1 Introduction

The two standard views on the mind-body problem are materialism and dualism. Here, materialism is the view that phenomenal facts metaphysically depend on the physical facts, while dualism is the view that neither physical facts nor phenomenal facts metaphysically depend on the other.

Materialism faces difficult challenges, such as the explanatory gap argument. The basic idea is that no matter how much we know about the structure of physical world and the causal roles of the entities it contains, this will not explain the subjective aspects of the world: what it is like to be a conscious subject. But dualism has its own challenges. It is typically thought that every physical event has a full causal explanation in physical terms. But then, if consciousness is independent of the physical, it seems that there is no causal role left for consciousness to fill. So dualism seems to have the counterintuitive consequence that, e.g., our pain states do not causally influence the physical world.

To avoid this dilemma, some philosophers have recently argued that we should reject the above dichotomy and instead accept idealism:

Idealism: Physical truths are metaphysically dependent on phenomenal truths.

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1 For discussion, see e.g., Bolender (2001), Segal & Goldschmidt (2017), Goff (2017), Chalmers (forthcoming).
But how exactly the idealist responds to the mind-body problem will depend on the specific details of her view. In this paper, I will briefly consider some existing ways that idealists have responded to the mind-body problem. But these proposals encounter serious problems. I will then present a new version of idealism—*macroidealism*—that avoids these problems. I will then defend macroidealism from a certain prominent objection.

2 Background

I will begin by clarifying the varieties of idealism discussed in this paper.

2.1 Versions of idealism

On current usage, the idealist claims that physical truths metaphysically depend on phenomenal truths. But this general thesis is compatible with a variety of more fine-grained views on metaphysical structure. Here are three major alternatives:

**Cosmic idealism**: Cosmic idealists claim that physical truths depend on truths about the phenomenal states of a single cosmic entity. One version is *Russellian cosmic idealism*, according to which fundamental physical states are holistic and the realizers of these physical states are phenomenal states. A second version is Yetter-Chappell’s (2017) *unity of consciousness* view; on this view, the physical world is a vast phenomenal unity.

**Microidealism**: Microidealists claim that physical truths depend on truths about the phenomenal states of microphysical entities. An example of this view would be a panpsychist who thinks that all fundamental microphysical properties have a phenomenal intrinsic nature. (By contrast, any panpsychist who thinks that microphysical particles have both fundamental mental and fundamental non-mental properties will not count as microidealist on current usage.)

**Macroidealism**: According to the macroidealist, physical truths depend on macrophenomenal truths. Specifically, macroidealists claim that macrophenomenal truths determine physical truths in virtue of *appearance*:

\[(\text{Macro})\text{Idealist Dependence (ID):} \text{ A physical truth } P \text{ obtains iff phenomenal experiences (collectively) represent (or present) } P \text{ as obtaining.}\]

This view faces an immediate question. Inside the drawer is a calculator. But because this drawer is tightly shut, no macroscopic subject currently perceives the calculator. Must the macroidealist then say that the sentence ‘There is a calculator in the drawer’ is false (or lacks a truth value)?

\[\text{2 Cf. Greco (2017) for a similar characterization.}\]

\[\text{3 The labels “cosmic idealism”, “microidealism”, and “macroidealism” are from Chalmers (forthcoming).}\]

\[\text{4 Macroidealists have offered various accounts of this dependence relation; see, e.g., Pelczar (2015, 147) and [reference removed]. This rough characterization will suffice for present purposes.}\]

\[\text{5 Here, I say “represents (or presents)” in order to remain neutral on questions in the philosophy of perception. For convenience, I will simply say “represents” in the discussion ahead.}\]
The macroidealists’s standard response is to claim that physical truths depend not just on truths about actual experiences, but also on truths about counterfactual experiences: the experiences that subjects would have if conditions were different. For example: very roughly, the macroidealists will claim that the truth that there is a calculator in the drawer reduces to truths such as: if a subject were to have an experience as of opening the drawer, the subject subject would have an experience as of a calculator. I will use the label “macrophenomenal truths” to include truths about both actual and counterfactual macroscopic experiences.

2.2 The standard forms of idealism

This paper will focus on macroidealism. But in the recent literature, the views that have received the most attention are microidealism and cosmoidealism. It will be useful to very briefly consider the obstacles facing these views.

A major objection to microidealism is the combination problem: how do phenomenal truths at the microphysical level ground macrophenomenal truths? Chalmers (forthcoming, section 2) distinguishes three versions of this problem: (i) how do microsubjects yield macrosubjects, (ii) how do microqualities yield macroqualities, and (iii) how does microphysical structure yield macroexperiential structure? The original hope was that, with microphysical experiences, we could explain macroscopic experiences. But the connection between microexperience and macroexperience seems just as opaque as the connection between the physical and the phenomenal.

Cosmic idealism faces an analogous decomposition problem: how do cosmic phenomenal experiences ground macrophenomenal truths? Again, there are three versions of this problem: (i) how does the cosmic subject yield macrosubjects, (ii) how do cosmic experiential qualities yield macroqualities, and (iii) how does cosmic experiential structure constitute macroexperiential structure? (Chalmers (forthcoming, section 3).

To respond, the microidealists (or cosmic idealists) could claim that macrophenomenal truths are emergent from microphenomenal truths (or cosmic phenomenal truths). On this view, macroexperiences (and macrosubjects) are fundamental and do not depend on the relevant microexperiences or cosmic experiences. But as Chalmers (forthcoming) observes, by reintroducing macroexperiences as fundamental, the idealist inherits the major problem that faced dualism: how do these macroexperiences causally interact with the physical world?

2.3 A different starting point?

Neither the introduction of microexperiences nor the introduction of cosmic experiences seem to help with the issue of fitting macroexperiences into the natural world. Choose whatever you like: physical truths, microphenomenal truths, or cosmic phenomenal truths: none of these bases seems to entail or reductively explain macrophenomenal

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6For discussion, see, e.g. Goff (2017, chs. 7-8), Bohn (2018), and Mendelovici (2019).
7For discussion, see, e.g., Shani & Keppler (2018).
8But for dissenting views, see, e.g. Shani & Keppler (2018) and Mendelovici (2019).
truths. So if idealism is going to help the mind-body problem, it needs a different starting point.

Given the seeming impossibility of constructing macrophenomenal truths from anything else, we should instead see what progress might be made with macroidealism, which takes the macrophenomenal truths themselves as fundamental. Of course, the dualist also takes macrophenomenal truths as fundamental. But because she also accepts physical truths as fundamental, the dualist encounters the causal exclusion problem (see section 1). The hope is that, by instead reducing physical truths to macrophenomenal truths, the macroidealism will not encounter this difficulty.

Another advantage of macroidealism is that the macroidealism need not countenance microphenomenal or cosmophenomenal truths. The strangeness of these novel types of experience is certainly one reason why microidealism and cosmoidéalism are difficult to accept. For many, it is difficult to believe that there are conscious experiences—either at the microphysical or cosmic level—that are so unlike ordinary experiences.

Established views of consciousness—including even microidealism and cosmic idealism—face familiar difficulties. Whatever its flaws, macroidealism at least seems to avoid the major tensions in these more established views. But if this view is to taken seriously, there are a number of important objections that must be come. Here are just a few examples:

1. **The explanatory worry**: The macroidealism avoids the traditional explanatory gap from the physical to the macrophenomenal by having macrophenomenal truths ground physical truths. But does macroidealism simply reintroduce an explanatory gap from the macrophenomenal to the physical?

2. **The coherence worry**: Given the macroidealism’s assumption that there is no mind-independent world, what grounds and explains the coherence of phenomenal truths?

3. **The discrepancy objection**: In many cases, we think that the physical world does not align with our experiences. The idealist cannot accommodate the discrepancies between the physical world and our experiences of it.
Of course, it is outside the scope of this paper to respond to all of these objections. For the remainder of this paper, my goal will be more modest: to show that the macroidealism can adequately respond to (1).

3 The explanatory gap argument against macroidealism

The original explanatory gap argument claims that there is an explanatory gap from physical truths to phenomenal truths. By inverting the order of priority, the macroidealism avoids this concern. But does this merely reintroduce a gap in the opposite direction? In this section, I will offer several arguments for why there is no such parallel gap.

3.1 Structure and function

The key to the original explanatory gap argument (see section 1) was the identification of a difference in principle between the physical and phenomenal truths. The former explain at most structure, dynamics and function, but consciousness involves more than structure, dynamics and function.

But there is no analogous reason why phenomenal truths cannot explain the structural, dynamical, and functional truths of physics. This is because experiences themselves have dynamics and structure: conscious states evolve through time in orderly ways and there are rich patterns of coherence across the space of (counterfactually-supported) conscious states. But it is already agreed on all sides that, from certain truths about structure and dynamics, one can infer further truths about structure and dynamics (consider, for example, how macrophysical truths are explained by microphysical truths). So there is no reason in principle why phenomenal truths cannot explain physical truths.

3.2 Phenomenal states as realizors of functional roles

On a structural/functional conception of the physical, physical entities are the realizors of certain structural/functional roles. These functional roles are “thin”: the only requirements for entities to realize them is for those entities to stand in certain causal/structural relations to one another. But then, in particular, there is no reason why phenomenal entities could not fill such roles.

What exactly this looks like will depend on how the macroidealist views “phenomenal ontology.” For example, Pelczar (2018) identifies physical entities with dispositions to cause macrophenomenal states; so for Pelczar, “phenomenal potentials” are what fill the functional roles associated with physical entities. Alternatively, an idealist might appeal to a set of sui generis intentional objects of phenomenal states and say that these intentional objects fill the relevant functional roles.

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10For example, charge is identified with whatever fills the charge role, space is whatever fills the space role, and so on. For discussion of the structuralist conception of the physical, see, e.g., Chalmers (2012, 431-440).
11I defend this view in [reference removed].
I mention these examples simply to show that we can (at the very least) *conceive* of various ways in which the phenomenal might constitute the physical, even if (as many have claimed) we cannot similarly conceive of how the physical might constitute the phenomenal. This is because, if we adopt a structural/functional conception of the physical, it is conceivable that phenomenal entities fill the relevant structural/functional roles.

From structural and functional materials, it is mysterious how to construct consciousness. By contrast, we can construct something with structure and function from many materials, including (as I have argued) phenomenal ones.

### 3.3 Genuinely explanatory bridging principles

My third argument involves contrasting the *bridging principles* accepted by materialists and macroidealists. Here, a bridging principle is a biconditional describing how higher-level truths depend on lower-level truths. For example, materialists will accept something like the following principle:

**Materialist Dependence (MD):** $S$ is in phenomenal state $M_i$ iff $S$ has physical/functional organization $P_i$.

Critics have often complained that MD is not genuinely explanatory because the (alleged) metaphysically necessary connection expressed in MD is itself mysterious. For example, it is mysterious why a particular neural state $P_i$ grounds an experience of redness, as opposed to an experience of greenness. Indeed, it is mysterious why $P_i$ grounds any phenomenal experience at all.

But now contrast MD with the macroidealists’ bridging principle (see 2.1):

**(Macro)Idealist Dependence (ID):** A physical truth $P_i$ obtains iff phenomenal experiences (collectively) represent $P_i$ as obtaining.

Even on first inspection, it is clear that ID is explanatory in a way that MD is not. It is mysterious why a given neural state grounds an experience of redness; there is no reason why we would expect redness as opposed to greeness (or even no experience at all). But there is no similar mystery why, e.g., experiences of an apple ground truths about apples (as opposed to, e.g., truths about mushrooms). Apple-truths are naturally connected to apple experiences in a way that neural states and redness-experiences are not.

More precisely, let’s say that the relation $R$ between $x$ and $y$ is *a priori* when we cannot conceive of $x$ and $y$ not standing in $R$. There does not seem to be any (natural) *a priori* relation between neural states and redness-experiences. But there is an *a priori* relation between apple-experiences and apples states-of-affairs. How exactly one views this relation will depend on one’s specific theory of perception: perhaps it is representation, or perhaps presentation, or perhaps resemblance. But regardless, we cannot conceive of this relation not obtaining between $E$ and $S$.

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12 Certain philosophers who are pure externalists about *all* types of phenomenal content may deny this point. But this view has the implausible consequence that there is no content shared between the
The fact that there is no *a priori* relation between neural states and phenomenal states makes MD mysterious, *ad hoc*, and not genuinely explanatory. But because there is an *a priori* connection between phenomenal states and the physical states they are about, there is no similar worry for ID.

### 3.4 *a priori* entailment

To make the notion of an “explanatory gap” more precise, some philosophers have appealed to the relation of *a priori* entailment. On this usage, $X$ *a priori* entails $Y$ when it is possible to know that the material conditional $X \supset Y$ is true with justification independent of experience.\(^{13}\)

Chalmers & Jackson (2001) argue that the *a priori* entailment of $X$ from the conjunction of some more fundamental bodies of truths is *sufficient* (and also necessary) for the reductive explanation of $X$. To establish this, they consider paradigmatic cases of successful reductive explanation. For example, let $P$ be the conjunction of microphysical in our world (i.e., truths about the fundamental entities of physics as well as the fundamental laws of physics). Let $M$ be a typical macroscopic truth concerning natural phenomena such as water of life (e.g., ‘Water boils at 100 degrees Celsius’, ‘There are many living beings’, etc.). Chalmers & Jackson argue that $P$ *a priori* entails $M^{14}$, which in turn shows that there is a reductive explanation for $M$.

I will assume that Chalmers & Jackson are correct that *a priori* entailment is at least sufficient for reductive explanation. My final argument for why there is no explanatory gap from the phenomenal to the physical will be to argue that $Q$ (the conjunction of all phenomenal truths in our world) *a priori* entails $P$.

The macroidealist accepts the bridging principle ID (see 3.3). Because $Q$&ID logically entails $P^{15}$, $Q$ *a priori* entails $P$ iff $Q$ *a priori* entails ID.\(^{16}\) So to simplify discussion, I will argue that $Q$ *a priori* entails ID. Equivalently, I will argue that the material

\(^{13}\)Throughout this paper, I am assuming that epistemic arguments against materialism are successful. So I will set aside skeptical worries about the notion of apriority.

\(^{14}\)More precisely, Chalmers & Jackson argue that PTI implies $M$, where PTI is the conjunction of $P$ with two further statements $T$ and $I$. $T$ is a “that’s all” statement asserting that our world contains what is implied by $P$ and *only* what is implied by $P$. $I$ consist of the conjunction of the two truths ‘I am $A$’ and ‘Now is $B$’ where $A$ is an identifying description of a subject and $B$ is an identifying description of the current time. Neither $T$ nor $I$ are physical truths in the strict sense, but such truths are generally not thought to conflict with materialism. For convenience, I will not mention $TI$ in the discussion ahead, although see fn. 17.

\(^{15}\)Or, perhaps more cautiously: $Q$&ID logically entails the the set of truths that the macroidealist regards as physical.

\(^{16}\)Put differently: any failure of *a priori* entailment from $Q$ to $P$ will correspond to a failure of *a priori* entailment from $Q$ to ID. Note that my focus on the (conditional) apriority of ID in assessing macroidealism exactly parallels the focus on the (conditional) apriority of MD in assessments of materialism—see, e.g., Chalmers & Jackson (2001).
conditional $Q \rightarrow ID$ is a priori.\(^{17}\)

**Argument:** We can make the claim $Q \rightarrow ID$ intuitive as follows. The antecedent—$Q$—is a description of the phenomenal truths (both actual and counterfactual) of our world. As we all know, the phenomenal experiences of our world cohere in such a way so as to suggest a certain kind of physical reality (i.e.: the reality described by $P$). The consequent—ID—says that the physical truths are the ones collectively suggested by those phenomenal experiences. So, intuitively, $Q \rightarrow ID$ asserts that: if our experiences cohere so as to suggest a certain physical reality, then physical reality is as those experiences suggest.

Put this way, it is clear that anyone who is not a skeptic will grant that $Q \rightarrow ID$ is true.\(^{18}\) Not only is it true, but it is also a basic principle of any (non-skeptical) epistemology of perception. Those of us who are non-skeptics hold that—in the actual world—the fact that our perceptual experiences cohere in a certain world-suggestive way provides evidence that physical reality is the way that our experiences suggest. To deny the truth of $Q \rightarrow ID$ would be to deny that perceptual experience provides us with knowledge of the physical world.

Not only is $Q \rightarrow ID$ true, but it is also plausibly a fundamental epistemic principle in the following sense: it does not inherit its justification from any more basic epistemic principles or more basic empirical beliefs. This is to say: we do not come to accept the principle $Q \rightarrow ID$ (that is: the principle that if our experiences cohere so as to suggest $P$, then $P$) as a result of our accepting some other more basic empirical evidence. This can be seen from the fact that $Q$ itself subsumes all of the empirical evidence that we actually possess: remember that $Q$ subsumes all truths about actual human experiences.\(^{19}\)

But if $Q \rightarrow ID$ has no empirical justification, then it must be justified a priori. The only other option would be to deny that $Q \rightarrow ID$ is justified at all. But as I explained above, to deny that $Q \rightarrow ID$ is justified would commit one to skepticism. So I conclude that any non-skeptic must accept the apriority of $Q \rightarrow ID$.

The above responses approach the explanatory gap argument from different angles. But they all share a common refrain: that while there is no epistemic/explanatory link from physical truths to phenomenal truths, there is an epistemic/explanatory link in the reverse direction. So the explanatory gap argument is unsuccessful once we flip the order of priority.

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\(^{17}\)More precisely, I will argue that $QTI \rightarrow ID$ is a priori—see fn. 14. For convenience, I will not mention TI in the discussion ahead.

\(^{18}\)Or at least “approximately true.” I add this qualification in order to acknowledge potential counterexamples to ID. These counterexamples include cases of ordinary illusion and cases of imperceptible physical phenomena. I discussed how the idealist ought to respond to such cases in [reference removed]. So I will set these cases aside and will hereafter assume that this qualification (“approximately”) is unnecessary.

\(^{19}\)Of course, $Q$ contains a complete description of all counterfactual experiences as well.
4 Conclusion

In this paper, I have argued for macrorealism: the view that physical facts are meta-
physically determined by facts about actual and counterfactual human phenomenal ex-
periences. While I have not attempted to provide macrorealism with a complete defense, I
have argued that the macrorealist can adequately respond to one prominent objection:
the objection that it introduces an explanatory gap from macrophenomenal truths to
physical truths.

References

[1] Einar Duenger Bohn (2018). Panpsychism, the Combination Problem, and Plural Collective Prop-
ceptual Experience. OUP. 49-125.
to Panpsychism. OUP.
New Essays in Metaphysics. OUP.
New Essays in Metaphysics. OUP.