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Undermining Belief in Consciousness[1]

Does consciousness exist? In "The Meta-Problem of Consciousness" (MPC) David Chalmers sketches an argument for *illusionism*, i.e., the view that it does not. The key premise is that it would be a coincidence if our beliefs about consciousness were true, given that the explanation of those beliefs is independent of their truth. In this article, I clarify and assess this argument. I argue that our beliefs about consciousness are peculiarly invulnerable to undermining, whether or not their contents are indubitable or even obvious. However, the reason that they are peculiarly invulnerable to undermining points to a fundamental flaw in modal arguments for dualism.

1. Genealogical Debunking Arguments

Let us call the view that consciousness does not exist -- i.e., that phenomenal properties are nowhere instantiated -- *illusionism* about consciousness. What could recommend illusionism? According to Chalmers, "[t]he best arguments for illusionism….are...debunking arguments that

[1] Thanks to François Kammerer and John Morrison for helpful comments.

rest on there being [an explanation of] our beliefs about consciousness without invoking consciousness (MPC 9)." At first approximation, such arguments proceed as follows.[2]

1. For any (token) phenomenal belief of ours, that P, any (true) causal explanation of our belief that P fails to imply that P.
2. Knowledge of (1) *defeats* whatever (defeasible) justification our belief that P enjoyed.
3. Hence, if we know that (1), none of our phenomenal beliefs is justified.

(1) - (3) is the analog of an argument that has become standard in metaethics (Joyce [2008, 216]) [3] While (1) is controversial, epiphenomenal dualists like Chalmers accept it. The idea behind (2) is that (1) is an *undermining*, rather than rebutting, defeater of our phenomenal beliefs (Pollock and Cruz [1999, 196]). Instead of giving us direct reason to doubt the contents of our phenomenal beliefs, (1) gives us reason to doubt the epistemic credentials of those beliefs.

How might knowledge of (1) undermine our phenomenal beliefs? There is a standard answer in the metaethical case. Transposing from it, the answer is that premise (1) gives us reason to believe that it would be a *coincidence* if our phenomenal beliefs were true. Street writes,

[2] The arguments that Chalmers considers are slightly different. I have tried to improve on them here. His analog of (1) only requires that there is *some* explanation of our beliefs which fails to imply their contents. But it is hard to see how that could undermine. Maybe another one, at another level of generality, does imply this. Also, Chalmers speaks of "intuitions" rather than beliefs, for reasons broached in MPC 18. This complication will be irrelevant.
[3] For instance, Joyce writes, "any epistemological benefit-of-the-doubt that might have been extended to moral beliefs…will be neutralized by the availability of an empirically confirmed moral genealogy that nowhere…presupposes their truth" [2008, 216].

> [T]he realist must hold that an astonishing coincidence took place…that as a matter of sheer luck, [causal] pressures affected our…attitudes in such a way that they just happened to land on…the true normative views….[T]o explain why human beings tend to make the normative judgments that we do, we do not need to suppose that these judgments are *true* [2008: 208–9, emphasis in original].

This suggests the following refinement of (1) - (3).

4. For any (token) phenomenal belief of ours, that P, any (true) causal explanation of our belief that P fails to imply that P.
5. If (4), then it would be a *coincidence* if our belief that were true.
6. Knowledge that it would be coincidence if our belief that P were true undermines whatever (defeasible) justification our belief that P enjoyed.
7. Hence, if we know (4) and (5), none of our phenomenal beliefs is justified.

Argument (4) - (7) mimics reasoning familiar from the philosophy of mathematics. Benacerraf complains that "something must be said to bridge the chasm, created by...[a] realistic...interpretation of mathematical propositions...and the human knower". For "the connection between the truth conditions for the statements of [our mathematical theories] and...the people who are supposed to have mathematical knowledge cannot be made out [1973, 673]." The problem, as Field notes, is that "our belief in a theory" seems "undermined if the theory requires that it would be a huge coincidence if what we believed about its subject matter

were correct…" [2005, 77]. What debunkers add is that, in order to show that the correctness of our target beliefs is *not* a huge coincidence, we must show that their contents are implied by one of their explanations (contra (4)).

However, debunkers' addition is confused (Clarke-Doane [Forthcoming, Ch. 4]). While the fact that P is not implied by any explanation of our (token) belief that P is evidence that it lacks epistemically desirable qualities -- like sensitivity, safety, and (objective) probability -- *when P would be causally efficacious if it obtained*, this is *not* the case when P would be causally inert, as debunkers take the target truths to be. (If they took those truths to be causally *efficacious*, then it would no longer be plausible that any explanation of those beliefs fails to imply their contents.) In particular, our belief in an epiphenomenal truth may be safe, sensitive, and (objectively) probable, since it may be the product of causal forces which co-vary with the truth.

Let me illustrate. Our belief that P is *sensitive* when, had it been that ~P, we would not still have believed that P (had we used the method that we actually used to determine whether P). Now consider any atomic phenomenal truth, A is M, where A names a person and M ascribes a phenomenal property (e.g., that Jenn feels pain).[4] Then had A not been M, A would have been different in non-phenomenal respects. This is because the worlds in which A is not M and the "explanatorily basic" truths which fix the supervenience of the phenomenal on the non-phenomenal are different are more distant from the actual world than worlds in which A is not M and those truths are the same -- *whatever their modal strength*. And, yet, had A been

[4] The qualifier "atomic" will turn out to be important.

different in non-phenomenal respects, A's beliefs would have reflected the difference. Had Jenn not felt pain, she would not have thought that she did -- whether or not premise (4) is true.

2. Coincidence

So, what matters is whether it would be coincidence if our phenomenal beliefs are true. We should not assume that showing that the truth of our beliefs is not a coincidence requires challenging (4). The argument to focus on is the following.

8. It would be a *coincidence* if our phenomenal beliefs were true.
9. Knowledge that it would be coincidence if our belief that P were true undermines whatever (defeasible) justification our belief that P enjoyed.
10. Hence, if we know (8), none of our phenomenal beliefs is justified.

In what sense of "coincidence" are (8) and (9) plausible -- given that (8) does not follow from (4)? It might be said that the causal forces that shaped our phenomenal beliefs are "not a truth-tracking process" (Kahane [2011, 111]), so that "most of our...judgements" are likely "off track due to the distorting pressure of [causal] forces" (Street [2006, 109]). But, absent an independent account of "tracking" or "off track", this is uninformative. If what is meant is that there is no *causal relation* between our beliefs and their subject matter (Benacerraf [1973]), then (9) is false. Not even the originator of the causal theory of knowledge claimed that the theory applies to causally inert truths (Goldman [1967, 357]).

Field suggests that "[t]he Benacerraf problem…arise[s] from the thought that we would have had exactly the same...beliefs even if the mathematical…truths were different..." [2005, 81]. And Joyce suggests likewise that our moral "beliefs… may not be *sensitive* to the facts which they represent" (Joyce [2016, 147, emphasis in original]). But (9) is implausible on this reading too. The problem is not, contra Lewis [1986, 114-115], that "counterpossibles" are vacuously true, so there is no intelligible question of what would have been the case had the mathematical or (explanatorily basic) moral truths been different. The problem is that, our belief that P is insensitive, if not vacuously sensitive, *whenever P would be metaphysically necessary, if true*. Had, say, atoms arranged paper-wise failed to compose a piece of paper, we still would have believed that they did. And while we *might* conclude that our belief in all necessary truths is undermined, this conclusion is hard to contain. If our belief that atoms arranged paper-wise compose a piece of paper is undermined, then how can our belief that we are looking at one fail to be? *Perhaps* we could give up the requisite closure principles. But this would be a hard row to hoe.

An alternative suggestion is that the truth of our phenomenal beliefs would be coincidental in that "we could easily have arrived at mostly false" ones (using the method that we actually used to form ours) [Braddock, Mogensen, Sinnott-Armstrong]. That is, those beliefs are not *safe*. In the mathematical and moral cases, the fact of intractable disagreements seems to show that we could have easily believed the negations of what we believe. But there do not seem to be disagreements over the psychophysical laws of the sort that there are over Mill's Principle of

Utility or the Axiom of Choice.[5] And given the truth of those laws, and that we could not have easily believed their negations, there is a case to be made that our "everyday" phenomenal beliefs are safe too. The nearest worlds in which I am not in pain, or where I believe that I am not, are worlds in which my belief, or the truth, varies correspondingly. So, if the Benacerraf-Field Challenge is understood as the challenge to show that our beliefs are safe -- as it seems that it could be in the mathematical and moral cases -- then realism about consciousness would seem to be on better epistemological footing than mathematical and moral realism.

Maybe, though, the Benacerraf-Field Challenge should be construed differently in the case of consciousness. I objected to Field's and Joyce's construal on the grounds that the insensitivity of our beliefs in counterpossibles cannot be undermining, on pain of general skepticism. But while the mathematical truths are widely agreed to be metaphysically necessary, and the view that the moral supervenes on the non-moral as a matter of metaphysical necessity has been called the "least controversial thesis in metaethics" (Rosen [2014]), Chalmers [1996] argues that the phenomenal does *not* supervene on the non-phenomenal as a matter of *metaphysical* necessity. He argues that the "explanatorily basic" laws that link non-phenomenal to phenomenal properties are at most nomically necessary. Consequently, the overgeneralization objection to Field's construal of the Benacerraf-Field Challenge does not apply. Perhaps, then, we should construe the Benacerraf-Field Challenge for realism about *consciousness* as Field and Joyce construe similar challenges to mathematical and moral realism. The sense in which the truth of our phenomenal beliefs might be a "coincidence" such that (8) and (9), now restricted to contingent

[5] Of course, there are competing theories of consciousness, each implying different psychophysical laws, with no consensus about which laws hold in fact. My suggestion is that these disagreements are more like disagreements over what maximizes utility than like disagreements over whether maximizing utility is good.

truths, are plausible is that *our belief in the explanatorily basic phenomenal truths -- i.e., the psychophysical laws -- is not sensitive*. If knowledge of this is undermining, then our atomic phenomenal beliefs might be undermined too, by a closure principle. Just as it would be difficult to maintain that we are looking at a piece of paper while giving up on the bridge law that atoms arranged paper-wise compose one, it would be difficult to maintain corresponding atomic phenomenal beliefs while allowing that our beliefs in psychophysical bridge laws is undermined.

This interpretation of (8)-(10) squares with some of Chalmers' remarks. For instance, he writes,

> As long as we have modal independence, so that the meta-problem processes [those which generate our phenomenal beliefs] could have come apart from consciousness, it can seem lucky that they have not. Where psychophysical laws are concerned, it seems lucky that the laws are as they are. Only this luck ensures that we are not in a zombie world with physical processes and phenomenal intuitions but no consciousness, or in an inverted world where these processes yield pleasure when we feel pain…[MPC, 48][6]

3. Modal Pluralism

[6] Other times Chalmers seems to worry about a non-modal "connection" between our phenomenal beliefs and the truths. He writes, "what is needed is an explanation that shows how consciousness and meta-problem processes are inextricably intertwined. What would be ideal is an explanation of why the meta-problem processes are by their nature grounded in consciousness, even if it is metaphysically possible for them to occur without consciousness [MPC, 56]." But if a "connection" between our beliefs and the truths is not indicative of modal security, and a lack of one is not indicative of a lack of modal security, then "connection" seems *epistemically* irrelevant. Talk of non-modal "connection" *might* be relevant to the challenge of explaining the *determinacy of the contents* of our beliefs. But undermining arguments *assume* that our target beliefs have determinate contents. Indeed, the less determinacy our beliefs of a kind exhibit, the fewer (determinate) facts there are to correlate with our beliefs.

If knowledge of the insensitivity of our beliefs is undermining in the phenomenal case, but not in the moral or mathematical, then the sense in which the psychophysical laws could have been different must be *importantly distinct* from the sense in which the mathematical or moral laws could have been. And, indeed, it would be if the only sense in which the moral or mathematical truths could have been different was "epistemic" in the sense of Kripke [1980]. If the only sense in which the mathematical or moral truths could have been different was that it could "turn out", for all we know, or believe, that those truths *are* different, then there would be no analog to the *counterfactual* sense in which we can worry that the psychophysical bridge laws *could have been* otherwise. But, as the word "different" suggests, that is not the sense in which Field worries that had the mathematical truths been different, our mathematical beliefs would have been the same, or the sense in which Joyce worries that had the contents of our moral beliefs been false, we still would have believed them. The worry is that, *assuming* that the truths are what we take them to be, our beliefs would have failed to be correspondingly different *had those truths been otherwise*.

It might be doubted that there *is* a sense of "possible" answering to this worry in the moral and mathematical cases. Chalmers himself claims that "there is not even a conceivable world in which mathematical truths are false" [1996, 370]. Kripke tells us that metaphysical necessity (in a sense according to which at least the mathematical truths are necessary) is "necessity in the highest degree" ([1980, 99]). And Stalnaker writes, "we can agree with Frank Jackson, David Chalmers, Saul Kripke, David Lewis, and most others who allow themselves to talk about possible worlds at all, that metaphysical necessity is necessity in the widest sense" [2003, 203].

However, in any straightforward sense of "highest degree", "widest" and so forth, these statements are false (assuming that the mathematical and explanatorily basic moral truths are metaphysically necessary). For instance, both the mathematical and moral truths could have been different in any of the senses of logical possibility to which students of modal logic are routinely introduced.[7] These notions are no less *counterfactual* than metaphysical possibility. For instance, according to such a notion, we might ask whether we still would have believed that every set occurs at some level of the cumulative hierarchy *had there been a universal set*.

One might complain that the sense of "possible" in question is not "alethic" (Hale [2013]), "real" (Rosen [2006, 16]), "ontic" (Kment [2016]), or "objective" (Williamson [2016, 459]). But what does that mean? The sense of "possible" is certainly alethic in that it may satisfy the axiom *(T)* $[]P \rightarrow P$. Chalmers [1996, 35] might be taken to suggest that such notions of possibility are analyzable in terms of metaphysical possibility, but not conversely. But I know of no argument for this. It is true that one *can* define a given notion of logical possibility by saying that P is logically possible when it is metaphysically possible or not a logical truth. But this assumes the availability of a non-modal analysis of "logic" (Fine [2002, 237]), and advocates logical possibility, such as Balaguer [1995, 317] or Field [1989, Introduction], explicitly reject this assumption. (They *a fortiori* reject an analysis of logical possibility in terms of proofs or models.) Moreover, one could equally define metaphysical possibility as logical possibility, given the "laws of metaphysics" (Sider [2012, Ch. 12]). This analysis is also questionable. It

[7] *Not* to be confused with the sense of logical possibility (i.e., metaphysical possibility) to which Chalmers [1996, 35] appeals!

threatens to trivialize the necessity of the metaphysical laws (Fine [2002]). But this at most shows that neither notion can be *analyzed* in terms of the other.

It might be thought that in order to deny the vacuity of counterfactuals like "had there been a universal set, then we still would have believed that there was not" we must deny the "semantic orthodoxy" about counterpossibles (Williamson [Forthcoming]). That orthodoxy says that (P [] --> Q) is trivially true whenever P is absolutely impossible. But this is confused. We need to deny the orthodoxy *only if we hold that metaphysical possibility is absolute possibility*. The present point is that this assumption is false on any evident analysis. And while there are some who deny the possibility of the metaphysical necessities being different while allowing that the likes of counter-mathematicals and counter-morals are non-vacuous, it is hard to see what could recommend this position -- or even what it comes to. Such philosophers allow that there are "ontic" senses in which these truths could have been different (Kment [2016], Nolan [1997]). They just happen to call them senses of *impossibility*. What is the non-verbal question as to whether such notions count as notions of possibility rather than impossibility?

Perhaps the advocate of the sensitivity interpretation of (8) - (10) could accept all of this. What matters is that any such sense in which the mathematical or moral truths could have been different is *more inclusive* than some of the senses in which the phenomenal truths could have been. Worlds in which the mathematical or moral truths are different are *more distant* from the actual world than worlds in which the phenomenal truths are different.

But this is incorrect. While logical possibility may be more inclusive than metaphysical possibility, there are senses of possibility according to which the mathematical and moral truths could have been different which are not more inclusive than metaphysical possibility. To define one, take logical possibility in one of the prior senses and close the psychophysical laws, and no others, under modal logical consequence. The resulting sense of possibility, <S*>, is not more inclusive than metaphysical possibility, since, if Chalmers is right, the psychophysical laws could, as a matter of metaphysical possibility, have been different, but they could not have as a matter of S* possibility. And while one might complain that S* is a philosopher's invention, not a "real" notion of possibility, this would return us to the question of what that is supposed to mean. It is no less counterfactual. Maybe it is not interesting. But why does that matter?

Moreover, the above proposal assumes a dubious connection between the strength of a modality and counterfactual evaluation. Let us limit ourselves to a fixed S5 notion of logical possibility, <L>, of the sort to which modal logic texts routinely appeal. Letting <M> represent metaphysical possibility, we can assume that $\forall$P(<M>P $\rightarrow$ <L>P) while $\exists$P(<L>P & ~<M>P) -- i.e., that metaphysical possibility is strictly stronger, or less inclusive, than logical possibility. Even so, it does not follow that, for any logical possibility which is metaphysically impossible, P, any world in which P holds is more "distant" for the purposes of counterfactual evaluation from the actual world than every world in which the metaphysically necessary truths are the same. That assumes a relativized version of Nolan [1997]'s Strangeness of Impossibility Condition, according which, if <A> is strictly stronger than <B>, then any A-possible world is closer than any B-possible world (Clarke-Doane [2019, Section 7]). This is doubtful. Consider

the counterfactual *had the laws of physics been very different, the laws of mathematics would have been the same*. Since this is true when evaluated with respect to the metaphysically possible worlds, Counterfactual Absoluteness says that it remains true when evaluated with respect to the logically possible worlds (where the laws of mathematics can be different). But, given the indispensability of mathematics to the statement of physical laws, the closest world in which the laws of physics are *very* different would seem *not* to be a world with the same mathematical laws.

4. "Philosophical" Skepticism

So, if there is an important difference between metaphysical possibility and senses of possibility according to which it is possible that the mathematical and moral truths could have been different, it is not that all such senses are epistemic, derivative, non-alethic, or even more inclusive than the senses in which the psychophysical laws could have been different. Is there any other way to argue that the insensitivity of our belief in the psychophysical laws is undermining, given that the insensitivity of our belief in the moral and mathematical laws is not? Chalmers discussion of the "explanatory gap" might be taken to suggest a final way. He writes,

> Given that [the physical] facts are known, there is no room for skeptical doubts about most high-level facts, precisely because they are [metaphysically] supervenient…. [S]omeone in possession of all the physical facts could in principle come to know all the high-level facts, given that they possess the high-level concepts involved [1996, 76].

By contrast,

> Once all the physical facts...are in, the nature of [something's] conscious experience remains an open question: it is consistent with the physical facts about [something] that it has conscious experience, and it is consistent with the physical facts that it does not. From the physical facts about a bat, we can ascertain all the facts about a bat, except the facts about its conscious experiences [1996, 103].

These remarks suggest that metaphysically necessary laws, unlike metaphysically contingent ones, come epistemically "for free", at least for an ideal agent, who possess the concepts. So, in an important sense, we cannot intelligibly worry about the sensitivity of our belief in those laws.

But this is just what is in dispute! We certainly *seem* to worry about metaphysically necessary laws. In the mathematical case, we worry about the Axiom of Infinity (Mayberry [2000, 10]), the Least Upper Bound Axiom (Kilmister [1980, 157]), the first-order induction schema (Nelson [1986, 1]), and even whether every natural number has a successor (Zeilberger [2004, 32-3]).[8] Such worries do not, in general, turn on *conceptual analysis*. The important question at issue *vis a vis* Infinity is not whether *our* concept of set satisfies the axiom. It is whether any set-like concept does -- i.e., whether there is an inductive set-like object. Nor need such worries turn on outstanding questions of *logic*. One can worry that there is no inductive set even assuming that it

[8] We could equally make the point in terms of other supervenient truths. For instance, mereological nihilists worry that, granted there are atoms arranged paper-wise, maybe there are no pieces of paper. Or suppose that one is an Aristotelian realist about properties, and the question is raised whether there are only fundamental physical properties or high-level properties too. Such a philosopher grants how the world is in physical respects, but wonders how it is in high-level respects.

is *consistent* to suppose that there is. Indeed, the question of what axioms are true would be largely trivialized if it amounted to the question of what axioms are consistent -- not because it is trivial whether axioms are consistent, but because competing axioms are often equiconsistent.[9]

To be sure, we could *define* "rationality" such that it dictates answers to the question of what axioms of mathematics are true, what moral laws hold, and so on for all metaphysically necessary truths. But, in that case, "rationality" would not have much to do with epistemology! Call finitists "irrational", if you want. A (first-order) logically omniscient finitist could have beliefs which are not just consistent, but in reflective equilibrium. Stipulating that they are "irrational", and that an ideally rational agent can know all the metaphysical necessities, our question just becomes whether there is an important difference between rationality and "shrationality" -- where one's beliefs may count as "shrational" if they are like the ideal finitist's.

Chalmers might still complain that the sense in which we can vary the metaphysically necessary truths is "merely philosophical", while the sense in which we can vary the psychophysical laws is "first-order" (see Chalmers [1996, 74-75]). But, first, where is the line -- even vague -- between "first-order" and philosophical considerations? Sticking to the mathematical case, is the Limitation of Size doctrine philosophical? What about Weyl's and Nelson's worries about impredicative definitions? "Philosophical" debates in the foundations of mathematics *seem* to simply be deep mathematical debates made precise. Second, even if there are at least paradigmatic cases of philosophical as opposed to non-philosophical disagreements, it is hard to

[9] Not that the problem would go away if the said disputes turned on logical disputes. The kind of logical disputes in question would concern *what logic is correct*, not what follows in a given logic. It is hard to see how the claim that it is "knowable *a priori*" what logic is correct could have content. Knowability is relative to a logic.

see why non-philosophical doubts should be more epistemically unsettling. What matters, presumably, is the prospect of a mismatch between our mathematical beliefs and the truths. It does not matter whether that prospect is made pressing by "philosophical" arguments.

5. Broader Relevance

Is there any other ground on which to hold that the insensitivity of our belief in the psychophysical laws is undermining, while the insensitivity of our belief in the moral, mathematical, and more generally metaphysically necessary laws, is not? Absent a more principled account of the distinction between metaphysical possibility and other notions, I cannot see one. If the insensitivity of our belief in psychophysical bridge laws is undermining, then the insensitivity of our belief in metaphysically necessary laws should be undermining too. However, if our belief in the latter is undermined, then so is our belief in all manner of truths. Consequently, the insensitivity of our belief in metaphysically necessary laws cannot be undermining. It follows -- so long as our phenomenal beliefs have better claim than our moral or mathematical beliefs to being safe -- that our phenomenal beliefs are peculiarly immune to undermining, whether or not their contents are indubitable or even obvious.

This is not a victory for dualists. The argument that our phenomenal beliefs are peculiarly invulnerable to undermining relied on the premise that there is no principled distinction between senses of "possible" in which the metaphysical laws could have been different, and senses of "possible" in which they could not have been. But, if there is not, then influential arguments for dualism seem anemic. Here is a canonical example (Kripke [1971, 181]).

(a) It is conceivable that the mind exists without the body (or vice versa).

(b) If it is conceivable that the mind exists without the body, then it is possible that this is so.

(c) ∀xVy[(x=y) --> [](x=y)] (Necessity of Identity)

(d) Hence, the mind is distinct from the body.

Let us grant premise (a), that it is conceivable that the mind exists without the body. The key question surrounding this argument is widely supposed to be whether (b) is true. But if there is no principled distinction between metaphysical and other counterfactual notions of possibility, then there is a problem *even if conceivability is a guide to possibility*. The problem is that the Necessity of Identity is not necessary in every counterfactual sense. For instance, it is not logically necessary in all of the aforementioned senses (Girle [2017, 7.4, 8.5, & 8.6] or Priest [2008, Ch. 17]). So, if D is the set of worlds for which it holds, and L is the set of logically possible worlds, the argument assumes that the worlds in which the mind fails to identical to the body do not lie in (L-D). But once it is realized that metaphysical possibility is just one of many counterfactual notions, it would seem to be open to the non-dualist to respond as follows. The sense in which the mind could have existed without the body, or that there could have been zombies, or that the states that give rise to pain could have given rise to pleasure, are senses of possibility which *while non-epistemic* fail to validate the laws needed to deduce the actual non-identity of the objects or states in question from the relevant possibilities. So, even if conceivability is a guide to possibility, modal arguments for dualism have little force.

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