems that an object could cause incompatible spatial experiences without there being reason to think that anyone suffers an illusion. For example, suppose objects causing a square experience for humans systematically cause a 2:1 rectangle experience for Martians. Just as before, one could insist that there is a fact about which shape is *really* instantiated, but it seems more reasonable to say that no edenic spatial properties are instantiated at all.⁷

As for (ii): edenic space is incompatible with results from fundamental physics.⁸ For example, we experience space and time as independent dimensions of reality, each with its own qualitative nature. But from special relativity, we know that the division of spacetime into spatial and temporal dimensions depends on the observer's state of motion. For a second example: the space presented in our experience seems Euclidean. But we learn from general relativity that external space has a Riemannian geometry.⁹ Together, (i) and (ii) lend support to the following claim: *external space probably does not qualitatively resemble the space presented to us in experience.*¹⁰

The arguments ahead will not require the reader to accept this last claim; they only require that it be *epistemically possible* that external and manifest space diverge. Nonetheless, it is useful to mention the *actual* discrepancy between external and manifest space

⁷For further discussion of this type of case, see Thompson (2011, 176-181).

⁸See Thompson (2013, 170) for discussion.

⁹Some philosophers, such as Ney (2012), think that quantum mechanics also challenges our ordinary conception of space. But since this point is contested, I'll not discuss this issue here.

¹⁰Note: this claim is very different from the claim that space is not metaphysically fundamental. Recently, some philosophers of physics (such as Ney (2012, 546)) have discussed the possibility that 3D space is (in some sense) derivative from the state of an underlying infinite-dimensional configuration space. But this issue about fundamentality is independent of the issue of whether external space is edenic. To say that edenic space exists non-fundamentally would be just as wrong as saying that edenic colors exist non-fundamentally.

because it helps make the possibility of such divergence seem less strange.

6.2.3 Functional identification

Given these threats to the manifest image, what is the status of our ordinary judgments like ‘The chair is red’? One option would be to conclude that such judgments are simply false. But few philosophers today adopt this line. This is because, even if the world does not contain edenic properties, it *does* contain properties with a similar enough role to uphold our ordinary judgments. For example, we might functionally identify redness with whatever microphysical property normally causes our red experiences. Or we might instead functionally identify redness with a dispositional property (e.g., the disposition to cause red experiences in normal human subjects in certain circumstances). Similar proposals are available for our ordinary judgments about solidity, spatial properties, etc.¹¹

Functional identification has obvious advantages; it offers us a way to uphold our ordinary object judgments using a standard, compositional semantics. But in section 6.3, I will raise a series of puzzles for this proposal. The puzzles are cases where it is very difficult to match the objects and properties from our experience with corresponding items in the external world.

6.3 The puzzles

Each puzzle will describe a different hypothesis H about what the external world is like “in itself.” I’ll then ask a simple question: if the external world is like H , what would our ordinary object terms refer to? To provide an intuitive grip on the form of the puzzles, consider the following test case:

The Newtonian world: Suppose that the external world W_N is a classical, atomistic Newtonian world. More precisely: there is a 3D edenic spatial

¹¹For example, see Chalmers (2012, ch. 7) for a functionalist view of spatial properties.

arena¹² populated by a set of n particles. Roughly speaking, when these particles densely populate certain regions, an appropriately located subject has an experience of an object occupying that region, as in Fig. 6.1:

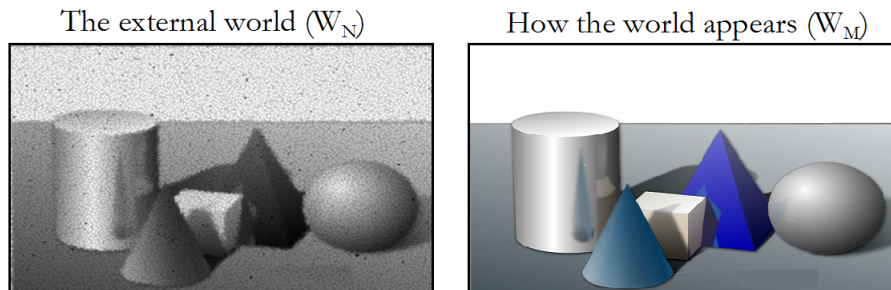


Figure 6.1: The Newtonian World (W_N)

What would our ordinary object terms refer to if the external world turns out to be like W_N ? In this particular case, this question doesn't raise any serious puzzles. For example, it is natural to say that if a subject with the experience in Fig. 6.1 asserted 'The cube is white', her term 'the cube' would refer to a certain system or arrangement of particles populating the corresponding cube-shaped region in W_N .

The puzzles below have the same form as the case just given. But these puzzles are cases where there is no easy answer to the question of what our object terms refer to. Here are two final preliminary notes on the puzzles:

Puzzles about language: Throughout this section, the question "What would our ordinary object terms refer to?" should be taken in its ordinary, intuitive sense. In other words, it is supposed to be a question that any ordinary speaker can answer just by consulting her intuitions about the cases. In contrast, it isn't a question about the "metaphysical nature" of ordinary objects, such as whether they perdure or endure.

¹²In other words, space in W_N is like the space presented to us in experience.

One might worry about drawing metaphysical conclusions from ordinary intuitions. But for the present, my goal is not to draw any conclusions about the metaphysics of ordinary objects *per se*; instead, my goal is to investigate the content of our thought and talk about ordinary objects.

Epistemic possibilities: For this same reason, we need not assume that the hypotheses presented below are physically or even metaphysically possible. It is enough to assume that the hypotheses below are epistemically possible in the very weak sense of not being ruled out *a priori*. It is very plausible that epistemic possibilities, in addition to metaphysical possibilities, are relevant to some component of the content of our linguistic utterances.¹³

6.3.1 Puzzle 1: the dust world W_D

Description of W_D : Just like the Newtonian world W_N , the dust world W_D has a 3D edenic space. And for every particle in W_N , there is a corresponding particle in W_D . But while the spatial positions of the particles in W_N evolve in orderly ways according to the laws of motion, the particles in W_D are randomly distributed throughout space like a giant dust cloud:

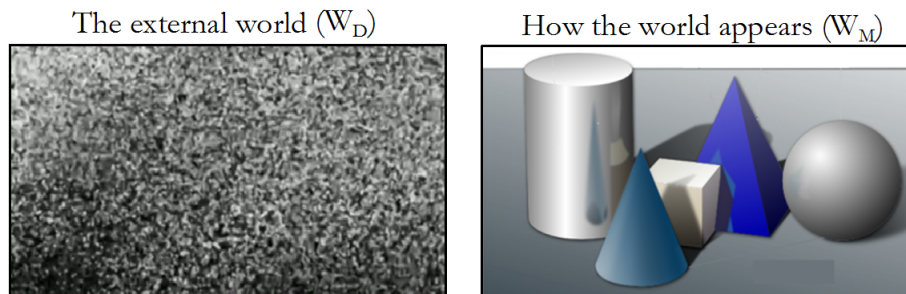


Figure 6.2: The dust world (W_D)

Despite this random configuration, W_D causes “normal” experiences like the one on the right side of Fig. 6.2. This is because each particle in W_D has a

¹³For example, we can explain the intuitive difference in content between the expressions ‘water’ and ‘H₂O’ by noting that these terms refer to different things in certain epistemic possibilities. For example, if the actual world turned out to be like Twin Earth, ‘water’ would have referred to XYZ (while ‘H₂O’ would still have referred to H₂O). For discussion, see Chalmers (2012, E11).

certain trio of “hidden” properties whose magnitudes directly mirror the spatial positions of the corresponding particle in W_N . The magnitudes of these hidden properties have no bearing on the particles’ movement through external space, but they have the same role in the physical and psychophysical laws that *external* spatial properties have in W_N .

Analysis: What does the expression ‘the cube’ refer to if the external world is like W_D ? The puzzle is that there is nothing remotely cube-shaped in W_D when we consider it in itself.¹⁴ Probably, it is most plausible to say that ‘the cube’ refers to the fusion of those particles in W_D that correspond to particles in W_N that constitute a cube. On this proposal, when speakers use the term ‘the cube’, they will be referring to a fusion of particles that are widely and randomly distributed through external space (i.e., particles that may be millions of kilometers apart).

Perhaps this result is palatable, but it is also puzzling. It is commonly thought that ordinary speakers do not work on an ontological framework on which widely-scattered particles compose a further object; after all, ordinary speakers explicitly deny the existence of such items.¹⁵ But on the current proposal, it would turn out that ordinary speakers actually *are* referring to scattered fusions merely as a result of contingent empirical facts about the external world. This would suggest that we cannot determine the ontological commitments of ordinary speakers merely by considering ordinary usage.¹⁶

¹⁴Since there is also nothing “body-shaped” in W_D , one might worry that this example controversially presupposes the possibility of disembodied experiences. But this is no serious problem. As discussed above, it is enough for the hypotheses in this section to not be ruled out *a priori*, and W_D plausibly meet this weak condition.

If any worry remains, we could modify the example so that W_D exactly matches W_N in the regions corresponding to the bodies of conscious subjects and is a giant dust cloud everywhere else. This modification would require certain adjustments in the physical laws; for example, particles leaving the body-shaped regions would instantaneously move to distant spatial locations, and so on. (Similar remarks will apply to the examples in 6.3.2 and 6.3.3.)

¹⁵For discussion, see Hirsch (2005).

¹⁶Of course, on the current proposal, the sentence ‘Widely-scattered fusions do not exist’ might still be true in ordinary language, since the extension of the predicate ‘is a widely-scattered fusion’ might be different from what we commonly suppose.

6.3.2 Puzzle 2: the single particle world W_S

Description of W_S : The external world W_S has a 3D edenic space, but this time, the only thing relevant to the psychophysical laws is a single particle instantiating a certain property P. At any time t , P takes a certain real number r_t as its magnitude. r_t encodes the entire state of the Newtonian world W_N (at the corresponding time t^* in W_N) as follows. We enumerate the magnitudes of the (assumed to be finite) fundamental properties had by the (assumed to be finite) particles of W_N at time t^* . r_t is the real obtained by interleaving the digits of these reals. The psychophysical laws act on P in such a way as to generate the same experiences as in W_N (see Fig. 6.3):¹⁷

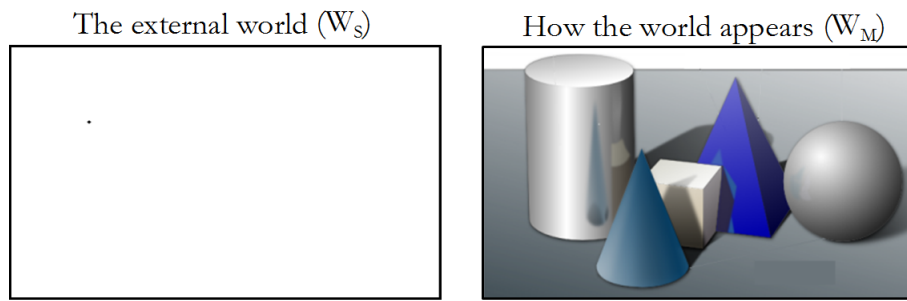


Figure 6.3: The single particle world (W_S)

Analysis: What do our ordinary object terms refer to if the external world is like W_S ? The puzzle in this case is that, since our experiences are generated by a single property of a single particle, it doesn't seem as if we could be referring to concrete entities of any kind. Later on, I'll consider whether there might be some *other* entities we could be referring to with terms like 'the cube' and so on. But for now, suffice to say that, if the external world is like W_S , there are no obvious candidates to serve as the denotations for our object terms.

¹⁷Note that, while only one particle in W_S is relevant to the psychophysical laws, we can imagine W_S containing other particles or objects as well. In this way, the example avoids any controversial commitment to an absolute conception of space.

6.3.3 Puzzle 3: the frozen world W_F

Description of W_F : From $t=0$ minutes to $t=5$ minutes, the external world W_F is exactly like the Newtonian world W_N . At $t=5$, all physical matter in W_F freezes in place for 5 minutes.¹⁸ At $t=10$, all this matter is instantaneously relocated so that W_F is just like W_N at $t=10$. This cycle continues throughout the history of W_F . But due to certain adjustments in the psychophysical laws, our conscious experience is always exactly like in W_N , even during those times when the matter in W_F is frozen.¹⁹ This situation is represented by the cloud in Fig. 6.4, which moves in W_M but remains stationary in W_F during the “frozen intervals”:

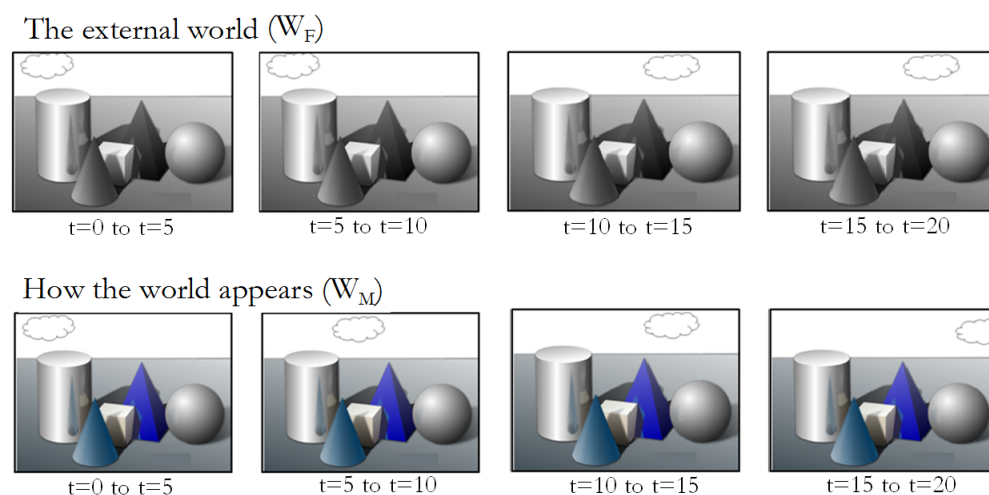


Figure 6.4: The frozen world (W_F)

¹⁸If one is worried that this presupposes a substantival view of time, one can suppose that the objects in some distant corner of the universe do not freeze in this way.

¹⁹Ordinarily, we view the psychophysical laws as a function from physical states (at a time) to phenomenal states (at that time). But during the frozen intervals in W_F , the physical state of W_F remains constant while its phenomenal state changes. So during the frozen intervals, this phenomenal state will be a function of two variables: (i) the physical state of W_F at the beginning of the interval and (ii) the time elapsed since the start of the interval.

We can represent this formally as follows. Let t_0 be a time when W_F freezes and let s be the time elapsed during the frozen interval since t_0 . Let $S_F(t)$ and $S_N(t)$ be the physical states of W_F and W_N at time t , and let $P_F(t)$ and $P_N(t)$ be the phenomenal states of W_F and W_N at time t .

For the phenomenal states of W_F and W_N to match, $P_F(t_0 + s)$ must be identical to $P_N(t_0 + s)$. Since the physical laws of W_N are deterministic, $S_N(t_0 + s)$ can be expressed as $D(S_N(t_0), s)$, where D is a function mapping the “initial conditions” of W_N at t_0 to W_N ’s physical state after time s . Since $S_N(t_0)$ is identical to $S_F(t_0)$, we can stipulate that $P_F(t_0 + s)$ is identical to $P_N(D(S_F(t_0), s))$ in order to ensure that the phenomenal states of W_F and W_N match. Note that, as described above, $P_F(t_0 + s)$ is a function of (i) $S_F(t_0)$ and (ii) s .

Analysis: What do our ordinary object terms refer to if the external world is like W_F ? Specifically, what would our term ‘the cloud’ refer to if our experiences were like in Fig. 6.4? On the interval from $t=0$ to $t=5$, the natural response is that ‘the cloud’ refers to a cloud-shaped arrangement of particles, just as in the Newtonian world W_N . The frozen intervals are more puzzling. From $t=5$ to $t=10$, we would continue to make assertions about the cloud and its changing properties, but during this interval, W_F doesn’t undergo any change at all.

One possibility would be to identify the temporal parts of the moving cloud in W_M with the corresponding temporal parts of the stationary cloud in W_F . On this proposal, we would need to give an alternative semantic treatment of predicates so that sentences like ‘The cloud is moving to the right’ come out true in the frozen intervals.

Perhaps this is a palatable result. But to make the puzzle sharper, we can modify the case so that this proposal is unavailable. Suppose we adjust the deterministic physical laws of W_N so that new objects are sometimes spontaneously generated (while making corresponding adjustments to the physical and psychophysical laws of W_F as well). During a frozen interval, we can imagine a subject making the assertion ‘That object just spontaneously generated’ on the basis of her visual experience. But such a subject could not be referring to any concrete item in W_F , since the object in question would not exist in W_F until the end of the frozen interval.²⁰

Again, while there may be responses worth considering, it is at least not obvious how functional identification would work in this case.

²⁰One might try to say that, during the frozen interval, ‘that object’ refers to a *future* existent in W_F (i.e., the object created when W_F aligns with W_N at the end of the interval). But we can rule out this proposal by supposing that objects in W_N sometimes spontaneously annihilate as well, and the object in question spontaneously annihilates before the end of the frozen interval. In this case, there will be no future existent in W_F to serve as a denotation.

6.4 Possible responses

There is no need to consider further cases; once you've seen the basic form of the puzzles, it is easy to generate additional examples. In each case, the puzzle arises because of the tension between the following two claims:

- (A) Our experience is such that we would (presumably) justifiedly make assertions about the existence and properties of ordinary objects.
- (B) There are no clear candidates in the external world to serve as the denotations for ordinary object terms.

In this section, I will consider some possible responses to the puzzles. While some are stronger than others, I show that each faces serious problems. I'll present the edenic idealist's solution to the puzzles in section 6.5.

6.4.1 Simple error theory

The simplest response to the puzzles is to say that, in each case, our ordinary object judgments are simply mistaken. One might think: these cases are just exotic hypotheses about the external world. If these strange hypotheses were to obtain, then terms like 'the chair' would not refer and our judgments about chairs would be false.

In fact, I don't think these hypotheses are any more exotic than some of the hypotheses offered by physicists and philosophers of physics. For example, the single-particle world is reminiscent of the "world particle" postulated by a certain version of Bohmian mechanics.²¹ But even putting this issue aside, I think a simple error theory is a difficult position to maintain.

To see why, consider how ordinary speakers would act if they learned that any of the above hypotheses accurately described the external world. Suppose the all-knowing, perfectly-trustworthy Oracle tells us that, in fact, the external world is just like the single-particle world. We would probably find this surprising. Indeed, upon hearing this result,

²¹See Ney (2012, 534) for discussion.

we might react by saying things like ‘Tables and chairs don’t actually exist!’ and ‘We don’t have bodies after all!’. But this initial shock would pass. And after several minutes, we would go back to saying things like ‘There are five chairs in the kitchen’ or ‘The bus arrives soon’ just as we always had.

This thought experiment sharpens the puzzles of section 6.3. It isn’t merely that there is a tension between the justification of our object judgments and the apparent lack of objects in the external world. In addition, it seems that our object judgments would *continue* to be correctly assertible even after we learned about the apparent lack of objects in the external world. This motivates the following desideratum for solutions to the puzzles:

- (1) *Correct assertibility*: A response to the puzzles should explain why sentences about objects would continue to be correctly assertible even after subjects learn what W_E is like “in itself.”

Unlike a simple error theory, the responses considered below each satisfy this condition. Before describing these responses, here are two other desiderata for solutions to the puzzles:

- (2) *Compatibility with linguistic evidence*: A response to the puzzles should not conflict with any independent linguistic evidence related to our object discourse.
- (3) *Respect for semantic self-understanding*: It is desirable that a response to the puzzles not radically undermine our self-understanding of the semantic role of our object discourse.²²

I will appeal to these desiderata while assessing the remaining responses.

6.4.2 Paraphrases

On the proposal of 6.4.1, our ordinary object judgments are simply mistaken in the puzzle cases. But it is also possible to be an eliminativist about objects while granting that

²²Of course, our semantic self-understanding is not infallible. But in cases where linguistic evidence does not conflict with it, it is desirable to respect our semantic self-understanding as much as possible.

object judgments are correctly assertible. The challenge for such a theorist is to account for the standards of correctness for object discourse on the supposition that object terms do not refer.

The eliminativist might try to paraphrase object discourse into sentences that do not mention objects.²³ For example, the eliminativist might use plural quantification to paraphrase sentences like ‘There is a chair’ as ‘There are particles arranged chair-wise’, thereby eliminating apparent reference to chairs. But there are two shortcomings with this proposal.

As for desideratum (2): paraphrase accounts seem to conflict with the linguistic evidence. For example, there are object judgments that *themselves* involve plural quantification (e.g., ‘There are some chairs in the kitchen’). But according to Uzquiano (2004), there is no way to systematically paraphrase such sentences using the device of plural quantification. Insofar as it cannot account for this type of object judgment, a paraphrase account conflicts with the linguistic evidence.

I think a second, more basic worry is that the current proposal seriously undermines our semantic self-understanding of our object discourse. When we make assertions like ‘The chair is brown’, we clearly intend to refer to something when we use expressions like ‘the chair’. Indeed, ordinary speakers consider ‘the chair’ to be a paradigmatic example of an expression with a referential semantic role.

The eliminativist might reply: “It would be nice to have a referential semantics, but the fact remains that no ordinary objects exist in puzzles 1-3. So non-standard semantics are our only option.” I’ll grant for the sake of argument that we should adopt a paraphrase semantics if no alternative account can be found. But even so, we should view this proposal as a solution of last resort.

²³See, e.g., van Inwagen (1990, ch. 2). I discuss a second possible strategy, *fictionalism*, in 6.4.3.

6.4.3 Fictionalism

In the puzzle cases, we would continue to make assertions about ordinary objects even though it is difficult to identify referents for our ordinary object terms. One way to explain this result is fictionalism. As I will use the term in this chapter, fictionalism broadly encompasses views on which the claims made within a certain area of discourse do not aim at the literal truth but instead involve fiction, pretense, or non-literal speech.²⁴

I think fictionalism provides a nice solution to the puzzles. But I also think that fictionalism faces independent objections as a semantic treatment of our object discourse. As for desideratum (2): the standard types of linguistic evidence indicative of non-literal or fictional discourse are absent from ordinary object discourse. For example, if a speaker says “She has butterflies in her stomach,” and a child asks “Did she eat the butterflies?”, the original speaker will immediately explain that her assertion is not literally true.²⁵ Similarly, in all clear cases of non-literal or fictional discourse, a competent speaker will retract her assertion when prompted. But ordinary speakers have no inclination to retract their assertions about chairs in response to queries like “Is there *really* a chair?”. This is one example of a disanalogy between our object discourse and ordinary cases of non-literal or fictional discourse.

As for desideratum (3): fictionalism seriously conflicts with our self-conception of the distinction between fictional and non-fictional discourse. As the terms ‘fictional’ and ‘non-fictional’ are actually used in our linguistic community, they mark a clear and important distinction between assertions like ‘Sherlock Holmes lives on Baker Street’ and assertions like ‘There is a chair’ (when, e.g., one is looking at a chair). So any theory on which *all*

²⁴To be more precise: this is *hermeneutic fictionalism*; I will focus on this type of fictionalism because I think it provides the best response to the puzzles of section 6.3. See Stanley (2001, 36) for discussion.

²⁵This example is from Burgess & Rosen (2005, 532-534).

ordinary sentences about objects count as fictional fails to respect the distinction as it is actually used by ordinary speakers.²⁶ Says Hirsch (2005, 90): “distinctions themselves must be based on a charitable interpretation of what people say. ... If you simply set yourself the task of interpreting in the most charitable way possible the language of our community, you cannot avoid the conclusion that the ontological sentences typically accepted by the community are true in that language, in the strictest and most literal sense.”

While fictionalism deserves much fuller discussion, it is outside the scope of this chapter to consider it in any greater depth. So for now, I will set fictionalism aside.

6.4.4 Deflationism

On the traditional view, we begin with an expression like ‘the chair’ that purports to refer to a certain entity. The truth of a sentence like $S \equiv$ ‘The chair is brown’ is then explained by the fact that ‘the chair’ successfully refers and its referent satisfies the predicate ‘is brown’. But deflationists claim that the order of priority should be reversed: what it is for S to be true just is for it to be correctly assertible within ordinary discourse.²⁷ And what it is for the term ‘the chair’ to refer just is for this term to have a certain syntactic role in correctly assertible sentences.

Here’s how a deflationist might diagnose the puzzles from section 6.3. In each case, the puzzle arose when trying to identify the referents of ordinary terms in the external world. But the deflationist will say that it is a mistake to “look for” the referent of our term ‘the chair’. Instead, we should start with the fact that sentences like S are correctly assertible in the described empirical situations. For this reason, it is trivial that there is chair and that the expression ‘the chair’ refers to it.

Let’s grant the deflationist the claim that, if ordinary speakers are inclined to assert

²⁶Analogous criticisms apply to versions of fictionalism that view ordinary object assertions as involving pretense or non-literal discourse.

²⁷See, e.g., Hirsch (2009, 248).

‘There is a chair’ in a certain empirical situation, then it is trivial that a chair exists. Even with this assumption, I think deflationism has shortcomings as a response to the puzzles. This is because deflationism is in tension with the linguistic evidence represented by the puzzle cases themselves.

When ordinary speakers consider the dust world or the single-particle world, they immediately judge that these are hypotheses on which there are no tables and chairs. They do not form this judgment because some clever philosophical argument has drawn them away from the ordinary use of their terms. Rather, they make these judgments simply by consulting their ordinary intuitions. It is plausible that competence with ordinary object terms involves the ability to make intuitive judgments about whether objects exist across various possible cases. When ordinary speakers judge, e.g., that the single-particle world contains no objects, it is plausible that they are exercising these conceptual capacities.

So the puzzles are not the result of ignoring the ordinary use of object terms. Instead, the puzzles arise because of an apparent discrepancy *within* ordinary use: our intuitive judgments when we consider the external world in itself do not line up with the judgments we make on the basis of our experiences. Since this tension arises within ordinary language, these cases should be just as puzzling for the deflationist. To simply discount our intuitive judgments about the external world in itself is to ignore an important part of our linguistic behavior.

6.4.5 Non-standard functional identification

The problem for functional identification is that, in the puzzle cases, it doesn’t seem as if there are any suitable concrete entities for our ordinary object terms to refer to. In this section, I’ll consider whether we might identify ordinary objects with *abstract* items instead. I will call this strategy “non-standard functional identification.”

I think the most promising and widely-applicable version of this strategy is to identify

ordinary objects with dispositions. For example, consider the single particle world. Suppose the psychophysical laws are such that the particle would cause experiences presenting a chair in spatiotemporal region R in suitably-located normal subjects. Then we might say that ‘the chair’ denotes the following disposition: *being an x such that x would cause experiences presenting a chair in spatiotemporal region R in suitably-located normal subjects*. Or perhaps, if we identify the parts of the chair with dispositions, we might identify the chair with the set of dispositions corresponding to its parts.²⁸

These examples are rough illustrations. But the advantage of the general idea is clear: dispositions are cheap. For any item x in the manifest ontology, we can simply *define* a corresponding disposition that mentions x . I think non-standard functional identification is perhaps the strongest solution considered so far. But I still think it faces certain difficulties.

For one thing, there are a variety of technical problems to address. For example, the proposal would need a systematic account of how predicates are reinterpreted when they apply to ordinary objects. Suppose that ‘This chair is broken and has five parts’ is correctly assertible. Since the corresponding disposition is not broken and does not have five parts, these predicates must have different interpretations in this context.

Discussing these technical issues would take us too far afield. So in fairness to the current proposal, let’s assume that the above problems can be overcome. Still, there is a more basic concern. As with some of the previous responses, non-standard functional identification seriously conflicts with our semantic self-understanding of our object discourse. When we use the expression ‘the chair’, we clearly do not intend to refer to a disposition (or a set of such dispositions). We mean to refer to items that are concrete, that are located in space and time, that have colors and shapes, and so on. But dispositions meet few of these conditions. Indeed, dispositions aren’t even the right ontological category! This is why, whatever its plausibility in the color case from 6.2.3, functional identification doesn’t

²⁸In some of the puzzles, other functional identifications might be available. But for simplicity, I will restrict attention to the disposition proposal, since other proposals are not applicable in all cases.

seem nearly as attractive in the current case.

A proponent of functional identification might reply that, whatever their shortcomings, dispositions are our best option for solving the puzzles. I'm willing to grant that, if dispositions really are the best option, then we should adopt non-standard functional identification. But in the next section, I'll present an attractive alternative.

6.5 Edenic idealism

The puzzles arise because of the tension between the following two statements:

- (A) Our experience is such that we would (presumably) justifiedly make assertions about the existence and properties of ordinary objects.
- (B) There are no clear candidates in the external world to serve as the denotations for ordinary object terms.

But this tension only arises if we tacitly assume that ordinary object terms purport to refer to items in the external world. I think the best response to the puzzles is to reject this assumption by endorsing the following thesis:

Edenic Idealism (EI): Ordinary object terms refer to items in the *manifest world*: the edenic world W_M presented by our experiences.

For example, suppose you have an experience of an apple. The realist wants to identify this apple with some item in the external world. But for the edenic idealist, the apple is a denizen of the edenic world presented by your experience. The situation is depicted diagrammatically below:

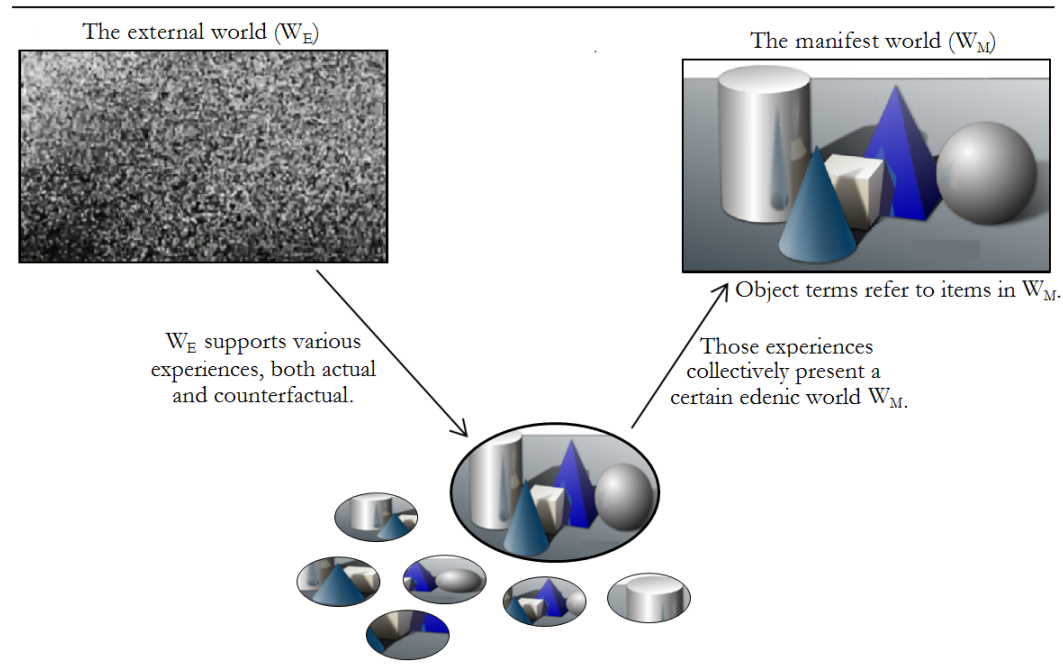


Figure 6.5: The edenic idealist's system

As shown in Fig. 6.5, the edenic idealist claims that two worlds are relevant to our assertions about ordinary objects. W_E is what I have been calling the external world. While I've depicted W_E as the dust world in Fig. 6.5, this is just for illustration; it could be the single particle world, or the frozen world, or As for W_M : it is a world with a 3D edenic space populated by edenic objects instantiating edenic properties. The central claim of EI is that our ordinary object terms refer to items in W_M , not W_E .

Importantly, W_M and W_E are not spatially, temporally, or causally related to one another.²⁹ Nor does W_E constitute or "metaphysically ground" W_M . Instead, W_E and W_M should be viewed as two completely distinct possible worlds. But these worlds stand in the following indirect relation: W_M is the edenic world *collectively presented* by the experiences counterfactually supported by W_E .

²⁹Except, perhaps, in a deflationary sense- I discuss this issue in 8.4.8.

For example, suppose there are 30 people in a room all looking at an apple. Let e_1 - e_{30} be the experiences of these subjects at time t . These experiences aren't completely unrelated to each other. On the contrary: taken together, they seem to present a single edenic object from a variety of different perspectives. Intuitively, W_M is the world presented by e_1 from perspective p_1 , presented by e_2 from perspective p_2 , and so on. So W_M will contain an edenic object with the same edenic properties that are presented to the subjects in e_1 - e_{30} . Of course, all actual experiences taken together do not collectively present anything close to an entire world. This is why the experiences *counterfactually* supported by W_E are also relevant. For example, there is no one in my kitchen right now. But if someone *were* in my kitchen, they would have an experience of a toaster. So W_M will contain the relevant toaster-shaped object.

We can summarize the general picture as follows. There is a vast set of possible edenic worlds. Within this vast set, there is a certain world W_M that agrees with the multitude of possible experiences counterfactually supported by W_E (i.e., it contains an edenically red cube when W_E counterfactually supports experiences of a red cube, etc.). According to EI, *this* possible world is the one our ordinary object assertions are about. By contrast, W_M is not “metaphysically grounded” by W_E or by the experiences W_E counterfactually supports. To avoid any misleading metaphysical overtones with the word “determine”, it is perhaps best to say that our experiences *select* W_M .³⁰

(One might worry that the possible experiences supported by W_E will be insufficient to select a complete world. For example: what about truths about the insides of stars? One might also worry about the distinction between illusory and non-illusory experiences. For example, must the edenic idealist say that sticks become crooked when they are partially-submerged in water? I think the edenic idealist has the resources to respond to both of these worries. But in order to get a working picture of EI on the table, I will postpone discussing

³⁰Perhaps better: our experiences select a certain equivalence class of worlds that exactly resemble one another with respect to objects and their manifest properties, and our object terms are referentially indeterminate over corresponding items in these worlds.

these issues.³¹ For now, I will simply assume as a working hypotheses that the actual and possible experiences supported by W_E suffice to select a complete world W_M and that the edenic idealist has some way of respecting the ordinary distinction between illusory and non-illusory experiences.)

6.5.1 Two worlds

The puzzles of section 6.3 are cases where it is very difficult to identify the objects and properties presented in experience with corresponding items in the external world. In the introduction, I mentioned two possible responses to these puzzles. The first response was to reject the manifest world as an illusion or a fiction. The second response was to reject the puzzle's implicit assumption that there is a mind-independent external world. Many historical proponents of idealism would adopt this second response. For example, Berkeley (1948, 201-202) would reject the puzzles because he thought the notion of a mind-independent substance was unintelligible.

Because few contemporary philosophers are idealists, I did not discuss this "idealist response" in section 6.4.³² That being said, it is useful to mention this response in the current context to help situate edenic idealism in the dialectic. Like the traditional idealist, the edenic idealist responds to discrepancies between W_M and W_E by rejecting a presupposition about W_E . But whereas the traditional idealist rejects the existence of W_E , the edenic idealist rejects the assumption that ordinary object assertions are *about* W_E . By granting that object assertions concern W_M , the edenic idealist secures the epistemic and semantic

³¹Briefly: the edenic idealist will appeal to nomologically impossible experiences to determinately settle truths about the insides of stars. To account for illusions, the edenic idealist will claim that the distinction between illusions and non-illusions is internal to our ordinary epistemic practices and so is equally available to the idealist as to the realist (*cf.* Berkeley (1948, 235)). I discuss these issues in chapters 9 and 8, respectively.

³²In contrast, I discussed the view that W_M is an illusion or a fiction in 6.4.1 and 6.4.3. The other proposals of section 6.4 (such as deflationism and non-standard functional identification) can be viewed as more sophisticated attempts to *identify* the manifest and external worlds.

advantages sought by idealists (which I will discuss in 6.5.4). But because she acknowledges the existence of an external world counterfactually supporting our experiences, the edenic idealist avoids many of the traditional objections facing idealist views.

For example, there is a worry that idealist views cannot explain the coherence between the experiences of different subjects.³³ But the edenic idealist can give the same explanation as the realist: subjects' experiences are coherent because they are counterfactually supported by the same mind-independent external world. Similarly, there is a worry that idealist views cannot respect the truism that the world outstrips our experience of it.³⁴ But the edenic idealist can grant that W_M extends beyond our actual experiences because of the multitude of possible experiences counterfactually supported by W_E . Similarly, one might worry that idealist views are incompatible with results from fundamental physics. But the distinction between W_E and W_M allows the edenic idealist to fully endorse the deliverances of science. For example, the edenic idealist can say that fundamental physics describes W_E while ordinary object discourse describes W_M .³⁵

6.5.2 Which world is actual?

If there are two worlds relevant to EI, which is the *actual* world? Since philosophers typically regard W_E as actual, I think it may be initially helpful to think of W_E as the actual world and to think of W_M as a merely possible world. On this reading, the main idea of EI is to locate ordinary objects in a merely possible world.

But I do not think this is the most attractive interpretation of EI. Consider: even if the Oracle told us that W_E is the single-particle world, we would continue to say things like 'That chair actually exists'. After all, we would still need to distinguish things like tables from things like unicorns. To acknowledge this aspect of ordinary usage, it is best for the

³³Cf. Berkeley (1948, 247).

³⁴Cf. Berkeley (1948, 253-257).

³⁵What about scientific assertions *about* ordinary objects, such as 'The table is in a curved space'? There are a variety of stances the edenic idealist can take towards such assertions; I discuss this issue in chapter 8.

edenic idealist to say that there are two actual worlds. In almost any ordinary context, the sentence ‘Tables actually exist’ is true. But if we are in a context involving reflection on the Oracle’s testimony, there will also be a perfectly good sense in which ‘The single particle actually exists’ is true. The truth value of such sentences will depend on whether we intend to make an assertion about W_E or about W_M .

In 10.4.3, I argue that the edenic idealist will adopt a similar stance to various other types of ordinary judgments about objects, such as judgments about the self and about causation.

6.5.3 Unique features of edenic idealism

In this section, I will summarize some of the features of edenic idealism that distinguish it from other idealist views. This discussion will also provide a preliminary sketch of how the edenic idealist avoids certain traditional objections to idealism. I develop the details of the edenic idealist’s system in chapters 7-10.

-A semantic form of idealism: On edenic idealism, the link between our experiences and ordinary objects is semantic, not metaphysical. Our experiences do not create or constitute W_M ; they merely select a certain possible world as the one relevant to our ordinary object assertions.³⁶ As a semantic thesis, edenic idealism avoids many of the objections traditionally lodged against its metaphysical counterparts, such as the subjective idealisms of Berkeley (1948) or Foster (2008). For example, unlike subjective idealists, the edenic idealist has no difficulties in acknowledging the truism that ordinary objects are metaphysically independent of our experiences of them.

-Two worlds: EI’s most important feature is the distinction between W_E and W_M ; as discussed in 6.5.1, this distinction allows the edenic idealist to avoid worries about the coherence between the experiences of different subjects, the ways in which the world outstrips

³⁶While EI is a semantic thesis, it should be contrasted with the “linguistic idealist” views discussed by Hofweber (forthcoming). A linguistic idealist claims that all truths are in principle representable by human language. In contrast, edenic idealism concerns the semantic role of ordinary object terms.

our experiences, etc.

This feature is reminiscent of Kant's (1998) distinction between the noumenal and phenomenal worlds, but there are also important differences. One difference concerns the status of the noumenal world. According to Kant, our knowledge of the noumenal world is limited to negative truths (e.g., *things-in-themselves are not in space and time*), analytic truths, and very general synthetic truths (e.g., *some thing-in-itself exists and grounds appearances*).³⁷ In contrast, it is consistent with EI to say that we can have more substantial knowledge of the external world, such as structural knowledge provided by fundamental physics. A second difference is that transcendental idealism, like subjective idealism, is a metaphysical form of idealism rather than a semantic form.

Edenic idealism should also be distinguished from the ontological pluralism of Carnap (1950). According to ontological pluralists, there are no objective facts about what exists: we can carve up the world in different ways by adopting different linguistic frameworks. By contrast, W_E and W_M are not two ways of carving up a world; they are two distinct (and incompatible³⁸) worlds.

-*Standard referential semantics*: Phenomenalists (e.g., Russell (1985)) viewed objects as *logical constructions* from sense data. On this view, reference to ordinary objects is merely apparent; ordinary object sentences are analyzable into sentences that only refer to sense data. In contrast, EI treats expressions like 'the chair' as genuinely referential expressions. This is a major advantage, since phenomenalism faces the same types of semantic worries lodged against paraphrase accounts in 6.4.2. (It is also worth emphasizing that, in contrast to the fictionalist, the edenic idealist views assertions like 'There is a chair' as true in the most literal sense.)

³⁷See Chignell (2014, 577-578).

³⁸By "incompatible," I mean that the truths of W_E are not compossible with the truths of W_M . For example, objects in W_M have edenic properties but no edenic properties are instantiated in W_E .

-Object-directed experience: The edenic idealist adopts a robust conception of experience on which our experiences directly present objects. Besides being more phenomenologically adequate than a conception on which experiences involve raw feels, this feature helps the edenic idealist avoid a famous circularity objection to phenomenalism raised by Sellars (1963a). I explain this objection and the edenic idealist's response to it in chapter 9.

Summary: The purpose of this section has been to summarize the unique features of EI and to sketch how they help the edenic idealist avoid certain traditional objections to idealism. But to see why we should even care about these details, it is useful to ask: why would we ever want to accept edenic idealism in the first place? With a basic working grip of the view on the table, we are now in a position to address this question.

6.5.4 Why accept edenic idealism?

One common reaction to Lewis's (1986) modal realism is the "incredulous stare." One might have the same response to edenic idealism. Indeed, the view's provocative label probably encourages this type of reaction.

But I do not consider EI to be a position that is amusing to think about but which cannot be taken seriously. Nor do I consider EI to be a "theory of last resort": a theory we must accept because there are no viable alternatives. On the contrary: I think that, when we sufficiently appreciate the fact that W_E (probably) doesn't at all resemble the manifest image (see 6.2.1-6.2.2), we see that EI is by far the most intuitive view of what we are actually talking about when we use ordinary object terms. It is the common sense position any ordinary speaker would accept if sufficiently apprised of the empirical facts.³⁹ To show this, I will consider various features of our ordinary object discourse.

Speakers' intentions: One factor often thought relevant to reference determination is the referential intention of the speaker. So what do we intend to refer to when we use terms like 'the chair'? We don't mean to refer to a randomly-scattered dust cloud or a complex of

³⁹*Cf.* Berkeley's (1948, 172-173) notorious claim that immaterialism is the position of common sense.

dispositions. We mean to refer to the kind of thing we are acquainted with in experience: objects that exist in 3D space, that have certain vivid colors, and so on. Edenic idealism vindicates this completely: we are referring to exactly the kinds of things we thought we were referring to all along. Edenic idealism is the view most closely aligned with our semantic self-understanding of our object discourse.⁴⁰

Usage: In section 6.4, I discussed some of the challenges of accommodating the truth values of our ordinary utterances when we adopt eliminativism or non-standard functional identification. Stepping back, I think that whenever a theorist talks of “accommodating” ordinary usage, it should raise a red flag. The very idea of “accommodating” or “preserving” ordinary language seems to suggest that ordinary speakers are *actually* talking about something else. But if a theory doesn’t describe what is actually guiding our usage, why should we care whether it ends up assigning the right truth values to our assertions?

With edenic idealism, there is no need to accommodate anything. Our ordinary object judgments are made with the items of the manifest world directly in mind, and edenic idealism says that those items are exactly the things we are talking about. Instead of forcing our language on a world it was never meant to describe anyway, EI takes our language completely at face value and says that we are referring to the items that actually guide our use.

Epistemology: It is often thought that the epistemology of a discourse is a good guide to determining the referents of its linguistic expressions. Berkeley (1948, 227-230) and Russell (1985, 160-161) thought the epistemology of ordinary object assertions supported subjective idealism and phenomenalism, respectively. Ordinary object epistemology also makes edenic idealism attractive. In ordinary language, it seems trivial to judge ‘There is an apple’ when one has various kinds of experiences of an apple (visual, tactile, and so on). With edenic idealism, it is easy to explain the triviality of this inference. W_M just is the

⁴⁰But don’t ordinary speakers intend to refer to items in the external world? Perhaps. But as I will discuss in 10.4.3, the edenic idealist will say that, in ordinary contexts, the expression ‘the external world’ refers to W_M .

world presented by our ordinary experiences, so if we are having ordinary experiences of an apple, it is trivial that there will be an apple in W_M .⁴¹

In contrast, for the realist, the truth of assertions about ordinary objects is hostage to empirical fortune. Perhaps the external world contains suitable items to functionally identify with the items of the manifest world, or perhaps it does not. Either way, it doesn't seem trivial that a functional identification will be available. So there is a worry that realism undermines the triviality of inferences from experience to ordinary objects. But then why would we think that ordinary objects terms have the semantic role of referring to items in the external world?

Of course, there is a large literature attempting to show that ordinary objects assertions *are* justified (under the assumption of realism).⁴² So perhaps the realist can respond to this epistemic challenge. But suffice to say that one attractive feature of EI is that it provides a very straightforward way of accommodating the epistemology of ordinary object discourse.

Pragmatics: I think the correct lesson to learn from the Oracle argument in 6.4.1 is that, in any ordinary context, speakers do not *care* what the world is like “in itself.” If they did care, they wouldn't continue to go on in the same way even after the Oracle's testimony. But if this is right, why think ordinary object terms have the semantic role of referring to items in W_E ? What ordinary speakers *do* care about is the world presented in experience, the world they think of themselves as inhabiting all the time and every day.⁴³ And it is because we think of ourselves as living in W_M that it becomes most plausible to say that object terms refer to items *in* W_M . This conclusion supports Goodman's (1978, 20) cryptic remark that “[the] world, indeed, is the one most often taken as real; for reality in a world, like realism in a picture, is largely a matter of habit.”

⁴¹One caveat: the edenic idealist will allow for the possibility of ordinary illusions (e.g., a stick appearing crooked when partially submerged in water). I discuss this feature of edenic idealism in chapter 10.

⁴²See, for example, Pryor's (2000) dogmatism.

⁴³But don't speakers think of themselves as inhabiting the external world? But as I will discuss in section 10.4.3, the edenic idealist will say that, in ordinary contexts, the expression ‘the external world’ refers to W_M .

6.5.5 Summary

I originally motivated edenic idealism as a solution to the puzzles in section 6.3. Sometimes, philosophers appeal to puzzles in order to support surprising or revisionary metaphysical conclusions. But this hasn't been my intention. Instead, my interest in the puzzles stems from what they reveal about our linguistic practices: they reveal that what matters to us when talking about ordinary objects is the world presented to us in experience. In this way, the puzzles of section 6.3 help *bring us back* to common sense.

Ultimately, the fundamental reason to endorse EI is that it is the most plausible account of what we are actually talking about in ordinary object discourse. In my estimation, everything hangs on this one point. Admittedly, EI may not seem intuitive on first glance. But this is because most of us ordinarily naively assume that the external world resembles the world presented in experience. Once we appreciate the fact that W_E does not resemble the world of our acquaintance, we realize that we never meant to be talking about W_E at all.

6.6 Conclusion

In this chapter, I have argued that the external world and the manifest world are both real and that each is metaphysically independent of the other. In claiming that ordinary object assertions concern W_M , edenic idealism has major epistemic and semantic advantages over realism: it is the most intuitive view of what ordinary speakers are actually talking about when they use object terms. But by acknowledging the existence of W_E , edenic idealism avoids many of the traditional objections facing idealist views.

7 THE DEFERENCE PRINCIPLE

7.1 Introduction

In the previous chapter, I defended the following thesis about the semantic role of our ordinary object terms:

Edenic Idealism (EI): Ordinary object terms refer to items in the *manifest world*: the edenic world W_M presented by our experiences.

According to EI, the counterfactual experiences supported by W_E “select” a certain edenic world W_M as the world relevant to the truth of our ordinary object judgments. But this brief characterization raises many questions. For example, *which* counterfactual experiences supported by W_E are the ones relevant to selecting the manifest world W_M ? And how exactly do these experiences determine what is true in W_M ? To answer these questions, the edenic idealist will appeal to a guiding precept I call the “Deference Principle”. The purpose of this chapter is to clarify this principle.¹

7.2 The Deference Principle

The following principle describes the edenic idealist’s view on how the actual and counterfactual experiences supported by W_E determine (or “select”) a certain possible world W_M as the one relevant to the truth of our judgments about objects:

Deference Principle: Let S_i be a sentence concerning ordinary objects and their manifest properties. Let s_i be the set of (contextualized) experiences ordinary subjects would (ideally) consider relevant to assessing the truth of S_i . Then a (counterfactual) experience e contributes to determining the truth of S_i

¹This chapter draws from and expands on the material in Smithson (forthcoming).

just in case e is a member of s_i . In particular, S_i is true just in case ordinary subjects would (ideally) judge that S_i is true when presented with all of the experiences in s_i .

Before clarifying the terminology of the Deference Principle itself, it will be useful to provide an intuitive grip on the principle by considering some examples:

Case 1: $S_1 \equiv$ The opposite side of the book is blue.

Which experiences do ordinary subjects consider relevant to assessing the truth of S_1 ? One set are the visual experiences I would have if I were to rotate or flip the book around. Another set are the experiences I would have if I were to walk around to the other side of the book, looking at it from the opposite direction. Another set are the experiences *other* subjects would have when looking at the book from the opposite direction. Another set are the experiences I would have if I were looking into a mirror placed behind the book. All of these experiences will be members of s_1 . And this merely scratches the surface: any competent subject can imagine (and recognize) countless other examples.²

The Deference Principle describes how all of the experiences just described determine the truth of S_1 . In particular, the Deference Principle stipulates that S_1 is true just in case ordinary subjects presented with all of the above experiences would judge that S_1 is true. Here is a second example:

Case 2: $S_2 \equiv$ There is a chair in room D.

²In general, there is no harm if s_i including “redundant” experiences (i.e., experiences whose relevance to S_i is screened off by the inclusion of other experiences). Still, there are a few types of experiences that, for ease of presentation, I will not mention in the discussion ahead. These include: experiences of memories, experiences involving testimony (either from people, or encyclopedias, or other sources), and experiences that are only relevant to S_i insofar as they support an inductive generalization that subsumes S_i . Since these experiences are plausibly redundant, there will be no need to mention them in the cases ahead.

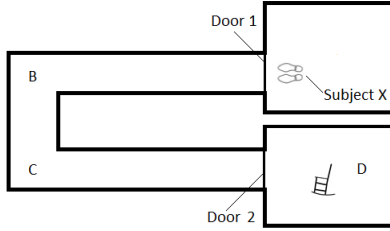


Figure 7.1: Hallway example

s_2 will include the visual experiences X would have if she were to open door 1, walk through the hallway, and then open door 2. It will also include the visual experiences X would have if X were in room D right now. It will include the experience of using a laser-range finder to image room D , the experience of pushing the apparent chair-shaped object around the room, and so on. If a subject presented with all of these experiences would judge that there is a chair in room D , then S_2 will be true in W_M .

Case 3: $S_3 \equiv$ The bicycle is blue.

(Assumption: It is night and nothing is visible.)

Since it is too dark to see the bicycle, s_3 will not include ordinary visual experiences of the bicycle. But s_3 will include: the experience we would have if we were to shine a flashlight on the bicycle, the experience we would have if the Sun were overhead, the experiences we would have if we scraped some paint off the bicycle and brought it to a well-lit area, and so on. According to the Deference Principle, S_3 is true just in case ordinary subjects presented with the set of these experiences would judge that S_3 is true.

Case 4: $S_4 \equiv$ There is a rock on planet L 's surface.

(Assumption: L is outside our lightcone.)

The unique feature of S_4 is that it is not nomically possible for us to travel to L to assess whether there is a heavy rock. But there are still experiences relevant to the truth of S_4 in W_M , since counterfactual experiences do not require us to travel to L . For example, s_4 includes the experiences we would have if we were on L right now and tried to pick up the rock, if we were on L right now and looked at the rock under a microscope, etc.

Case 5: $S_5 \equiv$ The stick is straight.

(Assumption: The stick is partially submerged in water.)

It is useful to think of this as a case where the experiences in s_i do not form a mutually coherent set. s_5 will include many experiences that indicate that S_5 is true: the tactile experiences of the stick, the experiences of the stick when it is taken out of water, and so on. But s_5 will also include many experiences that indicate that S_5 is false, such as the visual experiences of the stick when it is halfway submerged in water. So what is the truth value of S_5 , given that s_5 is not a mutually coherent set?

The answer is built into the Deference Principle: S_5 is true just in case ordinary subjects would judge that S_5 is true when presented with all of these experiences. In this case, subjects clearly would judge that the stick is straight. After all, we make this judgment on the basis of similar evidence in ordinary contexts all the time. So the idealist will say that S_5 is true and that sticks partially submerged in water remain straight.³ Here is a final example:

Case 6: $S_6 \equiv$ X is killer-yellow.⁴

(Assumption: Killer yellow is a color that kills any human who looks at it)

Since any human who looks at X dies, s_6 will not include ordinary visual experiences of X . Instead, s_6 will include: experiences involving tests of X 's surface reflectance properties, experiences I would have if my neurophysiology was different such that I could look

³With this example, I've gestured at how the idealist should distinguish illusions from non-illusions. Ordinary subjects are able to draw this distinction on the basis of the normal types of experiential evidence available to them. Even if they are unable to make a judgment about veridicality on the basis of their *actual* evidence, subjects recognize how further *possible* evidence would bear on such judgments. But if ordinary subjects can distinguish illusions from non-illusions, so can the idealist. This is because ordinary epistemology is directly built into the Deference Principle: whatever criteria ordinary subjects use to identify illusions, the idealist uses the same criteria (*cf.* Berkeley (1948, 235)). I discuss this issue in greater depth in chapter 8.

⁴For discussion of this example, see Lewis (1999, 344ff).

at X without dying⁵, experiences where X is viewed with color-inverting goggles, and experiences of photographs where the color of X has been adjusted.⁶

7.3 The Deference Principle and ordinary epistemology

As we see from the above examples, the Deference Principle does not offer an analysis of which *specific* types of experiences are included in s_i . For example, I did not try to give an exhaustive list of the specific types of experiences relevant to S_1 . Instead the strategy is to defer to ordinary epistemology. This feature ensures that the Deference Principle will not conflict with our ordinary intuitions about cases, and will therefore not be subject to counterexamples.

This alignment with ordinary intuitions is important because one of the main advantages I have claimed for EI is its compatibility with the epistemology of our object discourse (see 6.5.4). For the realist, the truth of judgments about ordinary objects is hostage to fortune. Perhaps the external world contains suitable items to functionally identify with the items of the manifest world, or perhaps it does not. Either way, it doesn't seem trivial that functional identification will be available. So there is a worry that realism undermines the

⁵It is important to use the Deference Principle when trying to interpret this and other contexts. For example, one way to interpret this counterfactual would be to imagine that we are not killed by killer yellow because our sensory faculties are completely different from how they actually are. But this would be a mistake, since ordinary speakers would not consider such experiences relevant to S_5 . Instead, the counterfactual modification of our sensory faculties would probably have to preserve how we experience other colors, shapes, etc.

⁶Since EI is a thesis about ordinary object terms, I have thus far restricted attention to sentences about ordinary objects. But what about smaller items, such as pollen grains, red blood cells, bacteria, and proteins? These items are just as much a part of the manifest world as ordinary objects. So the edenic idealist should say that these items are a part of W_M . For example, consider $S_7 \equiv$ 'There is a pollen grain in region T '. Applying the Deference Principle, s_7 will include, e.g., experiences involving magnifying glasses and various types of microscopes. Similar remarks will apply for sentences about any other item that can be viewed as part of the world of the manifest image.

What about microphysical entities: electrons, quarks, gluons, and superstrings? On Sellars' (1963b, 19) use of the term, what is distinctive of the scientific image is that it posits entities that are unobservable in principle. So, unlike pollen grains and bacteria, these items do not count as part of the manifest world. I discuss how the edenic idealist should view such items in chapter 8.

triviality of inferences from experience to ordinary objects.⁷

In contrast, because ordinary epistemology is directly built into the Deference Principle, it is *guaranteed* that the edenic idealist will respect ordinary epistemology. Facts about our epistemic practices help select W_M as the specific edenic world relevant to our object judgments; this ensures that our ordinary epistemic practices are capable of providing us with knowledge of truths about W_M .

There is one further feature of the principle worth emphasizing: with the Deference Principle, truths about objects are determined by the counterfactual experiences included in s_i (as well as, perhaps, facts about our epistemic practices). In contrast, the principle never invokes truths about an external reality independent of the human minds. In this sense, the Deference Principle is incompatible with realism.

7.4 Clarificatory notes

In this sub-section, I provide a few clarificatory notes on the Deference Principle.

(i) *Contextualized experiences*: The experiences relevant to the principle must be *contextualized* — that is, presented to a subject with a description of what types of experiences they are. Each experience in s_i should be paired with a description that includes (at minimum): (a) the subject in question and (b) a description of the counterfactual situation relevant to the experience. Without this information, a subject would be unable to interpret how the experiences in s_i bear on the truth of S_i .⁸

(iii) *The Cosmoscope*: There are various ways to explicate the idea of a subject being

⁷Of course, as I mentioned in 6.5.4, there have been many attempts to show that ordinary objects judgments *are* justified under the assumption of realism. See, e.g., Vogel (1990), DeRose (1999) and Pryor (2000).

⁸When describing the contexts for the experiences in s_1 - s_6 , I directly referred to ordinary objects (e.g., the book, the bicycle). This may seem puzzling, since the experiences in s_i are supposed to determine truths about objects. This worry is closely related to a famous circularity objection to phenomenalism raised by Sellars (1963a). I discuss how the idealist should respond to this objection in chapter 9.

“presented with the experiences in s_i ”. One option is to invoke Chalmers’ (2012, 114-116) notion of a “Cosmoscope”. The Cosmoscope is a hypothetical virtual reality device that allows a user to select a certain counterfactual experience and which then induces that experience in the user.⁹ For example, a user might select: the experience I would have if I were in position p at time t and were to look towards the book. After appropriate warning, the Cosmoscope would induce this experience in the user. We can think of the subjects in the Deference Principle as using a Cosmoscope to learn about all of the counterfactual experiences relevant to S_i .

(iv) *Idealizations*: The Deference Principle appeals to the experiences ordinary subjects “ideally” consider evidentially relevant to a given judgment S_i . To see why this idealization is needed, consider $S_3 \equiv$ ‘The bicycle is blue’. s_3 cannot be viewed as the experiences considered relevant to S_3 given our *actual* evidence; after all, our actual evidence may suggest that the bike is in the closet when, in fact, it is outside. Instead, s_3 should include the experiences considered relevant to S_3 after a certain process of *idealized evidence-gathering*. I describe how the idealist should understand this process in chapter 9.

The Deference Principle also requires an idealization for the judgment about S_i that abstracts away from our contingent cognitive limitations. For example, the idealization should give subjects the ability to remember an infinite number of experiences, should allow subjects to entertain thoughts of infinite complexity, and should give subjects competence with any concept it is possible to possess.¹⁰

(v) *Manifest sentences*: The scope of the Deference Principle is restricted to “manifest sentences”: sentences involving the properties directly presented to us in experience. Examples of such sentences include: ‘ X is blue’, ‘ X is cube-shaped’, ‘ X and Y are twice

⁹In fact, the Cosmoscope described by Chalmers is more complex. But these additional features will not be relevant to this chapter.

¹⁰For an example of an idealization that would work in the current context, see Chalmers (2012, 63-71).

as far apart as X and Z ', etc. In contrast, I will not consider "theoretical" sentences such as ' X has a charge of $3e$ ' or sentences involving "higher-level" properties such as: ' X is a zebra', ' X is loved by John', and ' X has a palindromic name'.¹¹

To capture the above restriction, I stipulate that a sentence S_i relevant to the Deference Principle must employ only *manifest vocabulary*, where manifest vocabulary excludes theoretical terms and higher-level terms.¹² With this restriction in place, the term 'book' in S_1 should be replaced by the more neutral term 'book-shaped object' (although I will sometimes continue to use higher-level terms like 'book' as abbreviations in the discussion ahead).¹³

(vi) *Type of analysis*: The Deference Principle should not be viewed as a *conceptual analysis* of statements about ordinary objects. Traditional conceptual analyses must meet various criteria of adequacy; common criteria include that the definition be *a priori*, that the definition be analytic, and that the terms in the *definiendum* be semantically prior to the terms in the *definiens*. But the Deference Principle does not meet any of these criteria. Furthermore, one could not use the Deference Principle to teach the meanings of ordinary object terms to someone who did not already understand them.

Nor should the Deference Principle be viewed as an attempt to give a *metaphysical analysis* of ordinary objects. For example, the Deference Principle does *not* assert that facts about ordinary objects are constituted by, metaphysically grounded in, made true by,

¹¹Some theorists, such as Siegel (2010), claim that higher-level properties are directly presented in experience. Whether or not this correct, I am excluding higher-level sentences from the scope of the Deference Principle.

¹²In contrast, manifest vocabulary will include (at the very least): predicates expressing edenic properties ('is blue', 'is square'), singular terms based off edenic properties ('the cube-shaped object'), indexical terms ('I', 'this', 'now'), and mathematical and logical terms ('2', 'or').

¹³I have excluded theoretical and higher-level judgments because it is not clear that subjects will always be able to know such judgments solely on the basis of s_i . For example, for X to count as a zebra, X must have certain genetic properties. But subjects may not be able to judge whether X has these properties solely on the basis of s_i . The scope restriction rules out such complications.

I discuss how the edenic idealist should view theoretical truths in chapter 9. As for "higher-level" truths: these truths plausibly supervene on theoretical and manifest truths (in addition to certain other classes of truths).

or reducible to facts about the epistemic practices of ordinary speakers.

Instead, the Deference Principle describes how the counterfactual experiences supported by W_E , in conjunction with facts about our epistemic practices, select a certain possible edenic world W_M as the one relevant to the truth of our ordinary object judgments.

7.5 Correspondence between truth and judgment

With the Deference Principle, the idealist assumes that truths about ordinary objects correspond to subjects' (fully-informed, idealized) judgments about objects. In this sense, the idealist assumes that judgments about objects are similar to judgments about *games*.

Suppose we were told all of the relevant details about the rules, aims, history, etc. of a practice X . Suppose that, on the basis of all of this information, we judge that X is a game. It is implausible that, nonetheless, X could fail to be a game. For example, when told all of the details about the rules, aims, history, etc. of chess, we judge that chess is a game. It is not coherent to suppose that, nonetheless, chess might not *really* be a game after all. So we can motivate the following principle:

Deference Principle for Games: Let G_i be a sentence of the form ' X is a game'. G_i is true just in case ordinary speakers would (ideally) judge that G_i is true when given a full description of the rules, aims, history, etc. of the practice X in question.

Similarly, the idealist's Deference Principle asserts that, if subjects were presented with all of the experiences ordinarily considered relevant to assessing S_i , and thereby judged that S_i is true, it could not be the case that, nonetheless, S_i turns out to be false.

That there is such a correspondence between truth and judgment is the main lesson of the Oracle thought experiment (see 6.4.1). This thought experiment shows that, when making judgments about ordinary objects, we do not care about whatever mind-independent external reality gives rise to our experiences; instead, we care about the world as it appears to *us*. For this reason, we should not expect truths about ordinary objects to outstrip judgments about objects made on the basis of all of the counterfactual experiences in s_i .

Of course, the Deference Principle does not guarantee that all of our *actual* judgments about objects are correct. This is for two reasons.

One reason is that ordinary speakers are not fully-informed of all the relevant evidence. For example, suppose that I have observed a blue bike outside my apartment an hour ago and on that basis judge ‘There is a blue bike outside my apartment’. This judgment may be mistaken; perhaps the bike has been moved since then. To account for such cases, the Deference Principle appeals to subjects who are fully-informed¹⁴ of *all* the evidence ordinarily considered relevant to assessing the truth of S_i . This evidence would include, e.g., the visual experiences I would have if I were outside my apartment right now: visual experiences that show my judgment about the bike is mistaken.

Even when assuming full information, we can still imagine truths about objects outstripping our actual judgments about them. For example, subjects may make mistaken judgments due to careless reflection on the evidence. Similarly, the total set of evidence may be too complex for any human to fully process. This is why the Deference Principle appeals to an idealization on the cognitive capacities of subjects making the judgments relevant to the principle, as discussed in note (iv) of section 7.4.¹⁵

7.6 Objections

Given the close link between truth and judgment discussed in the last section, one might worry that the Deference Principle makes truths about ordinary objects *too* subjective. In this section, I will consider some objections of this form.

Objection 1: “Why should we suppose that it is the judgments of actual human subjects that determine the truth of ordinary object judgments? Why not

¹⁴While it is fine for present purposes to leave the notion intuitive, I will clarify how to understand this assumption about “full information” in chapter 9.

¹⁵There are further reasons for challenging the alleged correspondence between truth and judgment described by the Deference Principle. For example, what about truths about objects in environments where experiences are not nomically possible? I consider these types of cases, and other challenges to the Deference Principle, in chapter 9.

subjects of some other possible community?”¹⁶

Response: To respond to this objection, it is useful to reconsider the deference principle for games. The parallel objection in this case would be: why is it the case that the game judgments of actual human subjects determine which practices count as games?

The response is that the deference principle for games is a principle about how *we* use the term ‘game’, not how some other community uses the term. Similarly, the reason the edenic idealist’s Deference Principle invokes actual human subjects is because it is a thesis about how *we* use ordinary object terms, not some other community.¹⁷

Objection 2: “It seems that subjects from other cultures or subjects from different time periods might consider different types of experiences relevant to assessing the truth of a manifest judgment S_i . The Deference Principle implies that such subjects do not even share our concepts of objects.”

Response: To begin, I note that the Deference Principle does not imply that anytime two communities disagree on the experiences relevant to assessing S_i , those communities possess different concepts. This is because of the cognitive idealization in the Deference Principle (see section 7.4): the experiences included in s_i are those that subjects would *ideally* consider relevant to assessing the truth of S_i . For example, speakers in ancient Greece would not consider flashlights relevant to judgments in dark environments since they would never have encountered flashlights before. But the cognitive idealization allows subjects to possess any concept it is possible to possess. And if ancient Greeks knew about flashlights, they would immediately recognize them as relevant to judgments in dark environments.

Might it be possible for there to be a community who assess evidence in radically different ways than we do? It is difficult to imagine a *human* community of this sort. But perhaps there could be an alien community of this sort; for example, an alien community whose phenomenology is very different than our own might employ very different

¹⁶*Cf.* Carroll’s (1994, 53) objection to Lewis’ (1973, 73) account of laws of nature.

¹⁷Of course, this objection would be a much greater concern if the Deference Principle was an attempt at either conceptual or metaphysical analysis—see section 7.4.

epistemic practices than we do. On the assumption that these aliens make different fully-informed object judgments than we do, the Deference Principle will claim that the two communities are using terms in different ways. But this is exactly what we *should* say about such a case. If two communities have completely different standards for assessing the truth of a sentence S_i , then it is not plausible to interpret a dispute over S_i as substantive. It is much more plausible to say that the aliens are simply employing different terms.

Objection 3: “On the assumption of realism, we have an explanation of why we follow certain epistemic practices when making judgments about ordinary objects: we have these practices because they help us form true beliefs about a mind-independent external world. In contrast, the edenic idealist cannot explain why we have the epistemic practices we have.”

Response: There are various types of explanations we might give for why we have the epistemic practices that we actually have. We might give an evolutionary explanation: these practices have helped contribute to evolutionary fitness. Or we might give a historical explanation, tracing the origins of these practices. Or we might give a pragmatic explanation: these practices help us form various types of useful beliefs. All of these types of explanations are just as available to the edenic idealist as they are to the realist.

7.6.1 Is the deference principle dispensable?

In this chapter, I have offered the Deference Principle as a way of precisifying the relation between W_E and W_M . But one might wonder whether the edenic idealist really *needs* the Deference Principle in order to specify this relation. To respond, I will consider whether there are any “easier” ways to select W_M . In particular, I will consider whether it is possible to directly read off W_M from a description of W_E .

For an example of how this “direct strategy” would work, suppose the external world was like the Newtonian world W_N .¹⁸ The psychophysical laws on this epistemic possibility

¹⁸See 6.3 for a precise description of W_N .

dictate that, roughly speaking, we experience an object in region J just in case particles densely populate the corresponding region in W_N . So, roughly speaking, an object in region J will exist in W_M just in case particles densely populate the corresponding region in W_N . But then, given this direct link between W_N and W_M , why should the edenic idealist bother with the Deference Principle and its attendant complexities?

I am willing to grant that, in certain cases, it may be possible to “read off” W_M directly from W_E . But there are two reasons why this “direct method” cannot and should not replace the Deference Principle.

First: it will not always be possible to directly read off W_M from W_E . For one kind of case, we can consider examples where we are not able to positively conceive what W_E is like “in itself” at all. In such cases, we could not read off W_M from W_E because we could not even positively describe W_E . For a second kind of case, we can consider examples where there is no clear link between W_E and W_M . For example, suppose W_E involves a wave function in an infinite-dimensional configuration space.¹⁹ Even given the psychophysical laws, it seems doubtful that we could read off W_M from W_E . More likely, the only way to identify W_M would be to consider the various counterfactual experiences that W_E supports, which is just what the Deference Principle recommends.

This last example suggests that, instead of viewing them as rivals, it is better to think of the direct strategy as a shortcut form of the Deference Principle that is available in certain simple cases. If the link between W_M from W_E is simple and uniform, we can use this uniformity to read off what W_M is like. But in more complex cases, there is no other recourse than to consider the experiences that W_E supports themselves.²⁰ (Of course, this

¹⁹For discussion, see Ney (2012).

²⁰Here is an example to illustrate this point. Suppose that W_E is a world where objects have edenic colors, but these colors change drastically as the objects are moved through space. For example, an edenically red object in region r_1 becomes edenically blue in r_2 , edenically green in r_3 , and so on. Now further suppose that the psychophysical laws compensate for these changes in the following way: edenic redness causes red experiences in r_1 , edenic blueness causes red experiences in r_2 , and so on, so that if an object were moved from r_1 to r_2 to r_3 , it would seem to us to be red the entire time. On this scenario, the edenic idealist will say that an object X 's color remains edenically red as it is moved through these spatial regions.

talk of “shortcuts” is metaphorical; it isn’t as if the edenic idealist is actually *making* the judgments relevant to world selection. The question concerning us is only whether there might be a simpler way for the edenic idealist to describe the relation between W_M and W_E .)

Second: the Deference Principle provides the most “conceptually basic” way of thinking about world selection. The guiding idea behind edenic idealism is to link the semantics of ordinary object discourse to the actual epistemology of that discourse. The edenic idealist accomplishes this by directly building ordinary epistemology into the Deference Principle. For this reason, any legitimate proposal to read off W_M from W_E must endorse the results of this principle. If a proposal conflicts with the Deference Principle, it should be rejected as conflicting with our ordinary epistemology.²¹

7.7 A taxonomy of objections

The purpose of this chapter and the last has been to provide the reader with a working grip on edenic idealism. I’ve also explained the epistemic and semantic attractions of such a view. But of course, there are many reasons why idealist views are not popular in contemporary metaphysics. So far, I have said little about how the edenic idealist might respond to such objections.

Now, suppose we try to read off X ’s color in W_M directly from W_E . Since the laws vary so widely, we would have to look directly to the experiences W_E supports in r_1 , r_2 , etc. in order to determine X ’s color. But this is just what we would do when following the Deference Principle. Because of its complexity, this is a case where the direct strategy and the Deference Principle collapse together.

²¹The present discussion is also relevant to the question of what vocabulary should be used to specify the contexts in s_i . On the approach that I will defend in 9.3, these contexts employ vocabulary that directly refer to the items of W_M . An alternative approach would be to employ vocabulary that describes W_E . For example, suppose W_E is the Newtonian world. Instead of using the context: “the experience I would have if I were to rotate the book”, we might instead use the description: “the experience I would have if the particles in W_N evolved in such-and-such way”. (Obviously, the description would depend on what W_E is like.)

This alternative may be acceptable in certain cases, but it should not replace the “manifest approach”. For one thing, this alternative will not be available when we cannot conceive what W_E is like in itself or when the link between W_E and W_M is unclear. Furthermore, the manifest approach ensures that there is a tight connection between the Deference Principle and our ordinary epistemology. This is because, when speakers engage in ordinary object discourse, they are working under the manifest image. I will discuss this issue in 9.3.

Within this dissertation, I have divided objections to idealism into three main groups. Under each general heading, I mention several specific questions confronting the edenic idealist.

1. *The discrepancy objection*: In many cases, we think our experiences do not accurately present the world. The idealist cannot accommodate the discrepancies between the world and our experience of it.

- How will the edenic idealist account for the distinction between veridical and falsidical experiences?
- What will the edenic idealist say about cases where different subjects have incompatible experiences of a single object?
- Can the edenic idealist account for the ways in which we think that science corrects our manifest understanding of the world? Is edenic idealist consistent with the deliverances of fundamental physics?

2. *The incompleteness objection*: Our experience does not present an entire world; at best, it presents a limited perspective on a small part of a world. The idealist cannot accommodate the sense in which the world outstrips our experiences of it.

- How will the edenic idealist account for truths about objects in environments where human phenomenal experiences are not nomically possible?
- Can the edenic idealist appeal to counterfactual experiences without falling into circularity or regress?
- Why should we think that W_E determinately supports all of the counterfactual experiences needed to settle the truths of manifest sentences in W_M ?

3. *Objections related to subjectivity and ordinary language*:

- *The Subjectivity Objection:* There is strong reason to think that ordinary objects would exist even if humans did not exist. By countenancing a close link between ordinary objects and our experiences of them, the idealist makes ordinary objects too subjective.
- *The Intersubjectivity Objection:* The idealist cannot account for the sense in which different subjects are all part of the same world.
- *The Ordinary Language Objection:* Idealism conflicts with common sense and the ordinary use of our language. For example, ordinary subjects would immediately deny that there are two worlds relevant to the truth of our ordinary object judgments.
- *The Battle Cry Objection:* Given that they agree on the truth value of most of our ordinary judgments, there is no substantive disagreement between the idealist and the realist.

In the next three chapters, I will show that the edenic idealist can respond to each of these families of objections.

8 THE DISCREPANCY OBJECTION

8.1 Introduction

In this chapter, I will defend edenic idealism from the following family of objections:

Discrepancy Objection: In many cases, we think that the world does not align with our phenomenal experiences. The idealist cannot accommodate these discrepancies between the world and our experience of it.

In particular, I will discuss the following three questions in the next three sections:

- How will the edenic idealist account for the distinction between veridical and falsidical experiences?
- What will the edenic idealist say about cases where different subjects have incompatible experiences of a single object?
- Can the edenic idealist account for the ways in which we think that science corrects our manifest understanding of the world? Is edenic idealist consistent with the deliverances of fundamental physics?

8.2 Cases of illusion

I will begin by considering cases involving illusions, dreams, and improperly-functioning sensory faculties. For example, suppose a stick is halfway submerged in water. Our visual experiences present the stick as crooked. Does this mean that sticks in W_M become crooked whenever they are submerged in water? If so, then edenic idealism fails to account for our ordinary distinction between illusory and non-illusory experiences.

In this section, I will describe how the edenic idealist should respond to such cases. The edenic idealist's general strategy will be to claim that the distinction between illusions and non-illusions is internal to our ordinary epistemic practices and so is equally available to the idealist as to the realist.¹

8.2.1 Illusions and the deference principle

First, consider ordinary cases of illusion, such as the case of the stick halfway submerged in water. To respond to such cases, the edenic idealist will appeal to the Deference Principle (see chapter 7):

Deference Principle: Let S_i be a sentence concerning ordinary objects and their manifest properties. Let s_i be the set of (contextualized) experiences ordinary subjects would (ideally) consider relevant to assessing the truth of S_i . Then a (possible) experience e contributes to determining the truth of S_i just in case e is a member of s_i . In particular, S_i is true just in case ordinary subjects would (ideally) judge that S_i is true when presented with all of the experiences in s_i .

It is useful to think of cases of illusion as examples where the (contextualized²) experiences in s_i do not form a mutually coherent set. For example, in chapter 7 I considered the sentence $S_5 \equiv$ 'The stick is straight'. s_5 will include many experiences that suggest that S_5 is true: the tactile experiences of the stick, the experiences of the stick when it is taken out of water, and so on. But s_5 will also include many experiences that present S_5 as false, such as the visual experiences of the stick when it is halfway submerged in water. So what is the truth value of S_5 in W_M , given that s_5 is not a mutually coherent set?

The answer is built into the Deference Principle: S_5 is true in W_M just in case ordinary subjects would judge that S_5 is true when presented with all of the above experiences. In

¹Cf. Berkeley (1948, 235).

²As discussed in 7.4, a contextualized experience is an experience paired with a description that includes, at minimum: (a) the subject in question and (b) a description of the counterfactual situation relevant to the experience. I will drop the adjective "contextualized" for the remainder of this chapter.

this case, ordinary subjects presented with all of the tactile and visual experiences described above clearly would judge that the stick is straight. After all, we make this judgment on the basis of similar types of experiences in ordinary contexts all the time. So W_M will be a world where the stick remains straight when submerged in water. Speaking more generally: the edenic idealist takes our ordinary judgments as the guide for deciding which experiences in s_i should be discarded as irrelevant to the selection of W_M .³

For a second example, consider $S_8 \equiv$ ‘In the image of Fig. 8.2, square B is a lighter shade than square A ’⁴:

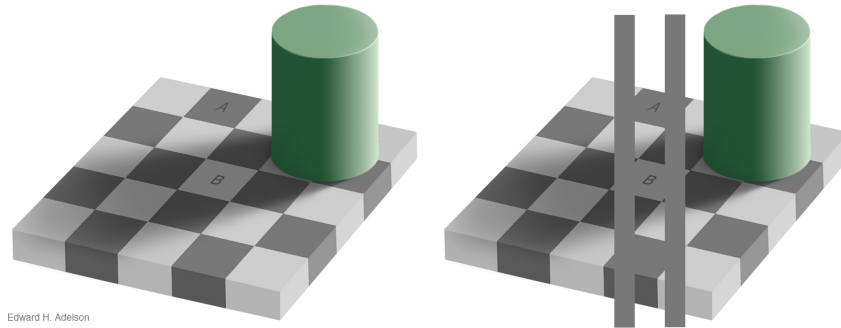


Figure 8.1: The checker-shadow illusion

Our visual experience of the left copy of the image suggests that S_8 is true. But our visual experience of the right copy of the image — where grey columns have been added — suggests that A and B are the same color. Both of these (contextualized) experiences are members of s_8 (along with countless other experiences). If presented with these experiences, ordinary subjects would judge that S_8 is false. After all, this is the judgment we actually make when presented with the copies of the image in Fig. 8.2. So the squares in the image will be the same shade in W_M .⁵

³I note that Berkeley (1948, 235) offers a similar strategy for distinguishing illusions from non-illusions.

⁴Image copyright owned by Adelson (1995). Used with permission

⁵“But what if the experiences that suggest S_8 is false turn out to be misleading as well?” Then there will be further experiences within s_8 that reveal this to be the case; this is because s_8 is stipulated to include *all*

The edenic idealist will give a similar response to cases involving improperly-functioning sensory faculties. Suppose that one's occurrent visual experience E_1 is of a tiger in the kitchen. Does this mean that $S_9 \equiv$ 'There is a tiger in the kitchen' is true? Or is the experience instead a hallucination? With just this information, we cannot yet say; this is because the truth of S_9 is determined by the set of *all* experiences ordinary subjects consider relevant to assessing its truth. For example, s_9 will include the visual experiences of *other* subjects in the kitchen. If these experiences failed to present a tiger, this would suggest that S_9 is false (and that E_1 is a hallucination). Similar remarks apply to cases involving dreaming.⁶

8.2.2 The ordinary epistemology of veridicality judgments

Ordinary subjects know how to distinguish illusions from non-illusions, dreams from non-dreams, and so on. And they are able to draw these distinctions on the basis of the ordinary types of experiential evidence available to them. Even if they are unable to make a judgment about veridicality on the basis of their *actual* evidence, subjects recognize how further *possible* evidence would bear on such judgments. In this sense, the ability to distinguish between illusory and non-illusory experiences is part of the ordinary epistemology of our object discourse.

But if ordinary subjects can distinguish illusory and non-illusory experiences, so can the edenic idealist. This is because ordinary epistemology is directly built into the Deference Principle: whatever criteria ordinary subjects use to distinguish veridical experiences, the edenic idealist appeals to the exact same criteria. This close link to ordinary epistemology reinforces one of the main semantic advantages of EI. In 6.5, I claimed that EI

experiences that ordinary subjects would consider relevant to the truth of S_5 (I discuss this issue further in 9.5.1). What about illusions that are in principle impossible to detect? I consider this possibility in 8.2.3.

⁶It is plausible that there are purely phenomenological means of distinguishing dreams from non-dreams (see, e.g., Noë (2004, 213)). If so, it will be very simple for the edenic idealist to distinguish dreams from non-dreams using the Deference Principle.

best accounts the epistemology of our object discourse. Because of her reliance on the Deference Principle, the edenic idealist also respects the epistemology of judgments about illusions.

8.2.3 Indetectable illusions?

Realists — that is, theorists who believe that ordinary objects are denizens of the external world W_E — typically accept the possibility of illusions that are in principle impossible to detect. For example, consider a Cartesian demon scenario. According to typical realists, this is a scenario where all ordinary experiences — both actual and counterfactual — are just as we take them to be, but truths about objects are radically different.⁷

In contrast, the Deference Principle rules out the possibility of (in principle) indetectable illusions. If subjects presented with all of the ordinary experiences in s_i would judge that S_i is true, it is not possible that, nonetheless, S_i is false. Similarly, the idealist will deny that it is possible that we are always dreaming. On these points, EI may seem to be at odds with common sense. But in fact, I think the rejection of (in principle) indetectable illusions is a point in favor of idealism.

This can be seen by reconsidering the Oracle thought experiment.⁸ Suppose that the Oracle provides a description of W_E that — by the typical realist’s lights — describes a possibility in which all of our experiences are illusory. For example, perhaps W_E is an evil demon scenario. Upon hearing this testimony, we might initially react by saying things like: “My experiences have always been illusions!” But this shock would pass. And after several minutes, we would revert to saying things like: ‘I thought the two squares in Fig. 8.2 were different colors, but now I realize that it was just an illusion’ and ‘The

⁷ Of course, certain types of “non-standard” realists *deny* the coherence of this particular skeptical scenario (see Putnam (1981) for discussion). Nonetheless, in Smithson (forthcoming, 3.6), I argue that even non-standard realists will accept certain cases of indetectable illusions. So the discussion of this section should apply to most forms of realism.

⁸See 6.4.1 for the Oracle argument originally used to motivate EI.

stick *appears* crooked, but really it is straight'. In other words, we would soon return to classifying experiences as illusory and non-illusory just as we always had.

Just as with the original Oracle thought experiment, there are a variety of ways the realist might try to account for this behavior. For example, the realist might try to *paraphrase* our discourse about illusions, or she might say that such discourse involves fiction, pretense, or non-literal speech. It is outside the scope of this chapter to carefully assess these proposals. But I suspect that such proposals will encounter the same shortcomings that arose for analogous proposals about our ordinary object discourse in general.⁹

In contrast, the idealist will explain this behavior by saying that the distinction between veridical and falsidical experiences does not ultimately hinge on facts about whatever mind-independent external reality gives rise to our experiences. Our reaction to the Oracle's testimony shows that, in fact, this is a distinction that subjects are (in principle) able to make on the basis of the types of experiential evidence that are ordinarily available to them. Stepping back, perhaps this is not surprising; a distinction on which *every* experience counts as falsidical would be of little use to us.

By rejecting the possibility that we are *always* suffering an illusion or *always* dreaming, the edenic idealist respects the distinction between illusory and non-illusory experiences (or between dreaming and waking experiences) as it is actually drawn by ordinary subjects.¹⁰ By contrast, because she claims that the veridicality of an hinges on facts in some external reality to which we do not have direct epistemic access, the realist *fails* to draw this distinction in the ordinary way.

⁹I discuss the problems with these proposals in the ordinary object case in 6.4.

¹⁰It should be said, however, that the edenic idealist can acknowledge the possibility of illusions that are not technologically or even nomically possible to detect. I discuss this issue in 9.2.

8.3 Cases of incompatible experiences

Illusions can be seen as cases where there are discrepancies between the world and certain *specific* experiences we have. But there are also reasons for thinking that there are discrepancies between the world and our experiences *in general*. Our experiences seem to present a world of edenic objects instantiating edenic properties. But many theorists believe that this “manifest image” of the world does not survive critical scrutiny.¹¹

In effect, the edenic idealist claims that we should *return* to the manifest image; she claims that ordinary objects really *do* have the primitive properties they seem to have in experience. If this view is to be defended, the edenic idealist must respond to the considerations that have persuaded theorists to abandon the manifest image in the first place. If this is not possible, the edenic idealist will be jumping from the frying pan into the fire.

In 6.2, I identified two major threats to our manifest conception of objects: (i) the argument from incompatible experiences and (ii) arguments from science. I will consider (i) in this section and (ii) in section 8.4.

8.3.1 Splitting the world

As discussed in 6.2.1, there are cases where subjects have incompatible experiences of the same object without there being reason to think that anyone is suffering an illusion. For example, Neitz & Jacobs (1986) provide evidence that the color properties presented in the visual experiences of female subjects are slightly different from the color properties presented in the color experiences of male subjects. Since there is no reason to think that either group of subjects are systematically suffering color illusions, a natural conclusion is that ordinary objects do not instantiate edenic colors at all.

Cases of incompatible experiences threaten our manifest conception of ordinary objects, and thereby threaten the identification of objects with items in W_M . But in this

¹¹For discussion, see 6.2.1-6.2.2.

section, I will show that the edenic idealist has resources to respond to such cases that are unavailable to the realist.

Just as with illusions, it is useful to think of cases of incompatible experiences as examples where the experiences in s_i do not form a mutually coherent set. For example, consider $S_{10} \equiv$ ‘The cube is green’. Let’s suppose that there are two communities B and C such that subjects in B and C experience the cube as edenically green and edenically red, respectively. Assuming that s_{10} includes the red experiences as well as the green experiences¹², what color is the cube in W_M ?

One response would be to follow the realist and say that there are no edenic colors in W_M . But this would be a disappointing concession; in moving away from the manifest image, the edenic idealist would be giving up some of the semantic advantages that made EI attractive in the first place.

I think a better response is to distinguish the judgments of S_{10} made by B -subjects from those made by C -subjects. The edenic idealist can then say that B -experiences are only relevant to B -judgments and that C -experiences are only relevant to C -judgments.¹³ Intuitively, this has the effect of “splitting the world”: B -subjects will refer to an edenically green item in a certain world W_M^B , while C -subjects will refer to an edenically red item in a certain world W_M^C . Note that this strategy is unavailable to the realist, since the realist believes that our ordinary object terms refer to items in an external world that is common to all subjects.

Because there is an isomorphism between the items of W_M^B and W_M^C , the current proposal does not threaten intersubjective communication. The edenic idealist might say that the cubes in W_M^B and W_M^C are (trans-world) identical, or she might say that they stand in a counterpart relation. Either way, she will agree with the realist about the truth of ordinary

¹²For simplicity, I will assume that s_{10} only includes experiences of subjects in B and C .

¹³On this proposal, the edenic idealist is rejecting the earlier assumption that s_{10} includes both red and green experiences.

claims like ‘ B -subjects and C -subjects are referring to the same cube’.

One might still worry that the distinction between W_M^B and W_M^C is *itself* at odds with common sense. In response, the edenic idealist will say that our belief that B -judgments and C -judgments are about numerically-identical worlds — call it Ψ — is closely linked to our ordinary belief in realism. Once we recognize the problems with realism, Ψ itself no longer seems compelling. The edenic idealist will view Ψ as a mistaken theoretical belief about the semantics of our ordinary object terms.

The above discussion focused on a case of intersubjective disagreement involving colors. But analogous remarks would apply in other cases as well. If B -subjects experience a square in circumstances where C -subjects experience a 2:1 rectangle, then W_M^B will contain an edenic square while W_M^C will contain an edenic rectangle. As long as there is an appropriate mapping between B -experiences and C -experiences, there will be no barrier to intersubjective communication.¹⁴

8.4 Scientific cases

The second major threat to the manifest image are arguments from science: arguments that the image of the world we obtain from our ordinary experiences is in conflict with scientific results.¹⁵ Since W_M is supposed to agree with the manifest image, the edenic idealist must give responses to these arguments. In this section, I will discuss results from relativity theory, results from quantum theory, and results pertaining to scientific ontology.

¹⁴Of course, if no such mapping was available, there would indeed be barriers to intersubjective communication. For example, suppose that (somehow) B -subjects experience an object in the shape of a toy jack in circumstances in which C -subjects experience a sphere. In this case, B -subjects and C -subjects will have trouble communicating; after all, there are no items in W_M^C that correspond to the different jack legs in W_M^B . But this is exactly what we should expect in cases without such a mapping anyway.

¹⁵For discussion, see 6.2.1-6.2.2.

8.4.1 Special and general relativity

As discussed in 6.2.2, the central way in which special and general relativity threaten the manifest image is by challenging our intuitive conception of space.¹⁶ But I'll now argue that, by distinguishing W_E and W_M , the edenic idealist has the resources to resist this threat.

The edenic idealist can agree with the realist that various phenomena are best explained by saying that W_E has a non-Euclidean spacetime.¹⁷ For example, the trajectory of light in a vacuum is independent of the physical state of its source. The edenic idealist can agree that this phenomenon can be explained (in part) by positing that, in small enough regions, the geometry of W_E 's spacetime is approximately Minkowskian. But the edenic idealist disagrees with the realist about the relevance of this result for ordinary object discourse. Since the edenic idealist's ordinary objects are in W_M , she can accept these facts about W_E 's spacetime while still maintaining that ordinary objects are in a three-dimensional edenic space.¹⁸ Similar remarks apply to other ways in which relativity challenges our manifest conception of space.¹⁹

Of course, this type of response raises an important question: if the results of relativity do not apply to ordinary objects, what kinds of entities do they apply to? The same question arises for quantum mechanics, so I will briefly postpone discussing this issue.

¹⁶See Maudlin (2012, chs. 4, 6) for relevant discussion.

¹⁷This is a rough first pass; in sections 8.4.4-8.4.7, it will be seen that there are a variety of stances the edenic idealist can take towards the results of fundamental physics. But this won't affect the present discussion.

¹⁸Does this mean that judgments like 'The table is in a curved space', made in a scientific context, are false? I will discuss this issue in 8.4.6-8.4.8.

¹⁹There is a second, indirect way in which relativity may seem to threaten EI. Suppose that, due to their different inertial trajectories, subjects A and B experience a rod as having different lengths. One might worry that there will be no fact of the matter about the length of the rod in W_M . But this is just an example of the phenomenon of intersubjective disagreement discussed in section 8.3.

8.4.2 Quantum mechanics

Many of the phenomena associated with quantum mechanics (e.g., single particle interference, quantum tunneling) are unusual. But these phenomena are no threat to the manifest image in and of themselves. For one thing, these phenomena almost always involve microphysical entities, which are not a part of the manifest image anyway. But even in their macroscopic forms, these phenomena present no threat. For example, Couder & Fort (2006) have shown that vibrating macroscopic silica droplets exhibit single-particle interference patterns, just as electrons do.²⁰ While this behavior is unusual, our experiences present these droplets as moving around in edenic space just like any other macroscopic object.

But one major way in which quantum mechanics threatens the manifest image is by its countenancing *wavelike* physical states. In classical physics, the state of a particle can be expressed by giving determinate values for each of its properties. For example, the position of a classical particle can be expressed as a single real number. But in quantum mechanics, the position of a particle must instead be expressed as an infinite-dimensional vector with a different magnitude for each possible location. One can think of a quantum position state as a superposition of the basic position states from classical physics. Similar remarks apply for systems of particles; in general, the state of a system is a superposition of the states of its component particles.

We can represent the position state of a quantum system as a function from location to amplitude: the *wave function*. The wave function evolves across time in accordance with a differential equation called the Schrödinger Equation. One important feature of the Schrödinger Equation is that states that begin as a superposition of states in a limited range generally evolve into superpositions of states across a much larger range.

²⁰The droplets also exhibit features like tunneling and quantized orbits (see Fort et al. (2010) and Eddi et al. (2009), respectively). These features are not explained by any distinctly quantum effects; instead, they result from the dynamics of the droplet interacting with the “pilot wave” it generates when bouncing on silica gel.

We are now in a position to describe how quantum mechanics threatens the manifest image; for simplicity, I will illustrate the tension with an example involving position. If we think of an ordinary object as constituted by a system of particles, then the Schrödinger Equation predicts that the position state of any object will soon evolve into a superposition of states across a wide spatial area. But there are two senses in which this does not square with the manifest image. First, we never *observe* objects in massively superposed position states. The second, more basic challenge is an intelligibility worry: it is not clear what it would *mean* to experience objects in a superposed position state. (We might imagine them as a “cloud” spread out in space. But of course, this is merely imagining a cloud with a non-superposed position state.²¹)

The above considerations pressure the realist to say that objects must be very different from how we experience them. But, just as before, EI has the flexibility to avoid this result. The edenic idealist can agree that various quantum phenomena are best explained by saying that items in W_E have wavelike position states.²² But since ordinary objects live in W_M , the edenic idealist can maintain that tables and chairs do *not* have wavelike position states²³; instead, they will (typically) have non-superposed position states within the edenic space of W_M .²⁴ (Just as before, this raises the question of what kinds of entities quantum physics describes, if it does not describe ordinary objects. I will address this issue in 8.4.4.)

In the literature, there are other alleged threats to the manifest image from quantum

²¹See Wallace (2003, 88) for relevant discussion.

²²Just as in footnote 17, this is a rough first pass; in fact, there are various stances the edenic idealist can take towards the results of quantum mechanics (see 8.4.4-8.4.7 for discussion). But this won't affect the present discussion.

²³Does this mean that judgments like ‘The cat is in a superposed position state’, made in scientific contexts, are false? I will discuss this issue in 8.4.6-8.4.8.

²⁴I've introduced the qualifier “typically” because the edenic idealist need not say that *any* given judgment $S \equiv 'x \text{ is in position } p'$ will have a determinate truth value. This is because there may be cases where W_E does not determinately support experiences that settle the truth of certain manifest judgments. In general, such cases need not have anything to do with quantum mechanics. I discuss such cases in 9.4.

mechanics.²⁵ But in each case, such threats presuppose that ordinary objects are items in W_E . For ease of presentation, I will consider just one more example from Ney (2012, 538-549). According to Ney, there is no way to functionally identify the three-dimensional space presented to us in experience with anything in the world described by quantum mechanics. Because of this failure, she concludes that ordinary three-dimensional space does not exist.²⁶

Insofar as she endorses the claim that objects are located in three-dimensional space, the edenic idealist must resist Ney's argument. To respond, the edenic idealist will say that Ney's argument relies on a mistaken presupposition about the semantic roles of our spatial terms. Ney assumes that, when we talk about space in ordinary life, we are referring to something in W_E . But this assumption is challenged by reflection on our linguistic behavior. Consider: even if we found Ney's arguments completely convincing, we would continue to make spatial judgments like 'The chair is two feet to the right of the table' and 'The book is closer to the apple than to the cat' in ordinary contexts. In other words: our spatial judgments would continue to be correctly assertible even if we were persuaded by Ney's argument that there is no three-dimensional space in the world described by quantum mechanics.

But just as it is difficult to be an eliminativist about tables while granting that sentences like 'The table is brown' are correctly assertible²⁷, so too it is difficult to be an eliminativist

²⁵For example: Ladyman & Ross (2007, ch. 3) claims that quantum mechanics undermines the basic idea there are self-subsisting, space-filling entities like those presented in experience. Wallace (2003, 99) thinks that quantum mechanics motivates an exotic view of ordinary objects where these items are identified with "patterns in the properties of the quantum state." Horgan & Potr (2000) claim that quantum mechanics shows that ordinary objects do not exist at all.

²⁶Ney's argument requires wave function realism: the view that the wave function is a concretely existing entity living in a concrete infinite-dimensional configuration space. Ney begins by noting that our ordinary spatial dimensions cannot be identified with any of the dimensions of this configuration space (538-540). She then argues, contra Albert & Loewer (1996), that three-dimensional space is not functionally enacted through the behavior of the wavefunction in configuration space (545-549).

²⁷See 6.4.1.

about space while granting that our spatial judgments are correctly assertible. The eliminativist might try to paraphrase away spatial discourse or might endorse fictionalism about such discourse, but it is likely that these proposals will face the same types of problems raised in 6.4.2-6.4.3. A much better explanation of our linguistic behavior is that our spatial judgments describe W_M , not W_E . Just as in previous examples, the distinction between W_E and W_M allows the edenic idealist to resist threats to the manifest image.

8.4.3 More semantic support for EI (and a critique of scientism)

As seen in 8.4.1 and 8.4.2, the edenic idealist resists scientific threats to the manifest image by claiming that ordinary objects are not part of the world described by fundamental physics. While this claim may initially seem difficult to accept, I think isolating ordinary object discourse from fundamental physics is actually a major advantage of edenic idealism. To show this, I will consider several aspects of our ordinary object discourse. The features below are the same features I discuss in 6.5 to provide the original motivation for EI.²⁸

Usage: Because the world described by fundamental physics is so different from the manifest image, theorists have developed elaborate theories to accommodate the truth of ordinary object judgments. For example, Wallace (2003, 99) identifies ordinary objects with patterns in the properties of the quantum state. For a second example, Wilson (2011, 373-374) identifies objects with fusions of ordered pairs $\langle b, a \rangle$, where b is a branch of the Everettian multiverse and a is a pointlike part of that branch. But such theories clearly have little connection to what *actually* guides our use of ordinary object terms. So why should we care whether these theories can be made to assign the right truth values to our judgments? Even if these theories make the correct truth value assignments, they seem to

²⁸In chapter 6, I defended the view that ordinary object terms do not refer to items in W_E . Here, I am defending a different claim: that ordinary object terms do not refer to items in the world described by fundamental physics. As I discuss in 8.4.7, the edenic idealist may or may not view these two worlds as identical.

be merely forcing our language on a world it was never meant to describe in the first place. By contrast, with EI, objects are identified with the things that actually guide our use: the items directly presented to us in experience.

Referential intentions: When ordinary subjects use terms like ‘table’, they do not intend to refer to exotic quantum items, such as patterns in the properties of the quantum state. Indeed, such items are not even of the right ontological category! In contrast, with EI, we are talking about exactly the type of things we thought we were talking about all along.

Epistemology: If the truth of ordinary object judgments depends on whether we can identify objects with items in the world described by fundamental physics, such judgments will be hostage to empirical fortune. After all, it is not trivial that quantum mechanics will end up yielding items that can be functionally identified with ordinary objects.²⁹ But with EI, we can explain why it seems trivial to infer the sentence ‘There is an apple’ when one has various kinds of experiences of an apple (visual, tactile, and so on).³⁰

Pragmatics: In 6.5, I argued that subjects do not care about what W_E is like “in itself” when they make judgments about tables. Similarly, in any ordinary context, subjects do not care about the results of fundamental physics. For example, after taking classes on quantum mechanics, subjects have no inclination to rise their judgments about objects (at least upon returning to ordinary contexts). But then why think that the truth of such judgments hinges on the deliverances of fundamental physics?

Of course, we can imagine communities where subjects *do* care about the results of fundamental physics when making judgments about objects. For example, we can imagine a community where subjects permanently abandon such judgments after learning about quantum mechanics. But this community is very different from our own community.

²⁹See, e.g., Ladyman & Ross (2007, 254): “We take it to be an empirical question for any particular common-sense object whether it [can be fit into the quantum world], and so eliminativism cannot be ruled out *a priori*.”

³⁰Of course, the edenic idealist allows that our experiences of an apple may be illusory (see 8.2.1).

The above considerations have implications for how we should conceive of the role of science in philosophy. Many “naturalistic” philosophers believe that the natural sciences are our only source of metaphysical knowledge. According to such theorists, there is nothing distinctive for philosophy to discover about metaphysics; instead, the role of metaphysics should be to clarify or unify the deliverances of science. One striking example of this stance is Ladyman & Ross (2007, vii), who claim: “standard analytic metaphysics contributes nothing to human knowledge.”

Whether or not Ladyman & Ross are correct about analytic metaphysics, I am suggesting that there is also something amiss when philosophers claim that the question of whether objects exist should be decided by looking to fundamental physics. Fundamental physics has authority over our ordinary object discourse only if ordinary subjects pay fundamental physics allegiance. But they don’t: there is no indication that, in any ordinary context, subjects care about the results of fundamental physics.

Of course, none of this should imply that edenic idealism privileges the epistemic credentials of common sense *over* science. For one thing, the edenic idealist is not skeptical of fundamental physics: she merely claims that these results do not directly threaten the deliverances of our ordinary experiences. In addition, it is a mistake to think of EI as attaching a special value to common sense *per se*. On edenic idealism, ordinary object judgments aren’t special because they are common sense; they are special because, when we have certain types of experiences, these judgments have the status of trivial truths.³¹ Looking to fundamental physics to determine whether tables exist is mistaken for the same kind of reason that it would be a mistake to look to fundamental physics to determine whether unmarried males are bachelors.

³¹That these judgments have the status of trivial truths is shown by the fact that we would continue to make these judgments even after learning the scientific results that allegedly conflict with them.

8.4.4 Microphysical ontology

I will now return to the question I put aside in 8.4.1 and 8.4.2: if fundamental physics does not describe ordinary objects, what kinds of entities does it describe? The next several subsections will discuss how the edenic idealist should approach *scientific ontology*.

To begin, we can consider *microphysical entities*: items like electrons, quarks, and so on. Where are these items located in the edenic idealist's system?

There are a few reasons why the edenic idealist should not view micro-entities as part of W_M . First, micro-entities do not have colors. In addition, it doesn't seem possible for an edenicly colored item to be wholly composed from colorless parts.³² So if ordinary objects were composed of micro-entities, they would not have edenic colors, contrary to claims of edenic idealism. Second, micro-entities have wavelike physical states. If so, they cannot exist in W_M , since objects in W_M do not have wavelike physical states (see 8.4.2).

If micro-entities are not in W_M , where are they located? There are at least three options available to the edenic idealist:

1) *Microphysical antirealism (MA)*. The first option is to say that micro-entities are located in no world at all. One way to endorse microphysical anti-realism would be to adopt a general anti-realist stance towards micro-entities, such as van Fraassen's (1980) constructive empiricism. Another way would be to adopt a strong version of ontic structural realism according to which, at the fundamental level, there are no 'things'; instead, there is nothing but structure.³³

Of course, even if micro-entities do not exist, judgments involving micro-entity terms still seem correctly assertible. So the anti-realist ought to give some semantic account of

³²To see why, try to imagine continuously zooming in on a homogeneously blue object until one gets to colorless parts. This can't be done: to imagine a shift in color, one either has to imagine (i) the color of the expanse (or some region of it) changing as one zooms in or (ii) a non-blue region becoming visible only after one has zoomed in to some degree. (i) contradicts the supposition that the object is not changing colors while (ii) is incompatible with the claim that the item is entirely composed of colorless parts (at some level of decomposition).

³³See Ladyman (2014, section 4) for discussion.

this discourse. The options here parallel the options discussed in 6.4: paraphrase accounts, fictionalist accounts, and so on. Suffice to say that microphysical anti-realists have to address the same types of worries facing parallel views of ordinary objects.³⁴

2) *Microphysical realism* (MR). The second option is to locate micro-entities in W_E . This is probably the standard position among contemporary philosophers of science. But interestingly, there may be problems for microphysical realism that parallel the problems I have raised for realism about ordinary objects. Notice that some of the puzzles from 6.3 are puzzles for microphysical realism just as much as they are puzzles for ordinary object realism. For example, in the single particle world W_S ³⁵, it is just as difficult to find denotations for an expression like ‘the electron’ as it is to find denotations for expressions like ‘the chair’. Similar remarks apply to the frozen world W_F .³⁶ So if the dialectic parallels the case of ordinary objects, we can motivate a third view:

3) *Microphysical idealism* (MI). On the third option, micro-entities are located in some other world W_{M^*} . Intuitively, our experiences do not merely suggest a world of ordinary edenic objects. Our experiences also cohere with one another in a way that is suggestive of an underlying microphysical world. According to microphysical idealism, microphysical terms have the semantic role of referring to items in W_{M^*} , the *microphysical world* suggested by our experiences.

To assess whether our experiences really have such an important role in scientists’ microphysical discourse, we have to decide whether microphysical discourse is relevantly similar to ordinary object discourse. For example, suppose the Oracle says that W_E is like the single-particle world. Would scientists continue to speak about electrons just as

³⁴See 6.4 for discussion.

³⁵I discuss the single-particle world in 6.3.2. I note that both W_S and the frozen world W_F were based off a classical Newtonian world. But with suitable adjustments, we could have equally described worlds W_S^* and W_F^* that are based off the world described by our current best theories.

³⁶I discuss the frozen world in 6.3.3.

before? I suspect they would; I doubt scientists care about possibilities like the single-particle world when working in scientific contexts. If this is right, pragmatic considerations may support microphysical idealism.³⁷ Other features of scientific discourse to consider include referential intentions, epistemology, etc. Discussing MI is outside the scope of this chapter; a proper defense would require engaging with the large literature on the aims and linguistic practices of science.

In summary: there are several possible stances the edenic idealist can take towards microphysical entities, but on any of the above views, our judgments about micro-entities do not concern W_M .³⁸

8.4.5 Other scientific ontology

Fundamental physics may be committed to other types of entities, such as fields and a concrete wave function. For each of these cases, the edenic idealist will have a choice between anti-realism, realism, and idealism; generally speaking, the pros and cons of each option should be the same as in 8.4.4.

If one accepts an idealist view towards any given item x , there is a further question about which world contains x . This answer may vary from case to case. The idealist about fields will probably locate them in W_{M^*} , the same world as micro-entities. In contrast, if we think of the wave function as a concrete entity (see footnote 26), it may be located in its own world; this is because the wave function is said to live an infinite-dimensional configuration space, and it may be the case that none of the dimensions of this space can be

³⁷One might object that science is particularly concerned with learning the true nature of the world. But on MI, scientists would still be discovering truths; it is just that these truths concern W_{M^*} , not W_E .

³⁸Given that micro-entities are not located in W_M , what are ordinary objects in W_M like on the micro-physical scale? The edenic idealist should probably say that this question has no determinate answer. One option would be to say that W_M is metaphysically indeterminate at the microphysical level. A second option, which I prefer, is to appeal to referential indeterminacy: the expression ‘the table’ is referentially indeterminate over items from all those worlds which agree with our experiences at larger scales. (Of course, none of this is to deny that there are determinate microphysical facts. The edenic idealist merely claims that such facts concern some other world than W_M .)

functionally identified with ordinary spatiotemporal dimensions.³⁹ Whenever two items in scientific ontology are incompatible (due to, for example, their existing in different spaces), the idealist can say that the items are located in different worlds.

8.4.6 Scientific macro-ontology

There is one further aspect of scientific ontology to consider: macroscopic objects. Ordinary subjects aren't the only ones who talk about tables; judgments about tables are also plausibly a part of scientific discourse (e.g., 'The table exists in a curved space').⁴⁰ Given the above discussion, must the edenic idealist say that scientists are *wrong* when they make such claims?

One possible response is to say that judgments like 'The table exists in a curved space' are indeed false, while giving an explanation of why such judgments *seem* correct. I will refer to this position as a *scientific error theory* (SE). The proponent of SE will claim that such mistakes are the natural result of confusion about the semantic roles of ordinary object terms. If we assume the single world of realism, and we learn from physics that space is curved, then it is natural to conclude that tables must exist in a curved space. But once we reject realism, we realize that it is a mistake to apply the results of fundamental physics to tables in the first place.

This response has certain attractions, but it may face difficulties. Suppose physicists were told the arguments for edenic idealism and became convinced that ordinary objects are in W_M . Even so, it is not obvious that such scientists would need to abandon judgments like 'The table is located in a curved space' while in scientific contexts. After all, such judgments are an established part of the linguistic framework of contemporary physics, a

³⁹See Ney (2012, 538-549) for discussion.

⁴⁰Thomasson (2007, 141-142) denies that judgments about tables are actually a part of the discourse of fundamental physics. This view is shared by Stebbing (1958, 58), who says: "I venture to suggest that it is as absurd to say that there is a scientific table as to say that there is a familiar electron or a familiar quantum." I do not agree with Thomasson or Stebbing, but if they are correct, there is no need for the edenic idealist to address macroscopic scientific ontology.

framework that does not seem to have held back scientific inquiry in any way. So why change? Unless there is some reason *internal to science* for abandoning this way of speaking, I doubt that there is any *philosophical* reason why scientists would alter their discourse.

Earlier in 8.4.3, I argued that scientific results do not threaten the truth of judgments from ordinary language. I am now expressing sympathy towards the same point in the opposite direction: “results” about ordinary language — such as edenic idealism — have no power to discredit judgments in fundamental physics. EI could only discredit such judgments if physicists cared about the manifest image when doing physics. But I doubt this is the case: ordinary and scientific discourse seem very far removed.⁴¹

If this is correct, then instead of denying scientific judgments about macroscopic objects, we should instead distinguish ordinary and scientific uses of the term ‘the table’.⁴² The edenic idealist will then have to choose from the same three options as above. The *scientific anti-realist* (SA) will say that macro-object terms in scientific discourse do not have a referential semantic role.⁴³ The *scientific realist* (SR) will say that scientific macro-objects are located in W_E . The *scientific idealist* (SI) will say that scientific macro-objects are located in some other world. Anyone who accepts scientific idealism will probably also accept microphysical idealism, so presumably such objects will be located in the “micro-physical world” W_{M^*} ; of course, this world will now need a new label. Just as in previous cases, the choice between these three options hinges on a careful study of the linguistic practices of scientists.

⁴¹According to Carnap (1950, sections 2-3), we cannot show the judgments within a certain linguistic practice are false from a standpoint external to the practice. At most, we can argue that our interests would be better served by adopting some other framework. In the current context, it is difficult to see why science would be better served by refraining from judgments like ‘The table exists in a curved space’.

⁴²Of course, there is probably not a clear boundary between scientific and ordinary discourse. But since there will be a mapping between the items on these frameworks anyway, this is no real concern. In borderline cases, it may be the case that terms like ‘the table’ are referentially indeterminate over items in both frameworks.

⁴³On standard usage, error theories are considered a form of anti-realism. But in order to solidify the analogy between microphysical anti-realism and scientific anti-realism, I am not including scientific error theory under the anti-realist label.

Note that the scientific macro-objects countenanced by scientific realists and scientific idealists will not qualitatively resemble the ordinary objects of W_M (i.e., they will not have edenic properties and will not live in edenic space). While our grip on ordinary objects involves our direct acquaintance with them in experience, our grip on scientific objects involves no such acquaintance. The edenic idealist might instead adopt a deflationary view of such entities on which the nature of scientific macro-objects is exhausted by what is correctly assertible of them within scientific discourse.⁴⁴

To sum up: ordinary and scientific discourse about macro-objects should probably continue as they always have. Confusion only arises when we think of fundamental physics as talking about edenic objects or when we think of ordinary language as talking about the items described by fundamental physics.

8.4.7 What world does fundamental physics describe?

The last three subsections have discussed different aspects of scientific ontology. While any combination of the above views will be logically consistent, some groupings are more natural than others. Three obvious groupings are general anti-realism, general realism, and general idealism across all items in scientific ontology. If one prefers scientific error theory about macro-objects, then SE can be substituted into any of these views. Another interesting option is realism about some “fundamental” item(s), such as a concrete wave function, and idealism about everything else.

Returning to the original question from 8.4.1 and 8.4.2: if fundamental physics does not describe ordinary objects, what kinds of entities does it describe? We now see that there are many possible responses this question available to the edenic idealist. The anti-realist about xs will say that scientific judgments do not (literally) describe xs at all. The realist about xs will say that these judgments describe xs in W_E . The idealist about xs will say that these judgments describe xs in some other world, such as W_{M^*} . But no matter what

⁴⁴See Thomasson (2007) for a deflationary account of *ordinary* objects.

she says about scientific ontology, the edenic idealist will deny that fundamental physics describes ordinary objects.

8.4.8 Relations between worlds

There is a final question to consider. Items from scientific ontology are typically thought to stand in various relations to ordinary objects, such as causal, spatial, temporal, and additive⁴⁵ relations. But if the edenic idealist denies that these items are in the same world, what should she say about these relations?⁴⁶ For concreteness, I will focus attention on what the edenic idealist should say about the relations between micro-entities and ordinary objects. But analogous remarks should apply to other cases.⁴⁷

There are three stances the edenic idealist can take towards these relations. The first stance is to give an error theory, claiming that we are mistaken when we assert that micro-entities and ordinary objects stand in the above relations. This response encounters the same worry as a scientific error theory. If, as seems plausible, sentences describing relations between micro-entities and ordinary objects would remain correctly assertible even for subjects who accepted edenic idealism, an error theory may not be compatible with our linguistic practices. The second stance is to adopt an anti-realist account of these relations, such as fictionalism or a paraphrase account. This will be the preferred response of microphysical anti-realists.

The third stance, which I prefer, is to adopt some kind of lightweight view of these

⁴⁵When I speak of “additive relations,” I have in mind the relations between the charges, masses, etc. of macro-entities and the micro-entities composing them.

⁴⁶Of course, certain relations, such as the relation *being mentioned in the same paper as*, do not raise any puzzles. But the relations I’ve mentioned in this paragraph are typically thought to only relate items from the same world.

⁴⁷One might think that countenancing scientific objects (see 8.4.6) dissolves the puzzle, since scientific objects are plausibly located in the same world as micro-entities. But there are two problems with this response. First: we sometimes specifically predicate these relations of ordinary objects, such as in judgments like: ‘I saw the brown table 20 minutes after the electron passed through the cloud chamber’. Second: the proposed response does not generalize to all version of EI, since some versions countenance multiple worlds relevant to scientific ontology (see 8.4.5).

relations la Schiffer (2003, ch. 2).⁴⁸ We may be accustomed to thinking of these relations in a more heavyweight manner, but the edenic idealist will say that this is a false theoretical belief derived from a mistaken assumption about realism.

I'll illustrate this third stance with a few examples. First, consider the sentence 'The electron passed through the cloud chamber 20 minutes before the chair broke'. The edenic idealist will deny that the events mentioned in this judgment are temporally related in the same way that two events in W_M are temporally related. But the proponent of microphysical idealism and microphysical realism will say that there is a mapping between events in W_{M^*}/W_E and events in W_M . So such theorists can acknowledge that sentences like 'The electron passed through the cloud chamber 20 minutes before the chair broke' are correctly assertible and that the events in question are temporally related in a deflationary sense.

For a second example, consider the sentence 'The chair is composed of electrons'. The edenic idealist will deny that the chair is composed of electrons in the same sense that the chair is composed of bits of wood. But proponents of microphysical idealism and microphysical realism can still acknowledge that 'The chair is composed of electrons' is correctly assertible and that the entities in question are mereologically related in a deflationary sense.⁴⁹

8.4.9 Summary

I have argued that EI is compatible with the deliverances of science. In general, the edenic idealist preserves the manifest image by isolating ordinary discourse from fundamental physics. Far from being a shortcoming of the view, I argued that this isolation is actually an advantage of EI. Beyond this general strategy, there are many options available

⁴⁸I briefly discuss deflationary entities in 6.4.4.

⁴⁹Note that, if one countenances scientific objects (see 8.4.6), these items will stand in a 1:1 correspondence with ordinary objects. So we can think of ordinary objects as standing in deflationary versions of all of the relations scientific objects stand in. It may also be advantageous to say that scientific objects stand in deflationary versions of the relations relevant to ordinary objects.

to the edenic idealist on how to interpret fundamental physics.

8.5 Conclusion

In this chapter, I have discussed three types of cases where it seems that the world is different from how we experience it: cases of illusion, cases of incompatible experiences, and scientific threats to the manifest image. To account for the distinction between illusory and non-illusory experiences, the edenic idealist argues that this distinction is internal to ordinary epistemic practices. In order to handle more general threats to the manifest image (involving cases of intersubjective disagreement or scientific cases), the edenic idealist appeals to the distinction between W_E and W_M .

Indeed, far from being a problem for the view, these types of discrepancy cases actually provide additional *support* for EI. I argued that, in rejecting the coherence of illusions that are in principle undetectable, the edenic idealist provides a more plausible account of the distinction between illusory and non-illusory experiences as it drawn by ordinary subjects. Similarly, by recognizing that judgments about objects are not threatened by results from fundamental physics, the edenic idealist provides a better explanation of facts about the usage, epistemology, and pragmatics of ordinary object discourse.

9 THE INCOMPLETENESS OBJECTION

9.1 Introduction

In this chapter, I will consider a second family of objections to edenic idealism:

Incompleteness Objection: Our experience does not present an entire world; at best, it presents a limited perspective on a small part of a world. The idealist cannot accommodate the sense in which the world outstrips our experiences of it.

As discussed in chapter 7, the edenic idealist's basic response to the incompleteness objection is to appeal to the counterfactual experiences supported by the external world W_E in order to account for the completeness of the world. In particular, the truth of any manifest sentence S_i will be determined by the set of counterfactual experiences s_i that ordinary speakers consider relevant to assessing the truth of S_i , as outlined by the Deference Principle. But there are many difficult questions that still need to be addressed, such as:

- How will the edenic idealist account for truths about objects in environments where phenomenal experiences are not nomically possible?
- Can the edenic idealist appeal to counterfactual experiences without falling into circularity or regress?
- Why should we think that W_E determinately supports all of the counterfactual experiences needed to settle the truths of manifest sentences in W_M ?
- Why should we think that the ordinary experiences relevant to the Deference Principle provide ordinary speakers with sufficient information to make judgments about manifest sentences, as required by the Deference Principle?

In this chapter, I will explain how the edenic idealist should respond to these difficult questions. In section 9.2, I will consider what the edenic idealist should say about cases where human experiences are not nomically possible. In sections 9.3-9.5, I will consider the worries about circularity, determinateness, and insufficiency, respectively.

9.2 Difficult cases

In many cases, there do not seem to be any nomically possible human experiences relevant to assessing the truth of manifest sentences. But I will argue that, even in these difficult cases, the edenic idealist should still appeal to the Deference Principle (see chapter 7) to explain how the truths of W_M are determined:

Deference Principle: Let S_i be a sentence concerning ordinary objects and their manifest properties. Let s_i be the set of (contextualized) experiences ordinary subjects would (ideally) consider relevant to assessing the truth of S_i . Then a (possible) experience e contributes to determining the truth of S_i just in case e is a member of s_i . In particular, S_i is true just in case ordinary subjects would (ideally) judge that S_i is true when presented with all of the experiences in s_i .

9.2.1 Inaccessibility cases

Consider the following case:

Case 11: $S_{11} \equiv$ There is a brown rock in region S .
(Assumption: S is inside of a star¹; see Fig. 9.1)

The difficulty with S_{11} is that there is no nomically possible way to observe S due to the extreme conditions inside stars. We can call cases that are similar to S_{11} in this regard

¹Of course, there are no brown rocks inside of stars. I consider this case just because it provides a simple illustration of the objection under consideration.

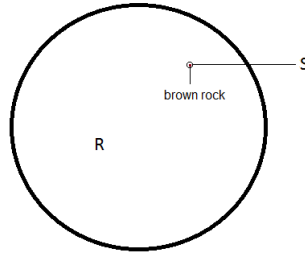


Figure 9.1: Star example

examples of *inaccessibility*.² I claim that, even in such unfavorable conditions, W_E still supports experiences that settle the truth of sentences about ordinary objects. Here are a few examples of the experiences I have in mind:

- (a) The experience a subject would have if
 - (i) the matter in region R were instantaneously eliminated and
 - (ii) the subject were then to travel through R towards S .

- (b) The experience a subject would have if she were to travel towards S in a ship made of super heat-resistant and pressure-resistant material.

I will call (a) and (b) *miracle experiences* because their antecedents are nomically impossible. But despite this fact, ordinary speakers still consider (a) and (b) relevant to the truth of S_{11} . So the Deference Principle dictates that these experiences should be included in s_{11} .

The Deference Principle also clarifies how we should interpret (a) and (b). When considering (a), one might mistakenly reason as follows: “If there were no matter in R , any cube in S would have been pulled by gravity elsewhere. So (a) will suggest that S_{11} is false.” This is a mistake because, on this interpretation, ordinary speakers would *not* consider (a) relevant to assessing the truth of S_{11} . Interpreted in the proper way, (a) involves a genuine miracle where most of the matter of the star instantaneously disappears. This is the interpretation that ordinary speakers would consider relevant to assessing the truth of S_{11} .

²Other examples of inaccessibility might include: ‘20 minutes after the Big Bang, there was a red glow in region X ’ and ‘There is a cube near the event horizon of the black hole’. For related discussion, see Roberts (2013), who refers to these examples as cases of “horrible conditions”.

Here is a third type of nomically-impossible experience relevant to S_{11} :

- (c) The experience we would have if
 - (i) things in region R did not directly causally interact with our bodies or sensory faculties (but both the things in R and our bodies and sensory faculties continued to interact with everything else in the normal way) and
 - (ii) we were to travel towards S

I will call (c) a *ghost experience*. Unlike miracle experiences, ghost experiences do not involve changing the objective properties of items out in the world. Instead, portions of W_M are rendered so that they do not affect us in certain ways. For example, in (c), the plasma in region R still exists, but it does not burn us, is not visible to us, and does not impede our movement.³

Again, many of the details of how to interpret (c) have been left underspecified. But just as in any other case, how these details are settled is decided by the Deference Principle: on what interpretation would ordinary speakers consider (c) relevant to assessing the truth of S_{11} ?

Given the present discussion, we see that s_i is even more broad than we may have originally thought. But this does not mean that *any* type of experience we can describe will be included. For example, consider the experience I would have if the rock was God's favorite

³Google Earth provides an intuitive illustration of ghost experiences. After loading Google Earth, zoom in close to the Empire State Building such that one is looking at the building directly from its side. Next, move forward so as to "collide" with the building. One will notice two things: buildings in Google Earth do not impede motion and buildings become (mostly) invisible so that the user can see through them. These "building interior" animations are similar to ghost experiences. The tower isn't *destroyed* by the user approaching it; instead, the tower is rendered so that it no longer interacts with the user. (Of course, there are also important differences. For example, Google Earth animations only involve visual experiences and Google Earth does not allow the user to render arbitrary regions of the world causally inefficacious to the subject.)

There are cases where ghost experiences may provide more flexibility than miracle experiences. For example, suppose the rock in S_{11} is brown, but due to some chemical interaction, it would turn black if it were not surrounded by the plasma in R (again, ignore the scientific implausibility of the example). (a) would misleadingly present the rock as black instead of brown. But (c) would correctly present the rock as brown, since the plasma in R is still causally interacting with the rock. Ordinary speakers would consider both (a) and (c) relevant to S_{11} , so both of these experiences will be included in s_{11} . But if (a) and (c) were to conflict in the way just described, ordinary speakers would presumably judge the rock to be brown. So by the Deference Principle, S_{11} will be true in W_M .

color. It is unlikely that W_E determinately supports this experience: even supposing God exists, it is unlikely that God has a favorite color. So this experience cannot be included in s_{11} .⁴

9.2.2 A worry

By appealing to ghost and miracle experiences, it may seem that EI warrants another “incredulous state” (see 6.5.4). But their labels notwithstanding, there is nothing spooky about experiences like (a)-(c). These experiences may invoke nomically impossible counterfactuals, but it is often the case that such counterfactuals are determinately supported.⁵

Still, the worry that W_E does *not* determinately support these types of “non-standard” experiences is a worry that the edenic idealist should take seriously. I will put this worry aside for the time being, and will return to it in section 9.4.

9.2.3 Interference cases

Here is a second type of difficult case where ghost and miracle experiences are useful:

Case 12: $S_{12} \equiv$ There is a dragonfly in region R .

Suppose there is a dragonfly inside an opaque metal box. The only way to look inside the metal box is by opening its swinging door (depicted in light grey). Suppose further that the dragonfly is very sensitive to movement: whenever the door starts to budge, the dragonfly alights and buzzes around the box (see Fig. 9.2):

⁴To be precise, there may be cases where the fact that W_E does not determinately support a specific experience meeting description D is *itself* relevant to the truth of S_i . So it is best to say that, in such cases, the Cosmoscope (see 7.4) should return the (possibly open-ended) set of experiences over which D is indeterminate. Nonetheless, the spirit of the point I am making stands. In most cases, an open-ended set of experiences will not help subjects make a judgment about S_i .

Related cases are ones where W_E determinately supports the *absence* of an experience meeting D (perhaps due to the death of the subject). There will be cases where this result is itself relevant to the judgment that S_i ; see fn. 17 for such a case. So in these cases, the Cosmoscope should return a null result (i.e., not induce any experience in the subject).

⁵For discussion, see, e.g., Roberts (2008, ch. 6).

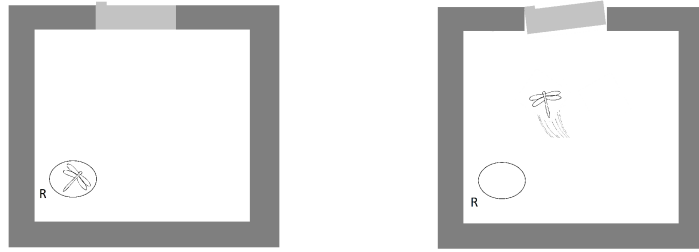


Figure 9.2: Interference example

In order to assess the truth of S_{12} , the first experiences that come to mind are the ones we would have if we were to open the metal door. But this presents a puzzle: the dragonfly moves when the door starts to open. Since the dragonfly has moved, the experiences we would have upon opening the door seem irrelevant to assessing S_{12} . This is an example of a phenomenon I will call *interference*. In a case of interference, the way in which we counterfactually modify W_E so that it supports a certain experience affects the truth of the sentence under consideration. So interfering experiences should be excluded from s_i .⁶

One option here would be to appeal to less intrusive experiences, such as experiences involving some advanced kind of imaging technology. But to make the case as difficult as possible, let's suppose that there are no nomically possible means to assess S_{12} without interference. To settle such cases, the edenic idealist will again appeal to nomically impossible experiences, such as:

- (a) The experience we would have if one of the walls were to (instantaneously) disappear.
- (b) The experience we would have if the walls did not causally interact with our visual faculties (but both the walls and our visual faculties continued to interact with everything else in the normal way)

⁶To be more precise: there may be some cases where interfering experiences can be included in s_i , such as cases where we can use such experiences to retrodict the truth of S_i . I will put such cases aside.

The thought with miracle experience (a) is that, since this experience involves an instantaneous change, it would allow us to detect the truth of S_{12} before the dragonfly alights.⁷ With ghost experience (b), the world is kept exactly as it is except insofar as it affects us visually. So with (b), we would inspect the dragonfly without any changes in its behavior. With miracle and ghost experiences, S_{12} will be determinate even though it is nomically impossible to assess S_{12} without interference. Analogous types of experiences will be available in other cases where interference is a concern.

Again, one might have the worry that W_E will not determinately support these types of non-standard experiences. But as I mentioned above, I will put this worry aside until section 9.4.

9.3 The Sellarsian objection

I will now consider a second type of worry related to the edenic idealist's appeal to counterfactual experiences. The edenic idealist uses contextualized experiences to "select" W_M as the possible edenic world relevant to our judgments about objects (for an explanation of the crucial notion of "world selection", see 6.5). But in all of the examples considered thus far, the relevant contexts directly refer to objects, places, and times in W_M . So it seems that the edenic idealist is faced with either circularity or regress.

The above objection is closely related to a famous objection lodged against early 20th-century versions of phenomenalism. According to theorists like Russell (1985), reference to ordinary objects is merely apparent; sentences involving singular terms for objects are analyzable into sentences that only refer to actual and possible sense data.⁸ But Chisholm (1948), Goodman (1951), Quine (1951), and Sellars (1963a) each argued that such a conceptual reduction will be circular. Here is Sellars' argument.

Consider a sentence like 'There is a fire in the room next door'. Assuming that no one

⁷If the dragonfly is still too fast, s_{12} will also include experiences involving high-speed cameras.

⁸See 6.5.3 for discussion.

is currently in the room next door, the phenomenalist will say that this sentence should be analyzed as follows: ‘if such-and-such conditions were to obtain, then I would experience toothy orange and yellow sense contents’. But what conditions? According to Sellars, the only counterfactual we are justified in believing is one whose antecedent directly mentions ordinary objects, i.e.: ‘if I were to go into the other room and look towards the fire, then I would experience toothy orange and yellow sense contents’. So we have regress or circularity: ordinary object sentences can only be analyzed into sentences that refer to ordinary objects.⁹ Given its resemblance to Sellars’ challenge, I will refer to the circularity objection to EI as the “Sellarsian objection”.

9.3.1 The basic response

There are two features of edenic idealism that allow it to escape the Sellarsian objection. First: unlike traditional phenomenologists, the edenic idealist is not trying to analyze away talk of ordinary objects. Second: the edenic idealist adopts a robust conception of experience on which our experiences directly present objects and their edenic properties.

To see how these features help the edenic idealist with the circularity objection, consider again $S_1 \equiv$ ‘The opposite side of the book is blue’ (see 7.2). s_1 includes experiences such as: the visual experience I would have if I were located in the region opposite the book and were looking back towards it. This counterfactual refers to various items in W_M (the book, a certain spatial region, etc.). But since EI isn’t concerned with conceptual reduction, there is nothing problematic about such reference in and of itself. Nor is such reference illicitly circular, since the items invoked in this counterfactual are directly presented in actual experience.

Of course, there are other counterfactual experiences whose inclusion in s_1 *would* lead to circularity, such as: the experience I would have if my shirt was the same color as the

⁹To be more precise, Sellars criticizes analyses that appealed to statistical generalizations, not counterfactuals. But the same point applies in either case.

opposite side of the book. This experience cannot be included in s_1 because it directly presupposes the truth of S_1 , the sentence whose truth s_1 is supposed to determine. In contrast, the previous example did not illicitly presuppose anything about W_M since our actual experience had already determined the relevant items in W_M for us.¹⁰

9.3.2 World selection as an ordered process

One might worry that the above response is not generally applicable, since many contexts I've mentioned refer to items that are *not* directly presented in actual experience. For example, consider $S_2 \equiv$ 'There is a chair in room D ' (see Fig. 9.3).

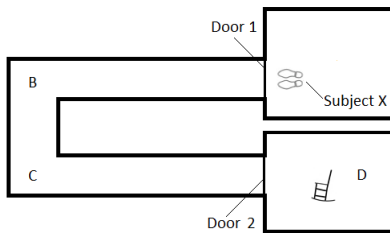


Figure 9.3: Hallway example

s_2 includes experiences such as: the visual experiences X would have if she were to open door 1, walk through the hallway, and then open door 2. But given Fig. 9.3, door 2 is not presented to X in experience.

The edenic idealist will handle such cases by determining the world in stages. X may not be presented with door 2, but she is presented with door 1. So we can legitimately refer to: the possible experience X would have if she were to walk over to door 1 and open it. If X were to have this experience, she would be presented with new items from W_M , such as the spatial position B . With these new elements of W_M now given, the edenic idealist can

¹⁰This is a simplification; objects in W_M will actually be determined by a much larger set of experiences. But our actual experiences at least determine objects to the extent that we can successfully refer to them in the contexts used to pick out other counterfactual experiences.

legitimately refer to: the possible experience X would have if she were to walk to B and turn left. If X were to have this experience, she would be presented with position C . So the edenic idealist can now legitimately refer to: the possible experience X would have if she were to walk to C and turn left. By continuing in this way, we can ground the reference of terms like ‘door 2’, ‘room D ’, and ‘the chair’.¹¹

This same kind of response will be available in any case. To see why, we can return to the Deference Principle. In chapter 7, I illustrated this principle by starting with an sentence S_i and then determining which experiences are included in s_i . But for present purposes, it is useful to think about the principle in the other direction: starting with our experiences and considering how they settle what is true in W_M .

Here is the intuitive picture. We start with our actual experiences. These experiences only determine certain very narrow aspects of W_M : those objects, properties, spatial regions, etc. that we directly experience.¹² But because these items are given to us, we can directly refer to them and can invoke counterfactual experiences involving them. For any object X , we can speak of the counterfactual experiences of lifting X up, pushing X around, viewing X from different angles, and so on. For any location y , we can speak of the possible experience of being at y or traveling to y . All of these counterfactual experiences will present new objects and properties that were not originally presented to us, thereby settling new truths about W_M . In addition, our acquaintance with new items from W_M allows us to refer to a new set of counterfactual experiences involving those items.

And so the process of world selection moves outward from the center, step by step. Whenever a possible experience presents a cupboard, we can appeal to the experience of opening it. Whenever it presents a lake, we can appeal to the experience of diving into

¹¹Of course, the specific details of the reference grounding in this paragraph are not important; there are countless other ways to link subject X to door D as well.

¹²As mentioned in footnote 10, this is a simplification. But what is relevant for current purposes is that our actual experiences at least determine objects to the extent that we can successfully refer to them in the contexts used to pick out other counterfactual experiences.

it. Whenever it presents something small, we can appeal to experiences of moving close to it. At certain points, our counterfactual experiences will present environments where interference or inaccessibility is a concern. No matter — we can appeal to nomically impossible experiences which make those environments accessible. By continuing this process indefinitely, our experiences select the whole world. And at every step, it is the Deference Principle that describes *how* these counterfactual experiences determine what is true in W_M . For example, counterfactual experiences involving flashlights are relevant in dark environments because ordinary speakers consider flashlight experiences relevant to sentences about objects in the dark.

The above discussion shows that world selection is an ordered process.¹³ In addition to establishing a single spatiotemporal framework for W_M , this ordering ensures that reference to items in W_M is ultimately grounded by our acquaintance with such items in actual and counterfactual experiences. In contrast, if W_M was selected by considering ordinary object sentences at random, there would be a serious worry about circularity.

9.3.3 Merely possible objects

Some of the objects mentioned in the contexts of s_i are not actually parts of W_M . For example, s_1 included the experience (call it E) of looking into a mirror located behind the book. But, assuming that there is no mirror in the room, this mirror is a merely possible item.

Roughly speaking, the edenic idealist will interpret E as: the experience W_E would cause in me if (i) W_E were such as to cause experiences of a mirror-like object X and if (ii) W_E were such as to cause me to have an experience of looking towards X when it is located behind the book. The first condition in this counterfactual establishes reference to a (merely) possible object X . The second condition makes anaphoric reference back to

¹³Of course, world selection isn't a *temporally*-ordered process. The sense in which our experiences determine W_M is referential, not causal or metaphysical. See 6.5.

X . We should interpret counterfactuals referring to other kinds of objects (e.g., flashlights, rulers, etc.) in a similar way.

Note the plural “experiences” in condition (i). I’ve expressed the context this way to capture the fact that X must exhibit certain counterfactual behavior for it to be relevant to the test mentioned in condition (ii). For example, W_E must be such that, if I were to have an experience of X being rotated clockwise, I would have an experience as of a reflection of the room to my left. We can think of condition (i) as abbreviating an infinite description of X ’s behavior in various counterfactual situations like the one just mentioned. Intuitively, condition (i) ensures that X isn’t a very realistic painting of a mirror (since a painting wouldn’t be relevant to assessing S_1).¹⁴ Similar remarks will apply to other possible objects mentioned in the contexts of s_i .

9.3.4 Merely apparent objects

There are many cases where our experience merely *seems* to present us with an object X . Examples include cases where we are experiencing an illusion, or where we are perceiving a hologram, or where we are really perceiving more than one object, etc. One might worry that, in such cases, the above story of reference grounding fails. If the objects “given” to us in experience don’t actually exist, how can they help ground reference?

In such cases, the edenic idealist should respond by replacing reference to objects with reference to apparent objects. For example, if our experience of a bike is an illusion, we can still refer to: the visual experience we would have if we were to approach the *apparent* bike. Similarly, if the apparent book is a hologram that cannot be lifted, we can still refer

¹⁴A few further observations. (1) When expressing the context of E , I intentionally used the term ‘mirror-like object’ instead of the ordinary sortal term ‘mirror’. This is because, for the purposes of the Deference Principle, the only thing that matters about X is that X exhibits certain counterfactual behavior. It may be that additional conditions have to be met for x to count as a mirror in ordinary language, but these conditions aren’t relevant in the current context. So I’m using the term ‘mirror-like’ in a stipulative sense: X is mirror-like iff it exhibits appropriate “reflective” counterfactual behavior (see 9.5.2 for further discussion). (2) I want to emphasize that the edenic idealist is not giving an analysis of ‘mirror’ or ‘mirror-like’ or any other term. The description of E that I’ve provided is merely supposed to be a rough illustration of a content that fully reflects the complexities of ordinary epistemic practices.

to: the experience we would have if we were to *attempt* to lift the apparent book.

9.3.5 World exploration and world selection

The above picture of ordered world selection should seem familiar. This is because it is closely related to our day-to-day practice of *world exploration*. In ordinary life, we think of ourselves as located somewhere in the world of the manifest image. To explore this world, we move around and manipulate it, walking its paths and opening its cupboards. As we do so, new objects with new properties are revealed to us. Upon encountering these objects, we recognize which new types of experiences will be needed to learn more about them. Just as with world selection, exploration starts at the center and moves outward as more and more of the world is revealed to us. This is by design: world selection is supposed to mimic ordinary exploration.

Of course, there are differences as well. One difference is that, with nomically impossible experiences, the edenic idealist can move through and manipulate the world in ways that ordinary subjects cannot. The second difference is that, when exploring, we have to rely on induction. I believe a certain bike is locked outside my apartment; it has been there every day this week. But it is possible that the bike has moved. This would be a case where, because I rely on induction, my working map of the world comes apart from the world itself. In contrast, with world selection, counterfactual experiences always “keep an eye” on the bike and no such discrepancy is possible.

We can think of world selection as corresponding to *idealized exploration*, where idealized exploration differs from ordinary exploration insofar as it includes nomically impossible experiences and does not rely on induction. This provides a simple way to think about W_M : W_M is the edenic world corresponding to the map of the world ordinary speakers would develop through idealized exploration.¹⁵

¹⁵With the Cosmoscope (see 7.4), we can visualize the link between idealized exploration and world selection in a particularly vivid way. Suppose we program the Cosmoscope so that, if the user moves her head to orientation $\{\theta, \phi\}$ (from some starting orientation), the Cosmoscope will induce: the experience a ghost

This link between world selection and world exploration is important for three reasons. Most importantly, it shows us that EI aligns with the ordinary epistemology of object discourse. As discussed in 6.5.4 and 7.3, this is one of the main motivations for adopting EI.

Second, it gives us reason to think that EI will not founder on technical objections. For example, it is clear that circularity worries do not hinder ordinary exploration. But then, since world selection mimics ordinary exploration, circularity is not a worry for world selection either.

Third, it explains how we should interpret the idealization on evidence in the Deference Principle (see 7.4). s_i should be viewed as including those experiences we would consider relevant to S_i if we were engaged in a process of idealized exploration. For example, consider $S_3 \equiv$ ‘The bicycle is blue’. At some point in the process of idealized world exploration, we would encounter the bicycle in question. Upon encountering it (wherever it might be found, in whatever lighting conditions, etc.), there are certain experiences we would consider relevant to ascertaining its color. It is *those* experiences that should be included in s_3 .¹⁶

Indeed, in many cases, the experiences included in s_i will be (metaphorically) “corrected” through the process of idealized exploration. For example, consider a sentence about the color of an object located far down a hallway. Originally, we might consider the

subject would have if her head was positioned in orientation $\{\theta, \phi\}$ (with respect to some initial orientation). Further, suppose the Cosmoscope is programmed so that, if the user pushes forward on a joystick, the Cosmoscope induces the experience of a subject located forward in space in the direction of the current orientation (and similarly for other directions). By programming the Cosmoscope in this way, world selection will be akin to exploration using Google Earth. Just as Google Earth allows us to glide around a map of the Earth, so too a subject can use the controls of the Cosmoscope to “glide around” W_M . Also like Google Earth, this “gliding” would not correspond to the experiences of a subject moving through time. Instead, gliding corresponds to a set of counterfactual experiences all occurring at a single given time. (Of course, unlike Google Earth, world selection also involves non-visual experiences and nomically impossible experiences.)

¹⁶One might worry that s_i will change across time. For example, speakers in ancient Greece would not consider flashlights relevant to sentences in dark environments since they never encountered flashlights. In response: the *second* idealization in the Deference Principle (see 7.4) ensures that subjects are aware of all relevant technologies. If ancient Greeks knew about flashlights, they would immediately recognize them as relevant to sentences about dark environments.

experience of walking down the hallway to be relevant to assessing the truth of this sentence. But perhaps, unbeknownst to us, we would fall through a trapdoor if we followed this plan. When the Cosmoscope presents us with an experience of falling through the trapdoor, we would revise our views on what experiences are in s_i . Now, s_i might include the experience of side-stepping the trapdoor, etc.¹⁷

9.3.6 Summary

In summary: the use of manifest vocabulary to specify contexts should be considered not a bug but a *feature* of the Deference Principle. This is because ordinary epistemology is built into the Deference Principle, and ordinary speakers are working under the manifest image when making judgments about objects. The close alignment between world selection and world exploration is important because one of the main semantic motivations for EI is its alignment with ordinary epistemology.

It is interesting to consider: *could* there be cases where speakers consider facts about what W_E is like in itself to be relevant to the truth of S_i ? I think we can imagine such a community, but I do not think this is our community. The Oracle argument (see 6.4.1) suggests that we do not consider what W_E is like in itself to be relevant to our manifest judgments. This is why the contexts in s_i can and should employ manifest vocabulary. I discuss this issue further in 9.5.2.

¹⁷We could also say that the original experience remains in s_i , but doesn't factor in to the subject's judgment about the color of the object; this is a terminological issue.

The present discussion shows why it is useful to include contexts with presupposition failures in s_i (see footnote 4). Consider $S_{11} \equiv$ 'There is a brown rock in region S '. Originally, a subject ignorant about the extreme conditions of stars might suppose that s_{11} includes the experience a subject would have if she were to enter region S in a spaceship, moving towards region R . Plugging this context into the Cosmoscope would yield a null result (since the subject would die). But being presented with this null result would cause the subject to *revise* her judgments about the experiences relevant to S_{11} .

9.4 The determinacy objection

I'll now consider a third challenge to the edenic idealist's appeal to counterfactual experiences: why should we think that W_E determinately supports all of the experiences relevant to the Deference Principle? If there is no fact of the matter about these experiences, then the edenic idealist will be unable to say that the world is as complete as we normally think it is.¹⁸ As discussed in 9.2.2, the determinacy objection arises with particular force when we consider ghost and miracle experiences. Why think W_E determinately supports experiences that are not even nomically possible?

There are different reasons why W_E might not determinately support the experience described by a context C ; not all such cases are genuine concerns for EI. For example, one source of indeterminacy could be that C employs imprecise language. But this is no threat to EI; it simply means that the contexts relevant to the Deference Principle should be more precise than the contexts I've appealed to throughout this chapter.

A second source of indeterminacy is empirical ignorance. Suppose a certain context refers to the book on the table but, unbeknownst to us, there are in fact two books on the table. Due to presupposition failure, W_E will not determinately support an experience meeting this description. But again, this kind of indeterminacy is no real threat, since such indeterminacies will be eliminated through the process of idealized exploration (see 9.3.5 for discussion).

Genuine threats to EI are cases where W_E *itself* is the source of the indeterminacy. For example, one might worry that no facts about W_E determine what a ghost experience 20 minutes after the Big Bang would be like. I will discuss this third type of indeterminacy in this section. The edenic idealist's strategy for responding to the objection will be to flip the objection back towards the realist.

¹⁸Speaking precisely, the possibility of indeterminate experiences is not any problem in and of itself. Perhaps speakers could still make judgments about S_i even if certain experiences in s_i are indeterminate. The more precise objection is: why think that ordinary speakers will always be able to make a determinate judgment about S_i when presented with s_i ?

9.4.1 A general response

Consider what the *realist* should say about the experiences in s_i . It seems that, insofar as she believes that W_E contains ordinary objects, the realist should also accept that W_E determinately supports at least *some* kinds of experiences of these objects. For example, suppose the realist thinks that W_E contains the book mentioned in $S_1 \equiv$ ‘The opposite side of the book is blue’ (see 7.2). Then it seems the realist should also accept that there is a determinate fact about what I would experience if I were to rotate the book, if I were to flip the book, if I were to look into a mirror on the opposite of the book, etc.

Similar remarks apply to more exotic cases. Let’s suppose the realist accepts that there is a brown rock in the middle of a star (see 9.2.1). Then it seems the realist should equally grant that there is a fact about what a subject would experience if the matter in region R were instantaneously eliminated, or if the subject did not causally interact with the matter in R . In other words, anyone who accepts the existence of the brown rock should also accept that there are ghost and miracle experiences presenting it.

The point can be made in the opposite direction as well. Let’s suppose that W_E does not support *any* experiences of a rock in the star, including ghost and miracle experiences. I don’t think we can make sense of the idea that, nonetheless, there really is such a rock. If there is a rock, then there should be some kind of counterfactual manipulation, however drastic or miraculous, that would yield an experience of it.

Let P be the claim that W_E contains an object X . Let Q be the claim that W_E supports experiences (broadly construed) of X . The above cases suggest that P entails Q . But if this is the case, then whatever grounds the realist has for accepting P , the edenic idealist will have at least as much grounds for accepting Q . For example: if the realist has grounds for thinking there are determinate facts about rocks three miles beneath the Louvre, the edenic idealist will have at least as much grounds for thinking that W_E determinately supports *experiences* (broadly construed) of rocks three miles beneath the Louvre. Since her epistemic commitments are strictly weaker than the realist’s, the edenic idealist can respond to the

determinacy objection by re-directing the question back to the realist.

9.4.2 Difficult cases

It is important not to overstate the point: it is certainly *possible* that W_M is not as complete as we ordinarily think it to be. Two types of cases come to mind. First, there are certain traditional skeptical scenarios. Like the realist, the edenic idealist will allow that it is *possible* that the universe does not extend beyond what we have actually observed. But like the realist, the edenic idealist will view such a scenario as improbable.

There may also be more mundane cases of indeterminacy. For an example of what I have in mind, consider again the case of $S_6 \equiv 'X$ is killer yellow'. In 7.2, I said that s_6 would include E : the visual experience I would have if my neurophysiology was such that I could look at X without dying. Now suppose that, as a matter of fact, there are *two* possible ways m_1 and m_2 to counterfactually modify my brain so that I would not die when looking at X . Suppose further that each method would generate an experience of a different edenic color (call them c_1 and c_2).

We can imagine a case where one of the modifications strikes us as more relevant to the truth of S_6 than the other; for example, perhaps m_1 strikes us as more relevant because it is a less drastic modification to our brain. In this case, there will be no indeterminacy; E will be the experience I would have if my brain were m_1 -modified.

But we can also imagine a case where m_1 and m_2 seem completely on a par. On this possibility, we would have indeterminacy that is unrelated to any general skeptical concerns.

While this type of case may be rare, I do not think it can be ruled out *a priori*. So I think the edenic idealist should simply grant that such cases involve indeterminacy. For example, in the above case, the edenic idealist should say that it is indeterminate which specific edenic color is instantiated by X . While this may initially sound like a cost to the view, there are two reasons why such cases are not genuine threats to edenic idealism.

First, the indeterminacy in these cases is just run-of-the-mill linguistic indeterminacy. If EI was a metaphysical version of idealism, then X 's color would be metaphysically indeterminate. This would be a concern, since many theorists consider the notion of metaphysical indeterminacy to be obscure or even unintelligible.¹⁹ But in fact, EI is a semantic form of idealism (see 6.5.3). So on EI, to say that X 's color is indeterminate is just to say that it is indeterminate whether we are referring to X in a possible world where it is c_1 as opposed to referring to X in a possible world where it is c_2 . In other words, it will be indeterminate which world W_M is the one relevant to our ordinary object sentences.

Second, this type of case is just as much a “problem” for the realist as it is for the edenic idealist.²⁰ Ordinarily, realists think that X 's color is determined by what color experiences X causes in certain normal situations. But in this case, these experiences are unavailable. The realist might instead try to appeal to facts about counterfactual experiences, but we are supposing that these also do not settle matters either. If actual and counterfactual experiences do not help, the only other option is to say that what W_E is like in itself determines X 's color. But most realists *agree* with the edenic idealist that such facts do not determine the truth of our color sentences.²¹

9.4.3 Summary

Since the edenic idealist's claims about W_E are strictly weaker than the realist's, any grounds the realist has for positing an object X will also be grounds for thinking that W_E determinately supports experiences of X . Of course, there may be cases where the world actually isn't as complete as we think that it is. But such cases are no threat to the edenic idealist since (i) the indeterminacy in such cases is merely referential and (ii) such cases

¹⁹For discussion, see Dummett (1975).

²⁰Indeed, the killer yellow case is often viewed as a challenge to standard functionalist views of color. See Lewis (1997) for discussion.

²¹See 6.2 for discussion. Are there *any* cases in which the state of W_E in itself is relevant to the truth of a manifest sentence S_i ? As I discuss in 9.3.6, I think the answer is “no”. But I present the alternative view in section 9.5.

are just as problematic for the realist.

9.4.4 The direct strategy as backup

In 7.6.1, I considered whether any more direct account of world selection is available to the edenic idealist. I argued that the strategy of directly reading off W_M from W_E should not replace the Deference Principle. But if there are cases where W_E does not determinately support the counterfactual experiences relevant to the Deference Principle, the direct strategy might serve as a useful backup approach to world selection.

For example, suppose I am mistaken that ghost and miracle experiences determinately settle the truth of $S_{11} \equiv$ 'There is a brown rock in region S (inside the star)'. In this case, the edenic idealist's best option may be to revert to the direct strategy for this particular sentence. To see how this would work, suppose that W_E is the Newtonian world. Suppose that, in normal circumstances, a certain cube-like arrangement of particles in W_N causes experiences of a brown rock. Finally, suppose that there is a cube-like arrangement of particles in the region in W_N corresponding to S . Under these suppositions, the edenic idealist could say that S_{11} is true in W_M on the following basis: the state of W_E in the region corresponding to S is relevantly similar to the state of W_E in regions that normally cause experiences of brown rocks.²²

This backup response is not *ad hoc*. One guiding intuition behind EI is that facts about what W_E is like in itself are not relevant to the ordinary epistemology of our ordinary object sentences (see 6.5.4). But if there was an exotic case where W_E doesn't even support ghost or miracle experiences, perhaps ordinary speakers *would* look to W_E to settle the truth of S_i . After all, there would be nothing else to go on. If this is correct, then adopting this backup strategy upholds the spirit of the Deference Principle: we are still deferring to ordinary

²²Again, I think the present case is one where W_E determinately supports ghost and miracle experiences. But for present purposes, I am assuming the opposite.

epistemology in order to determine what exists in W_M .²³

In summary: I do not think there are cases where we must read off W_M from W_E . But if I am wrong, the edenic idealist could use the direct strategy as a backup approach to world selection.

9.5 The insufficiency objection

I will now consider a final objection to the edenic idealist's appeal to counterfactual experiences. The Deference Principle presupposes that speakers presented with s_i are in a position to make judgments about ordinary objects. But one might worry that this "epistemic base" is insufficient for making such judgments.²⁴ I will discuss two forms of this worry in this section.

9.5.1 Judgment defeasibility

One might think that, for any sentence S_i we judge to be true, there is always some further course of experience that would lead us to revise our judgment. For example, our visual experiences might suggest a book on the table. But later on, we might learn that we are actually experiencing a clever hologram. If all of our judgments are in principle defeasible, one might doubt that any set s_i will be sufficient to allow us to make a conclusive judgment about S_i .

In response: any experiences that would lead us to revise our judgments will already be included in s_i . Take the hologram case. There are various counterfactual experiences that might lead ordinary speakers to deny that the book exists (e.g., attempted tactile experiences

²³On a related note: I argued above that any proposal to read W_M from W_E that conflicts with the Deference Principle must be rejected. But if the direct strategy is used as a backup approach to world selection, there is no risk of conflict. This is because the direct strategy would only be used in cases where there are no ordinary experiences to guide us.

²⁴*Cf.* Quine (1951) and Goodman (1951), who argue that we cannot infer truths about ordinary objects from truths about phenomenal experience. I think EI's reliance on a rich conception of experience helps it to avoid this particular version of the insufficiency objection. In the present section, I am considering whether these richer experiences might *still* be insufficient for knowledge of manifest truths.

of the apparent book, experiences of a projector shining towards the apparent book, etc.). But all of these experiences are already included in s_i . The same goes for any other possible experience we might imagine relevant to the sentence in question²⁵; indeed s_i will probably be an infinite set.²⁶ For this reason, worries about judgment defeasibility do not threaten the edenic idealist's account of world selection.

9.5.2 Other types of truths

One might think that, to judge that S_i , a subject requires more information than what is provided in s_i . For example, one might think that such judgments also require that a speaker know certain theoretical truths or higher-level truths about objects. If such truths are not themselves knowable from s_i , the Deference Principle will not settle the truth of S_i . To assess this objection, I will consider several families of truths that might be thought relevant to S_i .²⁷

*Higher-level truths*²⁸: While knowledge of higher-level truths may *allow* a subject to make judgments about manifest sentences, such knowledge doesn't seem *necessary* for such judgments. For example, my knowledge that X is a bird probably *allows* me to infer that X is not chair-shaped, but I do not *need* to know that X is a bird in order to make this judgment.²⁹ In general, it seems like the relevance of higher-level properties to our

²⁵See Chalmers' (2012, 160-166) "frontloading" argument for related discussion.

²⁶One might worry that the types of truths that could lead us to revise our judgments may not be truths we learn from experience. If one is sympathetic to this objection, then one will probably also think that these non-experiential truths are relevant to our *initial* judgments about S_i as well. I will address this concern immediately below.

²⁷There are two ways to resist the objection. First, one can argue that a subject does not need to know the truths in question in order to judge that S_i . Second, one can argue that the truths in question are themselves knowable from s_i . I think both types of arguments are available in the cases below, but for simplicity, I will focus on the former.

²⁸By "higher-level truths" I mean truths such as: ' X is a zebra', ' X is loved by John', ' X has a palindromic name', etc. See 7.4.

²⁹For further argument, see Chalmers (2012, chs. 3-4), who argues that higher-level truths are inferable from a set of truths that includes manifest truths.

judgments is screened off by the more direct evidence for manifest truths presented to us in s_i .³⁰

Truths involving instruments: Since I have often referred to instruments like flashlights and mirrors when specifying contexts, one might think that subjects must at least know higher-level truths about instruments in order to judge that S_i . On the assumption that properties like *being a mirror* or *being a flashlight* are not directly presented in experience, this is a form of the insufficiency objection.

In response, the edenic idealist will say that the use of these sortal terms is eliminable in principle. To repeat a point made earlier (see 9.3.3): for the purposes of the Deference Principle, all that is required for an object X to count as a mirror is for X to exhibit appropriate counterfactual behavior. Since this behavior can be described entirely using manifest vocabulary, the use of terms like ‘mirror’ is eliminable in principle.³¹

Causal truths: Since I have used causal language when specifying contexts, one might think that subjects require causal information to judge the truth of S_i . There are at least two possible responses. My own view is that, like instrument terms, such causal language is eliminable in principle (which would show that causal truths aren’t necessary for judgments about the truth of S_i). This presupposes a Humean view where causal truths involving ordinary objects can be inferred from a description of how such items are arranged in space and time.³² Another possibility is to say that we are sometimes directly acquainted with

³⁰Recently, many theorists (see, e.g., Siegel (2012, chs. 3-4), Macpherson (2012)) have discussed *cognitive penetration*: the alleged influence of non-sensory mental states on our phenomenal experience. Siegel (2012) offers the following example: Jill believes that Jack is angry at her, and this affects her experience of his facial expression. One might worry that such examples undermine my claim that higher-level beliefs are not necessary for a subject to judge that S_i . In response: the higher-level beliefs in such cases *causally* affect our judgments (insofar as they causally affect our experiences). But these beliefs are not necessary for the *justification* of this judgment, which is what is relevant for the present discussion.

³¹To be clear: when I say that these terms are eliminable in principle, I am not claiming that the *ordinary* concepts like ‘thermometer’ or ‘flashlight’ can be given a conceptual analysis. My claim is only that, when specifying contexts relevant to the Deference Principle, the use of such terms is eliminable in principle.

³²See Chalmers (2012, 336-340) for discussion of this point.

causal relations in experience. On this view, endorsed by some non-Humean theorists³³, the contexts for experiences in s_i can employ causal language.

Truths about W_E : The final family of truths to consider are truths about the state of W_E as it is in itself. For example, if W_M is the single particle world³⁴, then this family would consist of truths about the evolution of the single particle.³⁵

In 7.6.1, I granted that it may be possible (in certain cases) to infer manifest truths from a description of W_E and the psychophysical laws. But one of the guiding intuitions behind EI is the idea that we do not *need* to know such information. This is because speakers do not care about what W_E is like in itself when making judgments about tables and chairs. This is why, throughout this section, the vocabulary used to specify contexts has been the vocabulary of the manifest image, not a vocabulary for describing W_E (see 9.3.6). So the edenic idealist will deny that truths about W_E are needed for subjects to make judgments about S_i .

In 9.4.4, I discussed a potential exception: cases where our experiences fail to determinately settle S_i . I deny that there are such cases (see section 9.4). But if I am mistaken, there will be times when s_i is insufficient for our ordinary object judgments. As discussed in 9.4.4, the proper response to such a case is to use the “direct strategy” as a backup approach to world selection.

³³See, e.g., Armstrong (1997).

³⁴See 6.3 for the description of this world.

³⁵This family will perhaps also include fundamental physical truths, such as truths about microphysical entities and the fundamental physical laws. *Prima facie*, these truths pose no serious threat. Perhaps we are *able* to infer manifest truths from underlying microphysical truths (see Chalmers (2012, 290-298) for discussion). But it is doubtful that we *need* to know such truths for these judgments.

Suppose we've learned that, whenever we measure that X has microphysical property y , X appears red. Then we would consider the experience E of measuring y to be relevant to the truth of sentences like ' X is red'. This case may seem to challenge the above remarks, but I don't think it is a genuine cause for concern. This is because, as far as the Deference Principle is concerned, what matters is that E (counterfactually) *correlates* with X 's appearing red (*cf.* Sellars' (1963b, 19) remarks on the difference between correlational and postulational conceptions of science). So this case is analogous to other cases involving instruments.

9.6 Summary

The edenic idealist's basic response to the Incompleteness Objection is to appeal to counterfactual experiences supported by W_E as specified by the Deference Principle. In this chapter, I have considered a variety of worries that arise for this type of response. To deal with cases where no human experiences are nomically possible, the edenic idealist appeals to nomically *impossible* experiences. To respond to circularity worries, the edenic idealist appeals to a robust conception of experiences where experiences directly involve object. To respond to the determinacy objection, the edenic idealist flips the objection back towards the realist.

Just as in the previous chapter, I have argued certain perceived problems for edenic idealism are better regarded as *advantages of the view*. For example, it may have seemed problematic that the contexts for counterfactual experiences referred to items in W_M . But upon reflection, we see that this feature forges a close connection between EI and ordinary epistemology (see 9.3.6). Similarly, one might have worried that W_E does not determinately support all of the counterfactual experiences needed to select a complete world W_M . But upon reflection, we see that this is another case where the edenic idealist is in a stronger epistemic position than the realist (see 9.4.1).

10 FURTHER OBJECTIONS

10.1 Introduction

In the previous two chapters, I have defended edenic idealism from the *discrepancy objection* and the *incompleteness objection*. In this chapter, I will consider worries related to subjectivity and ordinary language. In particular, I will discuss the following objections:

- *The Mind-Dependence Objection*: There is strong reason to think that ordinary objects would exist even if humans did not exist. By countenancing a close link between ordinary objects and our experiences of them, the idealist makes ordinary objects too subjective.
- *The Intersubjectivity Objection*: The idealist cannot account for the sense in which different subjects are all part of the same world.
- *The Ordinary Language Objection*: Idealism conflicts with common sense and the ordinary use of our language. For example, ordinary subjects would immediately deny that there are two worlds relevant to the truth of our ordinary object judgments.
- *The Battle Cry Objection*: Given that they agree on the truth value of most of our ordinary judgments, there is no substantive disagreement between the idealist and the realist.

10.2 The mind-dependence objection

We think that objects would still exist even if humans did not exist. This claim is not merely an artefact of common sense; it also seems to enjoy strong scientific support. Does the idealist make the existence of ordinary objects too subjective?

I think that mind-dependence is a serious worry for many versions of idealism, including Berkeley's immaterialism. According to Berkeley (1948a, 41), ordinary objects are identified with "collections of ideas".¹ If these ideas are the ideas of human subjects, it seems to follow immediately that counterfactual conditionals such as 'If humans did not exist, the earth would still exist' are false.

To respond to this worry, the subjective idealist might appeal to a divine being. Indeed, Berkeley (1948a, 212-215) leverages the mind-independence of objects into an argument for God's existence: since objects are mind-dependent, and since objects do not depend on human minds, there must be a divine mind supporting their existence. By identifying ordinary objects with collections of ideas in the divine mind, Berkeley can respect the fact that ordinary objects would still exist even if humans did not.²

I suspect that any idealist view on which ordinary objects are (in some sense) constructed from phenomenal experience will similarly need to posit a divine being.³ But with edenic idealism, there is no such need. This is because edenic idealism is a semantic, and not a metaphysical, form of idealism.

According to edenic idealism, W_M is just a certain possible edenic world. Humans happen to be a part of it, but W_M would still exist even if there were no humans. The objects in W_M are made of ordinary matter, not sensory experiences. And in general, there is no metaphysical connection between W_M and human experiences: human experiences merely *present* W_M .

For this reason, the edenic idealist will claim that sentences like 'If humans did not

¹In fact, there are competing interpretations of Berkeley's view of ordinary objects. For example, Winkler (1989, 191-203) defends a phenomenalist interpretation of Berkeley on which statements about objects can be conceptually reduced into statements about minds and their ideas, statements which typically involve counterfactual conditionals.

²Of course, the appeal to a divine being raises difficult questions of its own. For example, Pitcher (1977, 171-172) notes that a divine being would have ideas of all possible objects, not just the ones that we ordinarily think exist. So it is not clear how Berkeley can account for the distinction between existent and non-existent objects. See Winkler (1989, 207-224) for a possible solution to this difficulty.

³For example, Foster's (2008) version of subjective idealism also appeals to a divine being. For further discussion of this issue, see Hofweber (manuscript, 4.1).

exist, the earth would still exist' are literally true (at least in ordinary contexts). In ordinary contexts, we are describing the world W_M , and the objects in W_M would (mostly) have the same properties they actually have even if there were no humans.

Of course, the edenic idealist may allow that the sentence 'If human phenomenal experiences had been different, a different world would have been relevant to the truth of our judgments about ordinary objects' is true. This is because, if W_E had supported different phenomenal experiences, the Deference Principle would have selected a different world W_M^* . But again, this is no threat to the mind-independence of objects because the sense in which our experiences determine truths about ordinary objects is semantic, not metaphysical.

10.3 The intersubjectivity objection

Next, I will consider an objection that Hofweber (manuscript, 4.1) calls that the *problem of intersubjectivity*.

“If [an] object is a mental phenomenon then it seems to belong to a particular mind. But then it is inaccessible to other minds, or so it would seem. Every mind would see only their own private world. ... But even if everyone only sees their own private objects and world, these worlds seem to be coordinated in various ways. If someone sings a song then several others hear the same tune. But each of them is immediately aware only of their own phenomena, and so the problem arises how this coordination is to be explained.”

Put simply: how can the idealist make account for the sense in which different subjects are all a part of the same world?

Just as with the mind-dependence objection, the problem of intersubjectivity is a serious concern for metaphysical versions of idealism. For example, Hylas raises this worry for Berkeley's immaterialism: “But the same idea which is in my mind, cannot be in yours, or in any other mind. Doth it not therefore follow from your principles, that no two can see the same thing? And is not this highly absurd?” (Berkeley (1948a, 247)).

Berkeley's first response is that, when the word 'same' is taken in its ordinary sense, it is obviously true that different persons perceive the same thing. Consider how ordinary speakers use the term 'same': it is clear that they use apply this term to the objects perceived by different subjects. As for whether the objects of perception are *really identical* in some more precise philosophical sense: Berkeley does not think that this is a meaningful question.⁴

I am sympathetic to Berkeley's response, but an important question remains. Even if he views sentences such as 'Mary and John perceive the same table' as true, Berkeley still needs to explain why Mary and Johns' experiences cohere. According to the realist, these experiences cohere because John and Mary are causally affected by the same mind-independent object. But this response is not available to the subjective idealist.

Berkeley explains this coherence by again appealing to a divine being.⁵ On this proposal, God shares his ideas with human subjects so that there is a coherence in the phenomena experienced by distinct subjects.

This proposal comes with a certain epistemological cost. As discussed in 6.5.4, one of the main motivations for idealism is to explain the trivial inferential connection between our phenomenal experiences and judgments about objects. But if the subjective idealist explains intersubjectivity by identifying objects with items in the *divine* mind, it seems that she has reintroduced an epistemic gap between human experiences and truths about objects.⁶

⁴*Cf.* Thomasson's (2007) claim that identity conditions for objects are relative to a linguistic practice.

⁵Says Berkeley (1948a, 248): "so may you suppose an external archetype on my principles; external, I mean, to your own mind; though indeed it must be supposed to exist in that mind which comprehends all things; but then this serves all the ends of identity, as well as if it existed out of a mind."

⁶The idealist could argue that God is not a deceiver and that, as a result, our experiences are in general correspond with divine ideas. But this proposal does not account for the seeming *triviality* of the inference from experience to judgments about objects in ordinary contexts. Says Berkeley (1948a, 230): "What a jest is it for a philosopher to question the existence of sensible things, till he hath it proved to him from the veracity of God; or to pretend our knowledge in this point falls short of intuition or demonstration!"

In contrast, the edenic idealist has no difficulties in accounting for intersubjectivity. On the edenic idealist's system, there are multiple senses in which subjects share the same world. First: the edenic idealist will say that subjects are part of the same *external* world W_E . The fact that human subjects share a world in this external sense is what explains the coordination between our experiences. Second: the edenic idealist will say that human subjects are part of the same *manifest* world W_M . The fact that human subjects share a world in this sense is what explains the fact that judgments made by different subjects all concern the common world W_M . It is also worth re-emphasizing that, with the Deference Principle, experiences from *different subjects* are relevant to selecting the manifest world. In other words: it isn't merely *my* experience of a book that determines the book's color in W_M ; its color is also determined by the counterfactual experiences W_E supports in other subjects.⁷

10.4 The ordinary language objection

I will next consider the worry that idealism conflicts with common sense and the ordinary use of our language. To respond to this objection, the edenic idealist will appeal to a distinction between *theoretical* and *ordinary* judgments about objects. This response is inspired by Berkeley, who used this distinction to defend subjective idealism from the ordinary language objection. So I will begin by discussing Berkeley's response.

10.4.1 Berkeley on common sense

Berkeley (1948a, 228-229) notoriously claimed that idealism is the position of common sense:

“But are you all this while in earnest, Hylas; and are you seriously persuaded that you know nothing real in the world? Suppose you are going to write,

⁷There is one complication. In 6.2.1, I mentioned the possibility of cases where subjects have incompatible experiences without there being any reason to think any individual subject is suffering an illusion. I discuss how the idealist should respond to this issue in 8.3.

would you not call for pen, ink, and paper, like another man; and do you not know what it is you call for? ... I am of a vulgar cast, simple enough to believe my senses, and leave things as I find them. To be plain, it is my opinion that the real things are those very things I see, and feel, and perceive by my senses. These I know; and, finding they answer all the necessities and purposes of life, have no reason to be solicitous about any other unknown beings.”

This aspect of Berkeley’s arguments has widely been dismissed or even ridiculed.⁸ For example, consider Bennett (2001, 177):

“In his published works, I contend, Berkeley had little interest in rescuing the plain person’s beliefs about sensible things. He did not want to connect them rigorously with his ontology, or even to show that this could in principle be done. ... Berkeley’s fundamental attitude to the plain person’s trees and stones, in the deployment of his philosophy, was this disrespectful one.”

But these dismissals of Berkeley may be based on a misinterpretation.⁹ What does Berkeley mean when he says that subjective idealism is the position of common sense? On one interpretation, Berkeley is claiming that the philosophical thesis of subjective idealism is *itself* common sense. If this is what Berkeley meant, he must have been dissembling. This is because most people’s immediate reaction to subjective idealism is that nothing could be further from common sense.

But textual evidence tells against this interpretation. For example, Berkeley (1948a, 43) mentions the “opinion strangely [i.e. greatly] prevailing amongst men, that houses, mountains, rivers, and in a word all sensible objects have an existence natural or real, distinct from their being perceived.”¹⁰ Similarly, in the introduction to the *Principles*, Berkeley (1948a, 24) refers to his views as “newly known and contrary to the prejudices of

⁸See, e.g., Hume (1999, 203n): “[A]ll [Berkeley’s] arguments, though otherwise intended, are, in reality, merely sceptical.”

⁹The discussion of this section draws from Bordner’s (2011) exposition of the role of common sense in Berkeley’s arguments.

¹⁰See Winkler (1989, 7) for discussion of this obsolete usage of the term “strangely”.

mankind.”¹¹

If the thesis of subjective idealism is not *itself* common sense, how can we make sense of Berkeley’s remarks? I think the most plausible interpretation is that Berkeley considered subjective idealism to give the best account of our *ordinary* judgments about objects: the judgments about objects we make in everyday life.

For example, consider the *epistemology* of our object discourse. According to Berkeley, our experiences would not justify ordinary object judgments if these judgments concerned mind-independent items in the external world; after all, it seems the external world “behind the appearances” could be very different from how it appears to us in experience.¹² But in ordinary contexts, it seems *trivial* to infer statements about objects (e.g., ‘There is a table’) on the basis of our experiences of them. So by identifying ordinary objects with experiential items, Berkeley claims that we can best account for the ordinary epistemology of our object discourse.

For a second example, consider the *referential intentions* of speakers making judgments about objects. According to Berkeley, ordinary speakers naturally believe that the world they perceive is the real world; they do not think that the perceived world is just a copy or some “more real” world behind the appearances.¹³ Berkeley (1948a, 263) further thought that the items we perceive are mind-dependent. Given this assumption, subjective idealism is the view that takes the referential intentions of ordinary speakers at face value.

¹¹See also Berkeley’s (1948b, 36) remarks in a letter to Percival: “The common cry being against any opinion seems to me so far from proving it false that it may with as good reason pass for an agreement of its truth. However I imagine whatever doctrine contradicts vulgar and settled opinion had need been introduced with great caution into the world. For this reason it was I omitted all mention of the non-existence of matter in the title-page, dedication, preface, and introduction, that so the notion might steal unawares on the reader, who possibly would never have meddled with a book that he had known contained such paradoxes.”

¹²Says Berkeley (1948a, 79): “This which . . . hath been shewn to be a most groundless and absurd notion, is the very root of scepticism; for so long as men thought that real things subsisted without the mind, and that their knowledge was only so far forth real as it was conformable to real things, it follows, they could not be certain that they had any real knowledge at all. For how can it be known, that the things which are perceived, are conformable to those which are not perceived, or exist without the mind?”

¹³See Bordner (2011, 322) for discussion of this point.

In summary: Berkeley thought that subjective idealism was the best way to make sense of our *ordinary* judgments about objects. This may be true even if the thesis of subjective idealism is not itself common sense.

10.4.2 The distinction between ordinary and theoretical judgments

Taking a tack from Berkeley, the edenic idealist can respond to the ordinary language objection by appealing to the distinction between theoretical and ordinary judgments. Examples of the former include: ‘The cup is tall’, ‘The book is blue’, etc. Examples of the latter are theses like EI and realism.

The edenic idealist will grant that, *qua* theoretical judgment, EI is a surprising result. So in one sense, it is true that EI conflicts with common sense. But even so, the edenic idealist will claim that EI provides the best account of our ordinary judgments about objects.¹⁴ And our ordinary judgments are what matters to the question of realism vs. edenic idealism.

To see why, it is useful consider the analogous issue in metaethics. Suppose that everyone in a certain community thinks that divine command theory is completely obvious (for example, when speakers in this community are explicitly asked what it is for an action to good, they reply that it is for the action to be commanded by God). This by itself wouldn’t show that divine command theory is the correct account of the semantic role of ‘good’ in that community. To decide this question, we would have to see how such speakers actually use the term ‘good’. If divine commands have no bearing on how the expression is actually used, then these speakers merely have false empirical beliefs about the meaning of their term.

The edenic idealist will say the same thing about our common sense preference for realism. It is ordinary use, not theoretical belief, which determines the semantic role of our object terms. And it is here that EI has the advantage over realism. As discussed in 6.5.4,

¹⁴See 6.5.4 and 9.3.5 for related discussion.

edenic idealism offers the best account of the referential intentions, usage, epistemology, and pragmatics of our ordinary judgments about objects.¹⁵

10.4.3 Specific types of ordinary judgments

I've argued that, in order to avoid the ordinary language objection, EI only needs to account for our ordinary judgments about objects. But does edenic idealism meet this weaker condition? In this sub-section, I will consider a few cases.

First, consider the sentence $T_1 \equiv$ 'This table actually exists'. On first pass, EI may seem to be committed to the falsity of T_1 . This is because it is natural to view W_E as the actual world and the edenic idealist does not locate tables in W_E . But as discussed in 6.5.2, this is not the most attractive interpretation EI. Consider: even after the Oracle's testimony (see 6.4.1), we would continue to make judgments like T_1 . This is because we would still need to distinguish things like tables from things like unicorns or golden mountains. To acknowledge this aspect of ordinary usage, the edenic idealist will say that the predicate 'is actual' applies to items in W_M in any ordinary context. So EI is not in tension with judgments like T_1 .

One might object that, no matter what the edenic idealist says about W_M , W_E is the only world that is *really* actual. To respond to this objection, it is useful to consider the parallel objection in metaethics: "The quasi-realist might *say* that certain actions are good, but this is goodness in name only." The quasi-realist will reply that, if one believes that goodness is something more than on the quasi-realist's story, one is simply not using the term 'good' with its ordinary meaning. The edenic idealist will respond similarly: as the term is used in typical ordinary contexts, 'actual' is a predicate that applies to W_M .

The edenic idealist will view other judgments in a similar way. For example, on first pass, it is natural to say that the term 'I' refers to a subject in W_E , since W_E is the world

¹⁵One might wonder: how do we determine whether or not a given judgment S counts as "ordinary"? I doubt that any precise analysis is available, but I think we have a good enough intuitive grasp of the distinction.

generating our experiences. But even if we accepted EI, we would continue to say things like ‘I am sitting on a chair’ in ordinary contexts. So in these contexts, ‘I’ will refer to an entity in W_M . By distinguishing contexts, the edenic idealist can also acknowledge senses in which both ‘My pain is caused by the hot pan’ and ‘My pain is caused by the state of the dust world’ are true.

For a final example, consider the sentence $T_2 \equiv$ ‘That chair is part of the external world’. Sometimes, philosophers use ‘the external world’ as a term of art; it is used to refer to whatever reality is “behind the appearances,” such as the dust world. On this usage (which I have adopted throughout this dissertation), the edenic idealist will deny T_2 . But ‘the external world’ may also have an ordinary use. For example, we might use a sentence like T_2 to distinguish the chair from items in hallucinations. Because of the usefulness of this distinction, ordinary speakers would continue to assert T_2 even after the Oracle’s testimony. So the edenic idealist will grant that, in any ordinary context, ‘the external world’ refers to W_M .

In summary: the edenic idealist will account for the ordinary use of terms like ‘I’, ‘actual’, ‘cause’, etc. by saying that these terms apply to items in W_M in ordinary contexts. *Prima facie* challenges to edenic idealism from ordinary language only arise when we view some, but not all, terms from ordinary object discourse as applying to W_M .

10.5 The battle cry objection

For the reasons outlined above, the edenic idealist will end up agreeing with the realist on the truth value of almost any ordinary judgment about objects. But this close correspondence raises its own questions. If the realist and edenic idealist agree on so much, why should we think that there is really any substantive dispute between them? Wittgenstein (1967) raises this challenge in the following passage:

“One man is a convinced realist, another a convinced idealist and teaches his children accordingly. ... But the idealist will teach his children the word chair after all, for of course he wants to teach them to do this and that, e.g. to fetch

a chair. Then where will be the difference between what the idealist-educated children say and the realist ones? Won't the difference only be one of battle cry?"

I think this "battle cry objection" may be an effective criticism of traditional metaphysical versions of idealism. If the *only* disagreement between the realist and the idealist is over the question of whether ordinary objects are mental or physical, it is tempting to say, in Carnapian fashion, that these theorists are merely working on different linguistic frameworks.

But whatever its success against theorists like Berkeley, the battle-cry objection does not challenge the semantic idealism of EI. The edenic idealist's disagreement with the realist isn't about metaphysics *per se*; it is a disagreement about the semantic role of our object terms.¹⁶ And on this issue, the edenic idealist completely agrees with the spirit of the battle cry objection: what determines the semantic role for these terms is how they are used.

One might still worry about the substantivity of the *semantic* disagreement between EI and realism. But even metaphysical deflationists allow for the substantivity of semantic disputes of this kind. In case one is unconvinced, it will be useful to mention several concrete points of disagreement between the realist and the edenic idealist:

- Unlike realism, EI views ordinary objects as having edenic properties.

- Unlike realism, EI denies that it is coherent to suppose that all of our ordinary object judgments are false (see, e.g., 8.2.3)

- Unlike realism, EI says that facts about how we interpret our experience are relevant to determining which world is relevant to our ordinary object discourse

¹⁶Of course, there will be indirect metaphysical disagreement that results from this underlying semantic disagreement. Since realists and idealists think that ordinary object terms refer to different things, they will disagree on the properties of ordinary objects.

(see chapter 7).

-Unlike realism, EI denies that results from fundamental physics are relevant to the truth values of our ordinary object talk (see 8.4.3).

10.6 Conclusion

In this chapter, I have defended edenic idealism from a variety of objections relating to subjectivity and ordinary language. This completes my defense of EI in this dissertation. In the next chapter, I discuss some of edenic idealism's applications to contemporary philosophical debates.

11 APPLICATIONS OF EDENIC IDEALISM

11.1 Introduction

In the past several chapters, I have defended the following semantic version of idealism:

Edenic Idealism (EI): Ordinary object terms refer to items in the *manifest world*: the edenic world W_M presented by our experiences.

If true, edenic idealism would have implications for many philosophical debates. In this chapter, I discuss EI's potential relevance to debates on composition, metaontology, external world skepticism, and perception.

The discussion of this chapter provides a second, derivative set of reasons to endorse EI: edenic idealism may help clarify various conceptual puzzles arising in certain contemporary philosophical debates. I say that these benefits are derivative because the edenic idealist will diagnose these conceptual puzzles as resulting from a mistaken view of the semantic role of ordinary object terms.

11.2 The debate on composition

EI is most obviously relevant to the debate over the existence of ordinary objects. If ordinary objects are located in W_M instead of W_E , then both sides in this debate have been looking for ordinary objects in the wrong place. The edenic idealist will say that, for this reason, many of the standard arguments given in this debate are based on a false presupposition. For example, some theorists have argued that fundamental physics has implications for the existence (or non-existence) of tables and chairs.¹ But if EI is true,

¹For discussion, see Sider (2013, section 11).

ordinary objects are not part of the world described by fundamental physics.

More significantly, EI provides a simple and direct argument for the existence of ordinary objects:

- (1) Ordinary objects are presented in experience. (premise)
- (2) W_M is the world presented in experience. (definition)
- (3) W_M contains ordinary objects. (from 1,2)
- (4) If W_M contains ordinary objects, ordinary objects exist. (EI)
- (5) Ordinary objects exist. (from 3,4)

Steps (2)-(4) aren't really necessary²: I've included them just to make EI's relevance to the debate as clear as possible. Put more simply, the argument is: we know chairs exist because they are presented to us in experience. Note that this is exactly how ordinary speakers would show that chairs exist, which should suggest that the above argument is on the right track (i.e., that EI correctly identifies the things that ordinary speakers are talking about when they use terms like 'chair').

Nihilists claim that our perceptual experience of objects does not show that they actually exist.³ This is because we would have the same experiences even if simple particles were the only things causally affecting us. But if EI is true, what items in W_E cause our experiences is neither here nor there. What matters is what is *presented* by our experiences. Since our experiences present objects, objects exist. There is no gap between our experience and what W_M is like "in itself".⁴

²This is because (2)-(4) merely state what is implicitly grasped by competent speakers. Compare:

- (1) John is a bachelor. (premise)
- (2) A bachelor is an unmarried male. (definition of 'bachelor')
- (3) Therefore: John is unmarried.

Since (2) states what anyone competent with the term 'bachelor' implicitly grasps, we wouldn't normally include it in the argument. Similar remarks apply to the original argument.

³See, e.g., Sider (2013, section 5).

⁴One caveat: the edenic idealist will acknowledge the distinction between illusory and non-illusory experiences as it is drawn *within our ordinary linguistic practice*. For example, the edenic idealist will grant that when a stick partially-submerged in water looks crooked, this experience is illusory. But she will deny

The nihilist might object: “Composition either necessarily occurs or necessarily does not occur. So if my arguments are successful, no objects exist in W_M . So my arguments still require a response.”

The edenic idealist will reply that, if our experiences present objects, it follows by definition that W_M contains objects. But, besides being phenomenologically obvious, the object-directedness of experience has strong support from research in cognitive science.⁵ If one accepts this result, then one must reject either the eliminativist’s arguments or the necessity of composition. The only other option would be to claim that our experience presents an impossible world. I think this suggestion betrays a shaky grip on the semantic role of the term ‘possible’. But even if W_M isn’t a possible world, it would be no threat to EI itself. We can call the objects in our experience actual, or merely possible, or impossible, or whatever else we want to call them. What matters for EI is that ordinary object terms refer to these items, no matter what label we choose.

11.3 Deflationism and ontological pluralism

In addition to clarifying the first-order debate over composition, EI is also relevant to the literature on metaontology. In this section, I will explain how EI puts pressure on *deflationary* conceptions of ordinary objects.

According to deflationists, the existence of ordinary objects is guaranteed by our having adopted a certain form of linguistic practice.⁶ What it is for the sentence ‘The table is brown’ to be true just is for it to be correctly assertible within ordinary discourse. And what it is for the term ‘the table’ to refer just is for this term to have a certain syntactic role in true sentences. One type of deflationism that deserves specific mention is *ontological*

that it is coherent to suppose that *all* of our experiences of objects are illusory. I discuss this feature of edenic idealism in [reference suppressed for blind review].

⁵For discussion, see Dickie (2010).

⁶Examples of deflationists include Carnap (1950), Thomasson (2007), Chalmers (2009), and Hirsch (2010). There are important differences between these theorists, but these differences are not relevant to the current discussion.

pluralism.⁷ On this view, there is no objective way to “carve” the world into existents; what exists depends on our choice of linguistic framework. In one framework, tables exist, while in another framework, tables do not exist.

While I think deflationism is an attractive view, EI puts pressure on a deflationary account of ordinary objects. To see why, consider Chalmers’ (2010) description of the phenomenology of object-directed experience:

“The phenomenology of vision seems to present a world that is carved into objects at its joints. One does not simply perceive a distribution of mass and color. One perceives objects on top of other objects, each of which may be articulated into objectual parts. Depending on one’s metaphysical views, one may think that the world does not respect this articulation into objects. One might give their existence some highly deflationary treatment on which their individuation is a matter of convention or conceptual scheme, or on which there is no deep fact of the matter about when there is an object or when there is not. But even if one’s metaphysics is deflationary about objects, one’s phenomenology is not.”
(448)

According to EI, W_M is the world presented by our experience. But as Chalmers observes, our experience presents a world that is objectively carved into objects. This means that the existence of tables in W_M is independent of our linguistic practices. If we were to adopt a linguistic framework that did *not* countenance objects, we would be failing to mention items that are directly given to us in experience. Our direct acquaintance with objects in W_M rules out a deflationary view of these items.

The original oracle thought experiments (see 6.3)) also support this conclusion. In each these cases, claims about ordinary objects would remain correctly assertible even after the Oracle’s testimony. For the deflationist, this suffices to show that objects exist. But if this is the whole story, we cannot explain why the cases seemed puzzling in the first place. What generates the puzzles is our failure (in each case) to find anything table-like when we “look out into the world”. But the very fact that we look out into the world to locate tables

⁷See Chalmers (2009) and Hirsch (2010) for two different versions of ontological pluralism.

suggests that they are not the “lightweight” entities posited by deflationists. Instead, they are the robust entities presented to us in experience.

In summary: if EI is true, then deflationists are mistaken about our concepts of ordinary objects. There is more to these concepts than their role in certain correctly assertible sentences. These concepts have the function of picking out items we are directly acquainted with in experience.

This being said, the deflationist and edenic idealist agree on a central point: that debates over the existence of objects are trivial. For the deflationist, they are trivial because existence questions are settled by adopting a certain linguistic framework. For the edenic idealist, they are trivial because we are directly acquainted with objects in experience.

There is a particular affinity between EI and ontological pluralism. Suppose there is a creature C whose experience doesn't present objects, or whose experience presents very different objects than our own phenomenology. The edenic idealist will say that C 's assertions will not concern W_M . So the edenic idealist will agree with the pluralist that speakers can have different ontological commitments without one side being in error. The difference is that, while the pluralist views subjects as carving up a single world in different ways, the edenic idealist views subjects as talking about different worlds.

It is also worth mentioning: while EI may be incompatible with deflationism and ontological pluralism about ordinary objects, it is compatible with these views in other areas of ontology. For example, the edenic idealist could be a deflationist about what exists in the external world W_E . And if the edenic idealist is also a microphysical idealist⁸, she can adopt a deflationary view towards items in W_M . Unlike ordinary objects, we are not directly acquainted with items in these worlds and so deflationism is still an available option.⁹

⁸See 8.4.4.

⁹It is interesting to consider how microphysical idealism and scientific idealism (see 8.4.4-8.4.6) compare to ontological pluralism. For simplicity, let's restrict attention to micro-entities. The pluralist says that there are different ways of carving W_E : on some carvings, W_E contains micro-entities, while on other carvings,

11.4 External world skepticism

Next, I will consider edenic idealism's potential relevance to the literature on external world skepticism. Here is a simple example of an argument for this type of skepticism:

- (1) If I am a brain in a vat, then my hand does not exist.
- (2) I do not know that I am not a brain in a vat.
-
- (3) I do not know my hand exists.

Of course, we could easily substitute other skeptical scenarios, such as Descartes' evil demon scenario, into the above argument. The standard response to the above argument is to reject (2). But the edenic idealist will reject the first premise as follows:

- (1*) My hand exists iff W_E counterfactually supports experiences of my hand.
- (2*) If I am a brain in a vat, W_E counterfactually supports experiences of my hand.
-
- (3*) If I am a brain in a vat, then my hand exists.

Earlier, I argued that what W_E is like in itself isn't directly evidentially relevant to our ordinary object assertions (see 5.4). This point still applies when considering traditional skeptical scenarios. Suppose the Oracle told us that we are envatted brains. Just as with the single-particle world, after several minutes, we would revert to talking about objects just as we did before. Again, the lesson to learn is that we do not care what W_E is like in itself. What matters to us is the world presented to us in experience.

This response has some similarities with one of Putnam's (1981, ch. 1) suggested responses to external world skepticism. Putnam, appealing to the idea that reference requires an appropriate causal link, suggests that the ordinary term 'my hand' may refer to (say) the

it does not. In contrast, the idealist says that anyone working on a micro-entity framework is talking about the microphysical world (as opposed to W_E). The difference seems to be: frameworks for the pluralist correspond to different carvings of W_E , while frameworks for the idealist correspond to different worlds. It is interesting to consider whether or not this disagreement is substantive. Regardless, I maintain that there *is* a substantive difference between idealism and pluralism about *ordinary* objects.

data structure in the computer that causes the relevant hand experiences. On this proposal, our hands exist even if we are envatted brains.¹⁰

Like EI, Putnam offers a semantic dissolution of a skeptical challenge. But EI's advantage is that it provides a much more plausible semantic treatment of ordinary object terms. Putnam's suggestion may seem unconvincing for the following reason: it doesn't seem plausible that we are talking about data structures when we use terms like 'my hand'. But with EI, we can avoid skepticism while maintaining that ordinary objects are exactly what we always thought.

Of course, EI does not rule out all types of skepticism. In particular, the skeptic might deny that W_E counterfactually supports experiences of a world that is as complete as we normally think it is. For example, why should we think that W_E will counterfactually support experiences of objects 10 seconds from now? But this skeptical challenge has more to do with inductive skepticism than external world skepticism, traditionally conceived.

11.5 Perception

According to direct realists, perceptual experience consists in a subject's being directly related to ordinary objects in the mind-independent world. Our contact with objects is not mediated by intermediary sense data, qualia, or intentional states. Instead, the presentational character of perceptual experience is directly constituted by the mind-independent objects and properties that are being looked at.

Direct realists claim many advantages for their account. McDowell (2008) uses direct realism to block Cartesian arguments for skepticism. Campbell (2002) argues that direct realism is needed to explain the way in which our perceptual experience puts us in a position to successfully refer to ordinary objects. But for present purposes, I want to focus on Martin's (2006) argument that direct realism offers the most phenomenologically

¹⁰I note that Putnam himself does not endorse this suggestion; he mentions some other possible responses as well.

accurate account of perception. According to Martin, when we introspect our perceptual experiences, they seem to involve a kind of “openness to the world”. We seem to be directly acquainted with objects in perceptual experience in a way that we are not directly acquainted with the objects of (say) belief. Crane & French (2016) precisify this claim as follows:

Presence: the character of perceptual experience seems to involve the presentation (as) of ordinary objects in such a way that it is immediately responsive to the character of its presented objects.

Martin (2002) argues that only direct realism can account for the phenomenology of presence in perceptual experience.

Despite its attractions, there is a powerful objection that can be raised against direct realism. The direct realist claims that the presentational character of perceptual experience is directly constituted by the mind-independent objects and properties that are the objects of perception. But as discussed in 6.2, there are strong reasons for thinking that the kinds of primitive properties presented to us in experience are not actually instantiated in the mind-independent world. For example, the argument from incompatible experiences suggests that edenic colors are not actually instantiated in the external world. And results from relativity and quantum mechanics challenge the idea that external space is anything like the space presented to us in experience.¹¹

In response to this worry, some direct realists have appealed to the idea that reality consists of many levels. Says Campbell:

But how can we resist the way in which physics pushes sensory experience inside the head? Our understanding of sensory experience could be transformed by giving due weight to the idea that reality can be described ‘at many levels’. We can acknowledge that there is something fundamental about the physics of our surroundings, at least in that all other facts about our world supervene on

¹¹The objection that I raise in this paragraph is discussed by Robinson (1994, ch. 3). See Fish (2010) for an overview of other objections to direct realism.

the physical facts, while being ‘pluralist’ about our world, which can be described ‘at many levels’, and the physical is only one level of description, even if it is a particularly fundamental level of description. ... This opens the possibility that characterizing the qualitative world we encounter in experience, the colours and shapes, the beach ball on the sand, and so on, is simply a matter of saying how things are ‘at a different level’ than the level of description used by the physicist. This doesn’t require that those qualities and objects should be in any way mind-dependent. The dissonance between the qualitative character of our experience and the qualitative character of the world as described by physics may then be merely an artefact of our shifting from one level of description to another. (Campbell & Cassim (2014, 3))

Campbell suggests that, even if no edenic properties are instantiated at the fundamental level of reality, we can still allow that these properties are instantiated at non-fundamental levels.

But I do not think this position is tenable. For example, given the impossibility of an object’s being both edenically red and edenically green at the same time, the argument from incompatible experience tells against the instantiation of *any* edenic colors. Similarly, the arguments from science do not merely tell against the existence of edenic space at the fundamental level; they tell against the existence of edenic space *simpliciter* (see fn. 10 of chapter 6).

We have an impasse. On the one hand, phenomenological considerations seem to give strong support to a view of perception on which we are directly related to objects. But on the other hand, it seems clear that we are not directly related to items in the external world.

I think edenic idealism provides a promising way out of this impasse. With EI, the qualitative nature of the external world does not threaten a directly relational view of perception. This is because the edenic idealist can say that, in perception, we are directly related to edenic objects in the *manifest world*. Indeed, since there is no gap between W_M and the world presented to us in experience, the edenic idealist can fully endorse the claim

that the presentational character of perceptual experience is directly constituted by the objects and properties we are looking at. We might call the resulting view of perception *direct idealism*.

In addition to avoiding the above objection about the external world, I think that direct idealism can avoid many other prominent objections to relational theories of perception. While it is outside the scope of this chapter to address these issues, I am interested in developing this view in future work.

11.6 Summary

The discussion of this chapter provides a second, derivative reason to accept EI. By clarifying the semantic role of our ordinary object terms, the edenic idealist is in a position to clarify certain conceptual confusions that arise in contemporary philosophical debates. Insofar as the edenic idealist can help dissolve or resolve these puzzles, it provides further indication that EI is on the right track.

A OTHER ARGUMENTS RELEVANT TO CAUSAL DEFLATIONISM

In this appendix, I will compare the arguments of section 2.4 to two other arguments that may challenge the claim that the term ‘cause’ expresses a relation with a discoverable, unified nature.

Pluralist arguments: As I will use the term, causal pluralism is the view that the ordinary term ‘cause’ is ambiguous over multiple relations.¹ Pluralists motivate their position by citing cases where we have conflicting causal intuitions. For example, Hitchcock (2003, 10) considers the following case: “Two assassins, Captain and Assistant, are on a mission to kill Victim. Upon spotting Victim, Captain yells ‘fire!’, and Assistant fires. Overhearing the order, Victim ducks and survives unscathed.” In this case, we have conflicting intuitions about whether Captain’s order caused Victim’s survival. According to Hitchcock, the best explanation of these conflicting intuitions is that the term ‘cause’ expresses different types of causal relations.²

While I am sympathetic to this argument, I do not think it goes far enough. In contrast to the pluralist’s claim that the term ‘cause’ corresponds to *more than one* natural relation, the arguments of section 2.4 suggest that ‘cause’ does not correspond to any natural relation at all. These two conclusions have different methodological implications. Pluralists have attempted to give analyses for each type of causation they distinguish.³ But on my view,

¹See, e.g., Hitchcock (2003) and Hall (2004). Not every view labeled “pluralist” in the literature will count as such on the usage of this chapter. See Hitchcock (2007) and Godfrey-Smith (2009) for useful taxonomies.

²Hall (2004) provides a similar argument for distinguishing *production* causation from *dependence* causation.

³For example, Hall (2004) offers analyses of two types of causation. Perhaps unsurprisingly, philosophers have raised counterexamples to Hall’s analyses (see Longworth (2006, 58-60)).

there will be no metaphysical analysis available for causation at all.⁴

Minimalist arguments: Some theorists have suggested that the term ‘cause’ is something like a family resemblance term. For example, Skyrms (1984) suggests that we employ an “amiable jumble” of criteria when making causal judgments, with no explicit rule for how these criteria should be weighed. Similarly, Psillos (2009, 2) claims that “causation is very much like the common cold ... [although it has no unique nature], it can be traced reliably by its symptoms.”

While I think it is plausible that we make causal judgments on the basis of a loose set of criteria, this fact by itself does not show that ‘cause’ is not a natural kind term. Consider: we make judgments about measles using a loose set of criteria, but ‘measles’ is still a natural kind term. So to establish that causation has no unified nature, further argument is required.

To this end, Anscombe (1971, 93), Cartwright (2004), and Psillos (2009, 14-20) have defended *causal minimalism*. According to causal minimalism, specific causal terms (e.g., ‘push’, ‘freeze’) are semantically prior to the abstract term ‘cause’. Assertions employing the term ‘cause’ do not express any content over and above what is expressed in assertions using more specific causal vocabulary. If causal minimalism is true, then it is plausible that the term ‘cause’ will not express a relation with a unified nature.

While I am not persuaded by causal minimalism, it is outside the scope of this chapter to discuss this view. Whatever the status of this view, the arguments of section 2.4 provide independent reasons to deny that causation has a discoverable, unified nature.

⁴Another potential shortcoming of the pluralist argument is dialectical. I suspect that theorists who view ‘cause’ as something like a natural kind term will not share Hitchcock’s intuition that there is no fact of the matter about whether causation occurs in controversial cases.

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