

Why Idealism?

Michael Pelczar

Abstract

Historically influential but inadequate reasons to favor idealism are distinguished from lesser-known but better reasons to favor it.

1 Introduction

Idealism, as I understand it here, is the view that the physical facts of our world reduce to broadly experiential facts. By “broadly experiential” facts, I mean facts about what experiences exist, as well as facts about what experience-causing powers there are, and facts about what experiences are apt to occur given the occurrence of other experiences.¹

All idealist theories are examples of *mind-first* metaphysics, in that they all try to understand the physical in mental terms rather than vice versa. However, not all idealist theories are *mind-dependent*, since not all imply that the existence of a physical world depends on the existence of minds or mental states. An example of mind-dependent idealism is Berkeleyan idealism, which identifies physical things with suitable complexes of experiences. Examples of non-mind-dependent idealism are Kantian noumenalism, which identifies physical things with (possibly unexercised)

¹This understanding of idealism excludes panpsychism, which doesn’t propose a reductive analysis of physical phenomena, but a brute identification of physical phenomena (or at least fundamental physical phenomena) with mental phenomena. (This is why panpsychists sometimes classify themselves as materialists: see, e.g., Strawson (2006).) I’m also not counting as a form of idealism the view, held at one time by Wittgenstein [Wittgenstein (1922)] and more recently Thomas Hofweber [Hofweber (2019)], that our cognitive capacities determine what is metaphysically possible—a view that’s compatible with, but doesn’t entail, a reductive analysis of physical phenomena in experiential terms.

powers to cause suitable complexes of experiences, and Millian phenomenalism, which identifies physical things with (possibly unrealized) propensities for experiences to occur in suitable patterns.

This paper has two main goals. The first is to identify a number of influential but, in my view, inadequate reasons to favor idealism. The second is to share what I consider better reasons to favor idealism (or at least a non-mind-dependent form of idealism).

The inadequate reasons include several championed by historically prominent idealists. The salience of these purported reasons, combined with their inadequacy, has discouraged many philosophers from taking idealism seriously. A subsidiary goal of the paper is to redirect people's attention toward better reasons in favor of idealism, in the hope that this will renew interest in idealist metaphysics.

2 Inadequate reasons to favor idealism

In this section, I consider several inadequate reasons to favor idealism, in descending order of inadequacy.

First inadequate reason: *Idealism solves the problem of external world skepticism.*

This is one of the most often cited, and worst, reasons to be an idealist.

Despite rumors to the contrary, idealism does nothing to solve the problem of external world skepticism.² Any adequate metaphysics has to acknowledge a distinction between veridical and non-veridical experience. A skeptical scenario is one where most or all of our experiences are non-veridical. To get such a scenario, I need only entertain the possibility that there is no physical world (or, no physical world remotely like the one we normally suppose to exist), and that all my experiences occur totally at random, just happening to occur exactly as they actually do. Idealism gives me no more reason to doubt that this possibility is actual than any non-idealist metaphysical theory.

²Berkeley started the rumor (Berkeley, 1710/1901, §§86-91), and it has since become a central tenet of idealist mythology.

It might be different if idealists claimed that physical things consisted entirely of their own experiences. If the present existence of the table I now perceive were just the existence of the experiences I'm currently having, then I could be as certain that the table presently exists as I am that I'm having these experiences.

But no idealist takes such a narrow view of things. According to Berkeley, in order to be parts of a real table, my experiences must agree with those that God has, or at least occur so as to fit into God's plan in the right way. According to Leibniz, in order to be parts of a real table, my experiences must relate a certain way to those of other minds (or "monads"). According to Kant and Mill, my experiences aren't part of a table at all, which is a power to give my mind and others suitably coherent experiences of a table (Kant), or a propensity for different minds to have suitably coordinated experiences of a table (Mill). Introspection on one's own experience can't prove that any of these conditions hold.

Second inadequate reason: *Non-mental facts metaphysically underdetermine the physical facts.*

One common reason idealists offer in support of idealism is that non-mental facts metaphysically underdetermine the physical facts. For instance, according to John Foster, without bringing conscious experience into the picture,

we can at best acquire knowledge of the structure and organization of the physical world, not, at least at the fundamental level, of its content. Thus while, from our observations, and from the way these support certain kinds of explanatory theory, we may be able to establish the existence of . . . external objects . . . and discover their shape and size, their spatial and spatio-temporal arrangement, their causal powers and sensitivities, and the various ways in which complex objects are composed of simpler ones, we can never discover the ultimate nature of their space-filling content.³

Similarly, according to Robert Adams,

³(Foster, 1993, 295).

a system of spatiotemporal relationships constituted by sizes, shapes, positions, and changes thereof is too incomplete, too hollow, as it were, to constitute an ultimately real thing or substance. It is a framework that, by its very nature, needs to be filled in by something less purely formal. It can only be a structure of something of some not merely structural sort. Formally rich as such a structure may be, it lacks too much of the reality or material of thinghood. By itself, it participates in the incompleteness of abstractions.⁴

To put these comments in the form of an argument for idealism: (1) the non-mental facts underdetermine the physical facts; (2) if the non-mental facts underdetermine the physical facts, then physical states of affairs must be at least in part mental states of affairs; (3) the simplest theory in which physical states of affairs are at least partly mental states of affairs is some kind of idealism; (4) therefore, we should accept that some kind of idealism is true.

The main problem with this argument is step (1). It's just not obvious that the non-mental facts underdetermine the physical facts.

The main argument for the underdetermination claim is that the only non-mental features that the physical world has are structural features, and that no purely structural state of affairs is sufficient for anything physical. "Structural" features include those we can describe in abstract mathematical terms, supplemented by a term for causation or some similar relation of contingent dependence (like conditional probability), plus maybe some primitive terms for spacetime relations (though the more austere forms of structuralism analyze spacetime in causal and abstract terms, or eliminate spacetime altogether).⁵

Idealist antipathy toward structuralism is as old as Berkeley's railings against "abstract ideas,"⁶ but actual idealist arguments against struc-

⁴(Adams, 2007, 40). For similar remarks, see (Hartshorne, 1946, 413).

⁵Bain (2006) argues for a structuralist reduction of spacetime, and Rovelli (2006) for spacetime eliminativism. Important defenses of structuralism about the physical world include Boscovich (1763/1922), Russell (1927), Dirac (1938-1939), (Ladyman et al., 2007, 130-89), Sider (2011), French (2014), and Tegmark (2014).

⁶See Berkeley's introduction to Berkeley (1710/1901), and (Berkeley, 1710/1901, §5).

turalism are thin on the ground. The most explicit arguments for the insufficiency of the structural for the physical actually come from panpsychists. According to Philip Goff, for example,

[T]here is a basic intuition that causal powers are too *metaphysically thin* to constitute the complete nature of fundamental concrete objects. A causal power concerns how its bearer points toward other entities and toward its own non-actual but potential manifestation in reaction to those entities. But, intuitively, fundamental objects must also have a *manifest nature*: a nature that does not consist in such shadowy pointing, but consists in how the object is *in and of itself*. This view is commonly expressed with the analogy that a world of pure powers is like a world in which things are continuously packing their bags for a journey that is never taken: objects continuously change their potentialities, but those potentialities never result in anything *actual*.⁷

Why, according to Goff, can't the manifestation of a given causal power be another causal power?

The problem is that if the manifestation of causal power F is itself a causal power—call it “G”—then we can only understand the nature of G by understanding its manifestation—call it “H.” If H is also a causal power, then we can understand its nature only by understanding its manifestation—call it “I”—and so on ad infinitum. Unless at some point we find a manifestation that is not itself a causal power, we will never reach an adequate specification of the nature of F.⁸

Here, Goff isn't arguing that we have to reject structuralism to avoid a vicious regress: structuralists can cut off a regress by defining powers and dispositions in terms of the pattern of their causal relationships.⁹ For example, in a world consisting of a power x to cause a power y which is a power to cause z , we can define x as that which nothing has the power to cause, y as that which something has the power to cause and that has the power to cause something, and z as that which y has the power

⁷(Goff, 2017, 140).

⁸(Goff, 2017, 137-38).

⁹As Goff acknowledges: (Goff, 2017, 138-39).

to cause. The problem, rather, is supposed to be that a description of things in purely causal or structural terms never gets as far as describing any physical state of affairs:

To have a causal power is to be disposed to bring about some change in the world, to make a difference. When I ask what a causal power is, I want to know what change it brings about in the world: what property it gives rise to. And I learn what change F brings about in the world when I understand the nature of its manifestation G. But so long as we are restricted to causal predicates, an explanation of G's nature is continuously deferred and never given.¹⁰

This argument is question-begging. If we ask what properties a causal power gives rise to, structuralists can answer: "further causal powers." Only if a thing's nature can't be exhausted by its causal powers is a characterization of the thing's properties in terms of causal powers alone not adequate. Goff replies that "by definition a causal power is something that gives rise to a certain property, and hence to understand what a causal power is, we need to understand the nature of the property it gives rise to."¹¹ However, structuralists will respond that the property's nature is to dispose whatever has it to have certain structural effects. To insist that there must be more to a property's nature than this would again beg the question against the structuralists.

Structuralism is a controversial view, and the jury is still out on whether it offers an adequate account of physical reality. But until idealists come up with some sound, non-question-begging argument against structuralism, they're not entitled to claim that considerations of underdetermination militate in favor of idealism.

Third inadequate reason: *Idealism implies that we are directly aware of the things we perceive.*

One ostensible virtue of idealist metaphysics is that it implies that when we perceive physical things, we are in some sense directly aware of the things we perceive.

¹⁰(Goff, 2017, 139).

¹¹(Goff, 2017, 139).

To begin with, we need to separate this ostensible reason in favor of idealism from the first one we considered. Whatever advantages there might be to the view that we are directly aware of the things we perceive, it's not that it allows us to overcome external world skepticism. Rather, the advantage of the view that we're directly aware of the things we perceive is supposed to be that such direct awareness allows us to distinguish knowing about things by perceiving them from knowing about things in non-perceptual ways. For example, there's a difference between perceiving that there's a rabbit in your garden, and knowing there's a rabbit in your garden on the strength of testimony to that effect from a reliable eyewitness. Accounting for this difference is one desideratum of a theory of perception, and one virtue of idealist theories is that they yield accounts of perception that satisfy it.

According to Berkeleyan idealists, the difference between perceptual and non-perceptual knowledge is that when you perceive something, your state of awareness of it (some perceptual experience) is part of the thing you're aware of, whereas when you know something from testimony, for example, your state of awareness (some non-perceptual belief state) is not part of the thing you're aware of.

According to noumenalists, the difference is that when you perceive something, your awareness of it is one of the experiences that the thing is a power to cause, whereas when you know something in a non-perceptual way, your state of awareness isn't among the experiences that the thing is a power to cause (though it might be among the experiences that a certain testimonial utterance is a power to cause).

According to phenomenologists, the difference is that when you perceive something, your awareness of it is one of the experiences for which the thing is a possibility, whereas when you know something non-perceptually, your awareness of it isn't among the experiences for which the thing is a possibility (though again it might be among the experiences for which some testimonial utterance is a possibility).

That idealism allows us to distinguish perceptual from non-perceptual knowledge is, I think, a point in its favor, but not a decisive point. Partly this is because it's unclear that non-idealist theories of percep-

tion are incapable of explaining the difference between perceptual and non-perceptual knowledge—a topic of ongoing debate—and partly because it’s unclear that there’s an urgent need to draw a sharp distinction between the two kinds of knowledge in the first place. If there’s a reason to favor idealism here, it works by factoring into a larger reflective equilibrium argument for idealism, not by justifying a belief in idealism all on its own.

3 Better reasons to favor idealism

Now let’s consider some better reasons to favor idealism. The goal here isn’t to build an airtight case for some kind of idealist metaphysics, but to put forward several considerations that give idealism the same level of *prima facie* support that exists for currently more popular metaphysical theories.

But first, let me make a preliminary point, which is that we have very good reasons to *reject* any form of mind-dependent idealism. (So, if there are really good reasons to favor idealism, they’re reasons to favor some kind of non-mind-dependent idealism.)

Our world contains stars, and it contains minds, but the existence of the stars in no way depends on the existence of the minds. At least, we can easily imagine a situation in which our world’s stars exists, but there are no minds or mental phenomena of any kind; to the best of our knowledge, that *was* the situation before life evolved anywhere in the universe.

Mind-dependent idealism conflicts with this simple observation. If, as Berkeley contends, stars consist of conscious experiences (such as those we have when perceiving stars), then the stars *do* depend on minds for their existence: if there had been no minds or experiences, there would not, according to Berkeley, have been any stars.

One might try to defend Berkeley by arguing that our ability to imagine the stars existing in the absence of anything mental isn’t proof that such a situation is metaphysically possible. Similarly, defenders of materialism argue that our ability to imagine fully functioning human organisms

existing in the absence of consciousness isn't proof that such organisms are metaphysically possible. So far, materialists have not carried out this defense very convincingly, and the prospects for a similar defense of mind-dependent idealism seem no brighter.¹²

Even less promising is Berkeley's own defense of his theory's implications in this regard. According to Berkeley, we cannot, in fact, imagine stars existing in a mindless world, since the only stars we can imagine are those that are imagined (by us), and in order for there to be an imagined star, there must be a mind that imagines it. The fallaciousness of this argument is too familiar to belabor here. Suffice it to say that Berkeley fails to notice that one can imagine something without imagining that one imagines it: that I don't have to project myself into every state of affairs that I call before my mind. (Otherwise, it would be impossible for me to imagine what my parents' life was like before I was born.)

The lesson here is that the only plausible idealism would have to be a non-mind-dependent idealism, like noumenalism or phenomenalism. If physical things are experience-causing powers, there's no contradiction in the proposition that our world's physical contents could have existed in the absence of anything mental: we need only imagine a situation in which all the powers exist, but none of them gets exercised (perhaps for lack of any minds for them to be exercised upon). If physical things are propensities for experiences to occur certain ways conditional on their occurring certain other ways, then again there's no contradiction in saying that our world's physical contents could exist without anything mental: we need only imagine that all the propensities exist, but none of them is manifested in the form of actual experience (as, for example, the fragility of a vase might never be manifested in the form of actual breakage). In the remainder of this section, I'll confine my attention to noumenalist and phenomenalist versions of idealism.¹³

¹²For a review of the relevant materialist literature, see Pelczar (2021).

¹³Whether noumenalism is properly classified as a kind of idealism is debatable—Stoljar and Smith (1998) classify it as a kind of metaphysical realism—but Kant refers to it as a kind of idealism, and I follow his example here. The label is less important than the idea behind it.

First reason: *Our ordinary ways of thinking already commit us to some kind of idealism.*

The ancients thought that trees were compounds of earth, air, fire, and water. Nineteenth century scientists thought they were clouds of atoms balanced in mutual equilibrium. Most physicists today think they are quantum states defined on a high-dimension Hilbert space.

Despite these disagreements about the underlying nature of trees, the ancients, Victorians, and contemporary physicists agree that there are trees. Neither the transition from ancient physics to classical physics, nor the transition from classical physics to quantum physics, prompted an outbreak of skepticism or antirealism about trees. Why is that?

Here's a natural explanation: what people mean, and have always meant, by "trees" is whatever ultimately explains why we have the sort of experiences that lead us to believe there are trees. Disagreements about the nature of the explanation are disagreements about the nature of trees, not disagreements about their existence; and, if we change our minds about the underlying nature of trees—say, by abandoning classical in favor of quantum mechanics—we don't change our minds about the existence of trees. We just change our minds about what ultimately accounts for the fact that there are trees.

Imagine that we somehow learn that trees actually have no stable underlying nature that explains our experiences of trees. Instead, the ultimate source of our experiences of trees and all other physical things is in a constant state of flux: now quantum states, now atoms, now something akin to Aristotelian prime matter, now God, now something-we-know-not-what, etc. Would this revelation diminish our confidence in the existence of trees?

I submit that it would not. We would still believe there were trees, and still believe that trees persist over time. For example, we'd still believe that the giant sequoias in Muir Woods exist and have existed for centuries.

If this is correct, it suggests that our belief in the existence of trees is, at bottom, a belief that the world has the power to cause suitable experiences as of trees, including the sort of experiences that we take as

evidence of trees. After all, what persists over time in the imagined scenario is the existence of such powers, rather than something that grounds or sustains them. But if our belief in the existence and persistence of trees is just a belief in the existence and persistence of powers to cause suitable experiences as of trees, then we already implicitly agree with Kant and the noumenalists that trees just are such experience-causing powers.

At least, it seems we implicitly agree that the existence of such powers is sufficient for the existence of trees. Whether our ordinary ways of thinking commit us to its being necessary is debatable.

Suppose we learn that nothing, in fact, has the power to give us experiences of trees, but that despite this fact, experiences tend to occur just as they would if there were things with such power. For example, we can imagine that despite there being no noumena with experience-causing powers, there's still an objective tendency for experiences as of traveling to a certain part of the central California coast to culminate in experiences as of giant redwoods. We might think of this tendency in terms of a true counterfactual to the effect that one would have experiences as of giant redwoods, if one were to have experiences as of traveling to a certain part of the California coast, or in terms of there being a high probability of experiences as of giant redwoods, conditional on there being experiences as of traveling to a certain part of the California coast.

The existence of such objective tendencies or propensities seems to give us everything we expect of a world with trees, regardless of whether the tendencies or propensities are grounded in a regime of experience-causing powers. If this is correct, then it seems we already implicitly agree with Mill and the phenomenologists that trees just are such objective tendencies or propensities: that, as Mill puts it, trees and other physical things are nothing but “permanent possibilities of sensation.”¹⁴

Second reason: *Idealism offers the best explanation of the regularity of experience.*

¹⁴See (Mill, 1865/1979, 183). The idea that some kind of idealism is implicit in our everyday thinking about the world goes back at least to Berkeley: see, e.g., (Berkeley, 1710/1901, §35) and the third dialogue of Berkeley (1713/1901).

I've just argued that our ordinary ways of thinking about physical things suggest that we're already committed to some kind of idealism. Maybe you'll say: so much the worse for our ordinary ways of thinking. Personally, I think that finding a commitment to a philosophical position in everyday life is about the most compelling argument for the position one could hope for. Be that as it may, there's a related argument for idealism that supports it more directly.

A common response to external-world skepticism is that we can infer the existence of a physical world from the fact that our experiences exhibit various regularities.¹⁵ Implicit in such anti-skeptical arguments is the idea that it's sufficient for the existence of a physical world for there to be something that explains the regularities in experience. This idea is plausible, independent of its role in anti-skeptical arguments. Our only reason for thinking that there's a physical world is that our experiences exhibit regularities that call for explanation. As we saw above, there's room for disagreement over the exact nature of the explanation, but, as we also saw, such disagreement doesn't precipitate disagreement over the existence of physical things, like trees. This suggests that we all agree that whatever explains the regularity of experience, *that's* what "the physical world" refers to.

If this is correct, we might argue for idealism by arguing that the best explanation for the regularity of experience is an idealist explanation.¹⁶

The most common explanation for the regularity of experience is the realist explanation, which goes like this. Conscious beings like us have bodies with various geometric and kinematic features, embedded in environments that also have various geometric and kinematic features, and interactions among our bodies and environment give rise to various conscious experiences. It's perhaps surprising that such interactions give rise to conscious experiences, but, given that they do, it's not surprising that similar environmental features cause similar experiences in similarly-

¹⁵See, e.g., (Locke, 1694/1979, IV.xi), (Russell, 1912, 5), (Broad, 1925, 140-220), (Mackie, 1976, 662-69), (Jackson, 1977, 141-51), Putnam (1982), Vogel (1990), (Davidson, 2001, 151), Chalmers (2010), and Huemer (2015).

¹⁶I take this to be the argument that Berkeley offers, in compressed form, in (Berkeley, 1710/1901, §20).

configured people, or similar experiences in the same person at different times.

The realist explanation of the regularity of experience makes sense, but is it the best explanation?

The realist explanation assumes that physical things have various experience-causing powers in virtue of having various underlying geometric and kinematic features (parts with certain shapes and sizes, standing in certain spatial relations, and undergoing various motions). But what is our basis for thinking that the things have their experience-causing powers in virtue of underlying geometric and kinematic features? Our only evidence that things have such features comes from experience; in this regard, our reasons for attributing things shapes, sizes, and motions are no different from our reasons for attributing them colors, odors, and flavors. Wouldn't it be more conservative simply to say that what explains the regularity of experience is that there are entities empowered to cause experiences to occur in orderly ways, without conjecturing that they have the powers in virtue of possessing some further categorical nature?

This is the noumenalist explanation of the regularity of experience. It's simpler than the realist explanation, in that its ontological commitments are a proper subset of those of the realist explanation. To explain the regularity of experience, realists posit entities that have suitable experience-causing powers in virtue of having various categorical (e.g., geometric and kinematic) features; noumenalists explain the same regularity by positing entities that have suitable experience-causing powers. Period.

In addition to being more parsimonious than the realist explanation, the noumenalist explanation has the advantage of explaining the experiential regularities that are our only evidence of the geometric and kinematic features that realists posit to ground things' experience-causing powers. According to noumenalists, for there to be things having various colors and odors is for there to be entities with the power to cause suitably organized and coordinated experiences as of objects with various colors and odors; for there to be things having various shapes and sizes is for there

to be entities with the power to cause suitably organized and coordinated experiences as of objects with various shapes and sizes.

The noumenalist explanation of the regularity of experience is simpler than the realist explanation, but it might not be the simplest possible explanation. That title might go to a phenomenalist explanation of the regularity of experience.

Let's remind ourselves of what it is about our experience that calls for explanation. What calls for explanation is that our experiences occur in seemingly non-random ways; i.e., that the relative frequencies of various phenomenal features of our experience are not what one would expect of randomly occurring experiences. Well, the simplest explanation of the fact that our experience *seems* to occur non-randomly is that it really *does* occur non-randomly: the reason why the relative frequencies of various phenomenal features of our experience are not what one would expect of randomly occurring experiences is that our experiences don't occur randomly, but in accordance with objective conditional probabilities.

Just as the noumenalist explanation is simpler than the realist explanation, the phenomenalist explanation is simpler than the noumenalist. The existence of powers to cause orderly experiences wouldn't explain the regularity of experience, if the powers didn't ground objective probabilities for experiences to exhibit certain phenomenal features conditional on their exhibiting certain other phenomenal features. But the probabilities might exist, even if there is nothing to ground them, and even if something does in fact ground them, it doesn't seem to matter whether it's the same thing from one moment to the next, as long as the probabilities remain the same.

This isn't the place to adjudicate between noumenalist and phenomenalist metaphysics. The important point is that both theories offer a simpler explanation for the regularity of experience than alternative realist explanations. Given that the physical world just is whatever explains the regularity of experience, this is a basis for identifying physical things with something broadly experiential: either experience-causing powers, or objective propensities related to experience.

Third reason: *Idealism follows from the best explanation of how basic scientific vocabulary gets its meaning.*

It seems reasonable to think that a description of the physical world in terms of an ideal physics—one free from the errors and omissions of present-day physics—would capture all of our world’s physical features. Now suppose it’s possible to define the expressions that make up the vocabulary of ideal physics purely in terms of some class of phenomena, ϕ . Then we can infer that the world’s physical features are exhausted by its ϕ -features. (This is like inferring that the world’s microphysical features exhaust its biological features from the fact that a complete description of the world in the vocabulary of ideal biology would capture all of the world’s biological features, and that the expressions that make up the vocabulary of ideal biology are definable in purely microphysical terms.)

What might the ϕ -features be? Well, how do physicists actually define their basic terms? According to Eddington, they do it with operational definitions:

The vocabulary of the physicist comprises a number of words such as length, angle, velocity, force, potential, current, etc., which we call “physical quantities.” It is now recognised as essential that these should be *defined* according to the way in which we actually recognise them when confronted with them, and not according to the metaphysical significance which we may have anticipated for them. In the old textbooks mass was defined as “quantity of matter”; but when it came to an actual determination of mass, an experimental method was prescribed which had no bearing on this definition. . . . You may if you like think of mass as something of inscrutable nature to which the pointer reading [i.e., the prescribed experimental method] has a kind of relevance. But in physics at least there is nothing much to be gained by this mystification, because it is the pointer reading itself which is handled in exact science; and if you embed it in something of a more transcendental nature, you have only the extra trouble of digging it out again.¹⁷

¹⁷(Eddington, 1929, 254-55).

If, as Eddington suggests, the basic terms of physics require operational definitions, these can't all be definitions in terms of operations that have physical states as inputs and outputs ("physical operations," as we may call them). That's because the inputs and outputs would also require definitions, and there's no way to define them in terms of further physical operations without either going in a circle, or introducing an infinite number of physical terms. Since physics employs only a finite number of terms, it follows that we can't, on pain of circularity, define them all in terms of physical operations.

It follows that in order for the chain of operational definitions to end without going in a circle, it must terminate in operational definitions that appeal to functions that don't have physical states as inputs and outputs. What form might such definitions take?

Apparently, they would have to be definitions in terms of functions that take conscious experiences as input and return conscious experiences as output. (Input: experiences as of performing such-and-such an experiment; output: experiences as of getting such-and-such a result.) Call these "phenomenal operations."

If the basic terms of ideal physics require definitions in terms of phenomenal operations, then a description of the physical world in terms of ideal physics is equivalent to some description in terms of the experiential inputs and outputs of various phenomenal operations. And if the most complete description of the world that ideal physics could offer would capture all of the world's physical features, it follows that the world's physical features are exhausted by those it has in virtue of experiences being apt to occur in certain patterns. But this is a kind of idealism.

Like the other arguments we've considered in this section, the foregoing invites objections that would have to be answered in a full defense of idealism. In particular, one would have to address criticisms of Eddington's view that physics relies on operational definitions for its basic vocabulary.¹⁸ But these objections are no more serious than various objections to the main arguments for the non-idealist theories that dominate the contemporary metaphysical landscape. They're important objections,

¹⁸Though see Chang (2017) for a recent defense of this view.

but not the sort that should discourage us from taking idealism seriously.

4 Conclusion

Like any ambitious global metaphysic, idealism isn't a position that you should be converted to on the strength of a discussion as brief as the foregoing. The purpose of the discussion has been rather to set the conditions for debate over idealism going forward, so that it revolves around the most promising arguments for idealism, rather than the more or less specious arguments that have tended to dominate discussions of idealism up until now. 21st-century discussions of materialism don't revolve around arguments based on crude contact-based models of causation, and 21st-century discussions of dualism don't revolve around arguments based on religious doctrine. It's time we extended the same courtesy to 21st-century idealists, by focusing on the best arguments for idealism, even when these aren't the best-known.

References

- Adams, Robert M. “Idealism vindicated.” In *Persons: Human and Divine*, Oxford: Oxford University Press, 2007, 35–54.
- Bain, Jonathan. “Spacetime structuralism.” In *The Ontology of Spacetime*, edited by Dennis Dieks, Amsterdam: Elsevier, 2006, 37–65.
- Berkeley, George. “A Treatise Concerning the Principles of Human Knowledge.” In *The Works of George Berkeley*, A.C. Fraser, ed., Oxford: Clarendon Press, 1710/1901, volume Vol. 1, 233–347.
- . “Three Dialogues between Hylas and Philonous, in Opposition to Sceptics and Atheists.” In *The Works of George Berkeley*, A.C. Fraser, ed., Oxford: Clarendon Press, 1713/1901, volume Vol. 1, 379–485.
- Boscovich, Roger Joseph. *A Theory of Natural Philosophy*, J.M. Child, trans. Chicago & London: Open Court Publishing Company, 1763/1922.
- Broad, C.D. *Mind and Its Place in Nature*. New York: Harcourt, Brace & Co., 1925.
- Chalmers, David. “The Matrix as metaphysics.” In *The Character of Consciousness*, Oxford: Oxford University Press, 2010, 455–494.
- Chang, Hasok. “Operationalism: old lessons and new challenges.” In *Reasoning in Measurement*, edited by Nicola Mößner, and Alfred Nordmann, London & New York: Routledge, 2017, 25–38.
- Davidson, Donald. “A coherence theory of truth and knowledge.” In *Subjective, Intersubjective, Objective*, Oxford: Clarendon Press, 2001, 137–157.
- Dirac, Paul A.M. “The relation between mathematics and physics.” *Proceedings of the Royal Society of Edinburgh* 59, 2: (1938-1939) 122.
- Eddington, A.S. *The Nature of the Physical World*. New York: Macmillan, 1929.
- Foster, John. “The succinct case for idealism.” In *Objections to Physicalism*, edited by Howard Robinson, Oxford: Clarendon Press, 1993, 293–313.
- French, Steven. *The Structure of the World: Metaphysics and Representation*. Oxford University Press, 2014.
- Goff, Philip. *Consciousness and Fundamental Reality*. New York: Oxford University Press, 2017.
- Hartshorne, Charles. “Leibniz’s greatest discovery.” *Journal of the History of Ideas* 7, 4: (1946) 411–421.
- Hofweber, Thomas. “Idealism and the harmony of thought and reality.” *Mind* 128, 511: (2019) 699–734.

- Huemer, Michael. “Serious theories and skeptical theories: why you are probably not a brain in a vat.” *Philosophical Studies* 173, 4: (2015) 1031–1052.
- Jackson, Frank. *Perception: A Representative Theory*. Cambridge: Cambridge University Press, 1977.
- Ladyman, James, Don Ross, David Spurrett, and John Collier. *Every Thing Must Go: Metaphysics Naturalized*. Oxford: Oxford University Press, 2007.
- Locke, John. *An Essay Concerning Human Understanding*. Oxford: Clarendon Press, 1694/1979.
- Mackie, J.L. *Problems from Locke*. Oxford: Clarendon Press, 1976.
- Mill, John Stuart. *An Examination of Sir William Hamilton’s Philosophy, and of the Principal Philosophical Questions Discussed in his Writings*. Toronto: University of Toronto Press, 1865/1979.
- Pelczar, Michael. “Modal arguments against materialism.” *Noûs* 55, 2: (2021) 426–444.
- Putnam, Hilary. “Brains in a vat.” In *Reason, Truth, and History*, Cambridge: Cambridge University Press, 1982, 1–21.
- Rovelli, Carlo. “The disappearance of space and time.” In *The Ontology of Spacetime*, edited by Dennis Dieks, Amsterdam: Elsevier, 2006, 25–36.
- Russell, Bertrand. *The Problems of Philosophy*. London: Williams & Norgate, 1912.
- . *The Analysis of Matter*. London: Kegan Paul, Trench, Trubner & Co, 1927.
- Sider, Theodore. *Writing the Book of the World*. Oxford: Clarendon Press, 2011.
- Stoljar, Daniel, and Michael Smith. “Global response-dependence and noumenal realism.” *The Monist* 81, 1: (1998) 85–111.
- Strawson, Galen. “Realistic monism: why physicalism entails panpsychism.” In *Consciousness and Its Place in Nature: Does Physicalism Entail Panpsychism?*, edited by Anthony Freeman, Exeter: Imprint Academic, 2006, 3–29.
- Tegmark, Max. *Our Mathematical Universe: My Quest for the Ultimate Nature of Reality*. New York: Alfred A. Knopf, 2014.
- Vogel, Jonathan. “Cartesian skepticism and inference to the best explanation.” *The Journal of Philosophy* 87, 11: (1990) 658–666.
- Wittgenstein, Ludwig. *Tractatus Logico-Philosophicus*. New York: Harcourt, Brace & Company, 1922.