Conceivability, Property Individuation, and Strong Necessities

1. The Conceivability Argument

Recently David Chalmers (1996, 2002) has defended the claim, let's call it CP, that

conceivability is a reliable guide to possibility. Armed with CP he has gone on to argue

that physicalism is false. His argument, let's call it the Conceivability Argument, has the

following structure.

(P1) P & $\sim Q$ is conceivable.

(P2) If P & $\sim Q$ is conceivable then P & $\sim Q$ is possible.

(P3) If P & $\sim Q$ is possible then physicalism is false.

(P4) Physicalism is false.

P is a statement that reports all the relevant physical facts that, according to physicalists,

entail Q. Q is a statement that reports an arbitrary phenomenal fact. To take a classic

example we might say that P represents the statement 'my C-Fibers are being stimulated'

and Q represents the statement 'I am experiencing pain'. (P1) might then be read as

follows. It is conceivable that my C-Fibers are being stimulated and I am not

experiencing pain[1].

I believe, however, that this formulation of the Conceivability Argument is

misleading because it treats CP as a single, monolithic principle when it is better

construed as a combination of two, more fundamental, principles: the Property

Individuation Principle (PI) and Hume's Dictum (HD).

PI: Concepts (of the right sort) individuate properties.

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[1] I realize, of course, that I am grossly simplifying matters. For one, Chalmers' formulation of the argument considers the possibility of entire zombie *worlds* and not merely the possibility of individual zombies.

> **HD**: There are no necessary connections between distinct properties that are not *a priori* related.

Let me explain. A statement is conceivable, according to Chalmers, if it cannot be ruled out on *a priori* grounds after ideal rational reflection. *P* & ~*Q*, therefore, is conceivable since the concepts needed to think of *P* and *Q* are *a priori* distinct. If the conceivability of *P* & ~*Q* is to guarantee the possibility of *P* & ~*Q* it seems the relevant concepts, say, the concepts allied with the terms 'C-Fibers' and 'pain', must individuate distinct properties. For consider a scenario in which the relevant concepts, instead of individuating distinct properties, individuated one and the same property. Any further speculation on the possibility of *P* & ~*Q* would be moot.

There is, then, an intermediary step from conceivability to possibility and it is the individuation of properties. It is only after securing this first step that any modal speculations of whether this or that property can come apart from this or that *other* property can be entertained. Chalmers, of course, believes that any two distinct properties, so long as there are no *a priori* relations between them, must be contingently related. Given these observations I suggest the following reformulation of the Conceivability Argument.

(P5) *P* & ~*Q* is conceivable.

(P6) If *P* & ~*Q* is conceivable then the concept associated with *P* and the concept associated with *Q* individuate distinct properties.

(P7) If the concept associated with *P* and the concept associated with *Q* individuate distinct properties then *P* & ~*Q* is possible.

(P8) If *P* & ~*Q* is possible then physicalism is false.

(P9) Physicalism is false.

Formulated in this way the constituent principles of CP are drawn out in (P6) and (P7). (P6) depends on the truth of PI and (P7) depends on the truth of HD. This two-stage formulation has the virtue of making explicit a critical step in the logic underlying CP.

2. Simplification?

One may be tempted to think the two-stage formulation unnecessarily complicates issues – *one* controversial principle is traded in for *two* controversial principles. Rather than complicating the debate, however, the separation simplifies it. First, it should be noted that the debates in this area of philosophy, for all intents and purposes, are focused on the truth or falsity of PI. Second, HD enjoys strong *prima facie* support and, more importantly, is implicitly accepted by all parties in the current debate. Let's consider these reasons in turn.

First, consider the fact that physicalists, in general[2], embrace (P5). They concede that *P & ~Q* is conceivable since there are no *a priori* grounds to rule it out. They argue, however, that *a priori* conceptual distinctions between physical and phenomenal concepts do not guarantee any ontological distinctions among properties[3]. The physicalist project is to show that conceptual gaps between physical and phenomenal truths do not entail ontological gaps between physical and phenomenal facts. In fact physicalists in this debate never even get to (P7) since they primarily, if not exclusively, dispute (P6). It is as though an anti-physicalist victory over (P6) *just is* a victory for anti-physicalism. It is safe to say, therefore, that most of the prominent physicalist responses to the Conceivability Argument, in one way or another, dispute PI.

Second, there is strong *prima facie* support for HD. Consider, for example, the property of being red and the property of being a plant. There are no necessary connections that hold

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[2] For a notable exception see Dennett (2007).
[3] For versions of this strategy see Levin (2007), Loar (2004), Papineau (2004), and Perry (2001).

between these properties. After all, in the actual world there are plenty of plants that are not red and there are plenty of non-plants that are. We don't have to speculate about modal issues to figure this out. But, following a medieval example, consider the property of being a featherless biped and the property of being a rational animal. These properties are always co-extensive in the actual world. Nevertheless no one is persuaded that they are *necessarily* co-extensive. There are worlds where these properties can come apart, say, a world with featherless bipeds that are not rational or a world with feathered bipeds that are. Finally, consider the property of being trilateral and the property of being triangular. These properties are distinct but they are necessarily co-extensive. That is, they cannot exist apart from each other in any possible world. This may, at first glance, seem to be a counterexample to HD since there are no possible worlds where trilaterality is instantiated without triangularity and vice versa. But there is, of course, an obvious difference between the first two pairs of properties and the final pair. While there are no *a priori* connections between the properties of the first two pairs there is an *a priori* connection between the properties of the final pair. An instantiation of the property of being trilateral logically guarantees an instantiation of the property of being triangular (and vice versa). HD, it seems, is a plausible principle.

Furthermore one need only consider the 'standard' formulation of physicalism in order to see that both physicalists and anti-physicalists are committed to HD. The 'standard' formulation of physicalism goes something like this. All the facts, including all the phenomenal facts, are necessitated by the physical facts. That is, once all the physical facts are fixed *all* the facts are fixed. But consider the position, let's call it necessitarian dualism, that posits a necessary connection between physical properties of human brains and non-physical properties of conscious experiences. Necessitarian dualism is consistent with the standard formulation of

physicalism and should therefore be considered a variant of physicalism. I hope it is clear, however, that this would be a mistake. Apparently the standard formulation must be supplemented with HD, or something like it, in order to rule out this possibility for without HD there is no way to ensure that positions consistent with the standard formulation can remain genuine versions of physicalism.

Given these considerations, the debate surrounding the Conceivability Argument essentially boils down to an assessment of PI. Besides, CP cannot even get off the ground if the *a priori* conceptual distinction between physical and phenomenal concepts is not mirrored by an ontological distinction among properties. If physical and phenomenal concepts refer to one and the same property then modal considerations concerning this property existing without itself become superfluous since one and the same property can never come apart from itself. If I am right about this the debates surrounding CP, as it relates to issues in contemporary philosophy of mind, can be reduced to a debate in general ontology: do concepts (of the right sort) individuate properties?

3. Strong Necessities

Now I would like to suggest that separating CP into its constituent parts not only simplifies the debate but it also exposes a mistake in Chalmers' criticism against those who deny CP. To begin, consider what it would take to generate a counterexample to CP. One might be tempted to think that we already have a slew of counterexamples inspired by Kripke. Consider the following identity statement:

   (S1)   Water is H_2O.

Everyone agrees that (S1) is *a posteriori*. But because (S1) is true and the terms 'water' and 'H$_2$0' are rigid designators (S1) is *necessarily* true. It is true in every possible world. What about its negation? ~(S1) is conceivable since it cannot be ruled out on *a priori* grounds, but it is impossible because there are no worlds in which ~(S1) is true. Isn't ~(S1), therefore, an obvious counterexample to CP? Not necessarily. Chalmers argues that there are two different ways of interpreting necessity and though (S1) is secondarily necessary it is not primarily necessary.

Let me take things a bit slower. It is plausible to think that a given term *T* is associated with two different intensions that map possible worlds to extensions depending on how the relevant world is conceived. The primary intension of *T* maps possible worlds considered *as actual* to extensions. The secondary intension of *T* maps possible worlds considered *as counterfactual* to extensions. Similarly, it is plausible to think that entire statements are also associated with two different intensions. The primary intension of a statement *S* maps possible worlds considered *as actual* to truth values and the secondary intension of *S* maps possible worlds considered *as counterfactual* to truth values.

Returning to (S1), consider the term 'water'. The primary intension of 'water' when applied to the actual world yields H$_2$0. When applied to Putnam's Twin-Earth, however, it yields a different extension, XYZ. The secondary intension of 'water', like its primary intension, when applied to the actual world yields H$_2$0. When applied to Twin-Earth, however, it yields the same extension, H$_2$0. This is because secondary intensions are applied to Twin-Earth considered as *counterfactual*. How about (S1) itself? Applying the primary intension of (S1) to the actual world yields T but applying it to Twin-Earth yields F. Applying the secondary intension of (S1) to the actual world

yields T and applying it to Twin-Earth yields T as well. In fact applying the secondary

intension to *all* possible worlds yields T. Accordingly we can give the following

definitions.

> A statement *S* is **primarily possible** if and only if its primary intension maps at least one possible world to T.

> A statement *S* is **primarily necessary** if and only if its primary intension maps all possible worlds to T.

> A statement *S* is **secondarily necessary** if and only if its secondary intension maps all possible worlds to T.

It seems, therefore, that Kripkean necessities like (S1) cannot undermine a modified

version of CP – conceivability is a reliable guide to *primary* possibility. Though

Kripkean necessities are secondarily necessary they are not primarily necessary.

What, then, constitutes a counterexample to CP? According to Chalmers the only way to

undermine CP is to isolate a strong necessity.

> A statement *S* is **strongly necessary** if and only if it is *a posteriori* and primarily necessary.

Coming up with an uncontroversial instance of a strong necessity is no trivial task. But even if

physicalists could come up with a convincing instance Chalmers argues that the very notion of a

strong necessity is objectionable. Among other things he claims that the existence of a strong

necessity introduces a "modality of metaphysical possibility that is distinct from and more

constrained than logical possibility" (Chalmers 1996, p. 136-7). This is because he believes that

conceivability is equivalent to logical possibility and further believes that logical possibility

should be identified with metaphysical possibility. The existence of a strong necessity, however,

would drive a wedge between logical and metaphysical modalities. He writes:

> On this view, there are worlds that are entirely conceivable, even according to the strongest strictures on conceivability, but which are not possible at all. This is a

gap between conceivability and possibility much stronger than any gap found elsewhere. (Chalmers 1996, p. 137)

The existence of strong necessities forces us to adopt a modal framework with at least three classes of possible worlds: nomologically possible worlds, metaphysically possible worlds, and logically possible worlds. In this framework the set of nomologically possible worlds will be a proper subset of the metaphysically possible worlds and the set of metaphysically possible worlds will be a proper subset of the logically possible worlds.

Chalmers argues that this puts constraints on the space of logically possible worlds that are 'brute and inexplicable'. Such a modality, he claims, 'cannot be supported by analogy' and it leads to an '*ad hoc* proliferation of modalities'. To press this point he challenges advocates of strong necessities to explain why God cannot create certain logically possible worlds where *P* & ~*Q* turn out to be true? If we presume that it is in God's powers to do anything that is logically possible it is difficult to see why we should accept metaphysical possibilities that are not equivalent to logical possibilities. The advocate of strong necessities, it seems, is forced to admit one of two things: (i) *P* & ~*Q* is logically possible but God could not bring it about or (ii) God could bring *P* & ~*Q* about but that *P* & ~*Q* would still be metaphysically impossible. Both options, however, are undesirable. The first option is poorly justified and the second option is completely arbitrary. Let's call this line of reasoning Chalmers' Rejoinder.

It is evident, given the previous considerations, that Chalmers' Rejoinder is grounded in the following logic. The *only* way to undermine CP is to posit the existence of strong necessities. To posit the existence of strong necessities, however, is to countenance a brute, inexplicable, and *ad hoc* modality. But is Chalmers' Rejoinder legitimate? There is reason to think that it is not. It is critical to note that there are at least two different ways of undermining CP: by undermining PI (~PI & HD) or by undermining HD (PI & ~HD). Depending on which principle is rejected,

however, there will be important differences in the way the relationship between logical and metaphysical possibilities is cashed out.

Let's begin by examining the second option first. How would (PI & ~HD) affect the relationship between logical and metaphysical possibilities regarding the phenomenal-physical domain? Since there are no *a priori* connections between phenomenal and physical concepts, PI would guarantee that the relevant concepts individuate distinct properties. But given that phenomenal properties are distinct from physical properties it does not necessarily follow that these properties can come apart. The rejection of HD leaves it open whether or not these properties can or cannot come apart in various possible worlds. Despite the absence of any *a priori* connections that hold between these properties there is no guarantee that these properties are not necessarily connected. After all, if *P* & ~*Q* is impossible, as physicalists claim, then it must be the case that there are *hidden* necessary connections between phenomenal and physical properties – ones that are not grounded in any *a priori* relations. This would, in a rather straightforward way, explain why *P* & ~*Q* is conceivable yet impossible. A commitment to this option, however, makes the physicalist vulnerable to Chalmers' Rejoinder. Because the necessary connections between phenomenal and physical properties are not grounded in any *a priori* relationships it seems the metaphysical impossibility of *P* & ~*Q* would be brute, inexplicable, and *ad hoc*. Though *P* & ~*Q* is logically possible it will, for no transparent reason, be metaphysically impossible. I think, therefore, the physicalist is well-advised in avoiding the second option.

What about the first option? How would (~PI & HD) affect the relationship between logical and metaphysical possibilities? A physicalist committed to this option could argue that a distinction between phenomenal and physical concepts does not guarantee a distinction among

properties. Yes, there are two distinct concepts but these concepts refer to one and the same

property. Though this could only be determined *a posteriori*, the fact that there is only one

property, despite the presence of two distinct concepts, makes the question of whether or not

there are necessary connections between two distinct properties irrelevant. We cannot ask

whether this or that property is necessarily connected to this or that *other* property since there is

only one property at play. So while it is clear that a rejection of PI is a rejection of CP, it is far

from clear that rejecting PI commits one to separate logical and metaphysical modalities. After

all it is neither logically possible nor metaphysically possible for one and the same property to

fail to be identical to itself. Physicalists would be well-advised in embracing the first option and

avoiding the second option.

By treating CP as a monolithic principle Chalmers' analysis of strong necessities is not

sensitive enough to capture the fact that physicalist responses, at least the more sophisticated

ones, actually agree with Chalmers in an important respect. Anti-physicalists and physicalists

alike are equally uncomfortable with countenancing *hidden* necessary connections between

distinct properties. For what, one might ask, would ground the connection between distinct

properties across all possible worlds? Without a logical relationship of some sort, the connection

would indeed be brute, inexplicable, and *ad hoc*. Both Chalmers and his physicalist opponents,

it seems, are committed to HD. When Chalmers goes on to criticize physicalists for rejecting CP

he is, in essence, assuming that a rejection of CP *just is* a rejection of HD. This, however, is an

assumption that does not have to be made.

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