# **Phenomenal Powers**

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**Abstract**: The phenomenal powers view claims that phenomenal properties metaphysically necessitate their effects in virtue of how they feel, and thereby constitute non-Humean causal powers. For example, pain necessitates that subjects who experience it try to avoid it in virtue of feeling bad. I argue for this view based on the inconceivability of certain phenomenal properties necessitating different effects than their actual ones, their ability to predict their effects without induction, and their ability to explain their effects without appeal to laws or regularities. I also offer a harmony argument according to which the view offers the best explanation for otherwise seemingly fortunate psychophysical regularities. I then outline the view's main implications for the metaphysics of causation and philosophy of mind.

### **1** Introduction

Now nothing is more evident, than that the human mind cannot form such an idea of two objects, as to conceive any connexion betwixt them, or comprehend distinctly that power or efficacy, by which they are united. ... If any one is of a contrary opinion, and thinks he has attain'd a notion of power in any particular object, I desire he may point out to me that object.

*—Hume, Treatise, 1.3.14* 

Hume famously claimed that there are no causal powers, or properties in virtue of which causes metaphysically necessitate their effects, at least not as far as we can experience. His main argument was that all properties we experience are conceivable with or without any effects, and since conceivability implies possibility, this means they do not necessitate them.

This conceivability claim seems highly plausible when it comes to any *physical* properties. For example, it seems clearly conceivable that two billiard balls bump into each other without transferring motion, that stones do not fall to the ground when dropped, and so on.

But an exception may seem to be found in the realm of *phenomenal* properties, i.e., properties that characterize *what it is like*, or how it feels, to be in conscious states. Consider, for example, what it is like to feel pain and pleasure, respectively. It seems difficult to conceive of pain and pleasure having different effects than their actual ones, i.e., that the feeling of

pain could make someone try to sustain or pursue it (or do anything else than avoid it), or the feeling of pleasure could make someone try to avoid it (or do anything else than pursue it).

I will argue that this, as well as other related connections between phenomenal properties and their effects, supports what I call *the phenomenal powers view*.<sup>1</sup> This is the view that phenomenal properties—understood as essentially qualitative rather than as essentially functional or dispositional (as per, e.g., analytic functionalism or dispositionalism)—truly metaphysically necessitate their effects, and thereby constitute real, irreducible causal powers.

Versions of the phenomenal powers view have previously been defended by Sprigge (1987) and Langsam (2011).<sup>2</sup> I have previously defended it as a response to various problems in philosophy of mind (Mørch 2017, 2018, 2019b, 2020). Here I provide a detailed overview and refinement of the main arguments for the view. I also respond to a number of objections, and outline and expand on its most important implications.

My main argument will be an *inconceivability argument*. According to this argument, it is truly inconceivable that phenomenal properties such as pain necessitate different effects than their actual ones in virtue of how they feel. In addition, knowing how such phenomenal properties feel allows us to *predict* their effects a priori, or without induction, as well as to *explain* their effects without appeal to laws or regularities. I will offer two versions of this argument, one according to which such inconceivability, predictiveness and explanatoriness obtains only conditionally, or given a certain assumption, and one according to which it obtains unconditionally.

I will also offer an additional *harmony argument*, according to which the phenomenal powers view offers the best explanation for the apparently harmonious or fitting nature of certain psychophysical laws or regularities.

<sup>&</sup>lt;sup>1</sup> Thanks to David Chalmers for suggesting this name.

<sup>&</sup>lt;sup>2</sup> Sprigge and Langsam point to ways in which the connection between phenomenal properties and their effects seems intelligible and non-contingent, but do not defend it by appeal to inconceivability or harmony as I do here. See also Builes (2020a, 2020b, 2023, 2024) and Pallies (2022) for further developments and applications.

I will then consider objections, including philosophical objections according to which the inconceivability, prediction and explanatoriness characterizing the relation between phenomenal properties and their effects can be explained as a result of a merely conceptual, constitutive, psychological or normative connection, rather than a genuinely causal one, as well as empirical objections, such as one based on the phenomenon of pain asymbolia (the phenomenon of masochism will also be addressed).

I will also consider some of the view's most important implications for the metaphysics of causation and the philosophy of mind. With respect to causation, it offers a new response to Hume's arguments against experience of causal powers. It also supports *the powerful qualities view* of properties (Martin and Heil 1999; Strawson 2008), but a non-standard version according to which powers are grounded in, rather than identical with, corresponding qualities (Jacobs 2011; Coates 2020, 2023; Tugby 2021; Builes 2024).

In philosophy of mind, it radically suggests that physicalism is false and that a form of panpsychism or panprotopsychism is true (Strawson 2006; Alter and Nagasawa 2012; Chalmers 2013; Goff 2017)—according to which all causal powers are phenomenal or protophenomenal (or all physical dispositions have (proto)phenomenal grounds).

I will first outline the essential features of the phenomenal powers view itself (section 2). I will then present the inconceivability argument (section 3) and the harmony argument (section 4), followed by objections (section 5) and implications (section 6).

# 2 The Phenomenal Powers View

Phenomenal properties are, to repeat, properties that characterize what it is like, or how it feels, to be in conscious states—such as seeing red or being in pain. Causal powers, on the other hand, can be characterized as properties that (metaphysically) necessitate<sup>3</sup> particular effects, by virtue of *producing* them or *making* them happen—at least in the absence of interference from other, more powerful causes, i.e., *ceteris paribus* ("*cp*" for short).<sup>4</sup> The

<sup>&</sup>lt;sup>3</sup> I will use "necessity", "necessitation" and so on to refer to *metaphysical* necessity unless otherwise noted.

<sup>&</sup>lt;sup>4</sup> For example, a metal object will not fall to the ground when dropped if there is a strong magnet placed above it, but metal objects being dropped might still necessitate them falling to the ground in the absence of such interference.

phenomenal powers view (PP) claims that phenomenal properties necessitate their effects in virtue of how they feel, *cp*, and thereby constitute causal powers.

PP thereby stands opposed to the regularity theory of causation (as applied to phenomenal properties), according to which causes do not necessitate their effects, but are merely contingently followed by them in accordance with some regularity (Lewis 1973; Beebee 2006).<sup>5</sup> It also stands opposed to the governing laws view (Dretske 1977; Tooley 1977; Armstrong 1978), according to which causes necessitate their effects but in virtue of irreducible laws that exist independently of the properties they relate (and the laws themselves are typically regarded as contingent). PP, in contrast, takes phenomenal properties to necessitate their effects in virtue of their own intrinsic character, not in virtue of any external laws or relations.

PP also understands phenomenal properties as essentially *qualitative*, or as constituted solely by what they are like, rather than as essentially dispositional or functional.<sup>6</sup> Dispositional and functional properties are properties constituted by relations to particular effects or manifestations; i.e., properties roughly on the format "will E if C (*cp*)", where E is an effect or manifestation and C is a triggering circumstance.<sup>7</sup> They could also be understood as related to particular effects as a matter of definition or conceptual truth.<sup>8</sup> Dispositional and functional properties may thereby necessitate their effects, but in a constitutive or merely conceptual (and some would say trivial) rather than causal way. This is because causal

<sup>&</sup>lt;sup>5</sup> Lewis' counterfactual theory can be classified as a version of the regularity theory because it reduces causation to contingent regularities, across not just the actual but also close possible worlds.

<sup>&</sup>lt;sup>6</sup> At least not a priori or as a matter of conceptual truth. The argument for PP does not presuppose that phenomenal properties could not be a posteriori identifiable with functions or other physical properties, as per what is known as a posteriori or type-B physicalism (Chalmers 2003). As will be discussed, however, the view itself may be hard to reconcile with physicalism (including the a posteriori sort).

<sup>&</sup>lt;sup>7</sup> Some use the term "disposition" as a synonym for "causal powers" as defined above (see, e.g., Ellis 2001; Molnar 2003), i.e., for what may ground or underlie dispositions in the sense constituted by relations (on the "will E if C, (cp)" format or similar). For clarity, I will use "disposition" to refer to dispositions in the sense constituted by relations, and "causal powers" to refer to necessitating properties that may ground them (following, e.g., Friend and Kimpton-Nye (2023)).

<sup>&</sup>lt;sup>8</sup> I assume that if some property by definition or as matter of conceptual truth causes an effect, then the property itself must be constituted by causing that effect on the ontological level.

relations should fundamentally connect *distinct*, and hence constitutively and conceptually unrelated, existences (Hume 2007: 61; Wilson 2010).

For example, the property of charge might be understood as a disposition to repel other entities with the same charge and attracting those with opposite charge (cp). Charge would then necessitate these effects (cp)—since if an entity with charge fails to repel entities with the same charge or attract entities with opposite charge (cp), it would not really be charged after all. But this necessitation would be constitutive or merely conceptual rather than causal.

In contrast, the phenomenal property of pain, for example, can be understood not as the property of causing subjects to try to avoid it (or similar), but rather as the property of having a specific subjective quality, and thereby as constitutively and conceptually unrelated to, and distinct from, the effect of trying to avoid it. But it still necessitates this effect, according to PP.

Additionally, PP claims that phenomenal properties necessitate their effects in an intelligible or transparent way, i.e., that we have insight into *how* or *in virtue of what* they necessitate them. Other views, such as the powerful qualities view (discussed in section 6.2), may also imply—if applied to phenomenal properties—that phenomenal properties necessitate their effects and are essentially qualitative. But they do not imply that the relationship between phenomenal properties and their effects or powers is intelligible or transparent, at least not in a way that involves inconceivability, prediction and explanation (as PP more specifically claims).

The arguments I will offer for PP will also be based on the intelligible and transparent relations between phenomenal properties and their effects. The intelligibility or transparency of these relations is thereby part of both the arguments and the view itself.

These arguments will primarily be based on pain and pleasure—understood as phenomenal properties. But, as will be discussed (section 5.7), the view can arguably be extended to other, plausibly all, kinds of phenomenal properties.

The view also takes phenomenal properties to be the *only* properties that intelligibly or transparently necessitate their effects. If physical properties necessitate their effects, they do so in a less intelligible or perhaps even completely opaque way (discussed in section 6.3).

### **3** The Inconceivability Argument

My first argument for PP will be based on three criteria, of *inconceivability*, *prediction* and *explanation*. The first two are the same as those employed by Hume in order to show that we do *not* experience any causal powers.<sup>9</sup> The argument therefore offers a (fairly) direct response to Hume, as will be discussed later on (section 6.1).

First, causal powers should be *inconceivable* without their effects (*cp*). This criterion assumes a link between conceivability and possibility, given which if a cause is conceivable without an effect, then it is possible without the effect and thereby fails to necessitate it, as well as between inconceivability and necessity, i.e., that what is inconceivable is impossible and the opposite therefore necessary.

Second, an experience of causal powers should enable *a priori prediction* of its effects, i.e., prediction without induction based on a single experience of the cause alone. The prediction criterion is closely related to inconceivability because if a cause is inconceivable without an effect, then the effect should come to mind as soon as one first experiences (and thereby conceives of) the cause, thus enabling a priori prediction.

I will also add a third explanation criterion. Explanation and necessitation are closely related in that if A (causally) necessitates B, then A explains B.<sup>10</sup> Causal powers should therefore *explain* or *render intelligible* why their effects occur, or why the cause has the effect it has rather than another. This explanation should not invoke any laws or regularities; instead, any associated regularities or laws should themselves be explained in terms of the causal powers (see, e.g., Bird 2005). For example, if electrons have a property in virtue of which they necessitate repulsion of other electrons, this explains why the regularity or law "electrons

<sup>&</sup>lt;sup>9</sup> See, e.g., Hume (2007: 136 and 410). Hume did not seem to explicitly endorse the explanation criterion, though he might have implicitly, given its close connection to the other criteria.

<sup>&</sup>lt;sup>10</sup> Both in the objective sense of explanation, and the subjective, assuming a subject that experiences or cognizes the necessitation.

repel each other" holds. This contrasts with both the regularity theory and the governing laws view, where the behavior of individual entities is explained in terms of regularities or governing laws, while the regularities or laws themselves remain brute and unexplained.

The criteria should be taken to apply only to *distinct* properties, i.e., as excluding dispositional and functional properties and their effects (or insofar as such properties satisfy them, it would only demonstrate a constitutive rather than causal connection).

I also grant that the criteria are not valid in all circumstances. For example, inconceivability could sometimes result from various psychological or cognitive limitations rather than the impossibility of the scenario to be conceived (and thus the necessity of the opposite scenario).<sup>11</sup> I will assume, however, that the criteria indicate a necessary connection in cases when there are no plausible alternative explanations available of why the criteria hold (or seem to hold). In the course of the paper, I will attempt to refute a number of such alternative explanations.

Now, as mentioned, it seems clear that no physical properties satisfy the inconceivability criterion (unless conceived in dispositional or functional terms, as in the example of charge above). All physical causes are conceivable without their effects, and all physical laws or regularities could conceivably be otherwise.<sup>12</sup> Furthermore, no physical effects seem a priori

<sup>&</sup>lt;sup>11</sup> Conversely, conceivability may come apart from possibility in cases where we conceive of the properties or entities involved in terms of their accidental rather than essential properties (Kripke 1980), opaque (i.e., non-nature-revealing) concepts (Goff 2017), or similar. This is most relevant to the claim no physical properties necessitate their effects because they are all conceivable without their effects. But to explain this away in terms of us having a non-essential or opaque concept of physical properties, rather than the absence of necessitation, is precisely to admit that the essence or nature of physical powers is unknown and hence not experienced. This issue will be discussed below (section 6.3).

<sup>&</sup>lt;sup>12</sup> It has been suggested that physical *shape* properties are inconceivable without particular dispositions or effects; for example, that sphericity is inconceivable without the disposition to roll. But there are plenty of spherical objects that conceivably or even actually have no such disposition, such as soap bubbles or spherical portions of empty space (Ingthorsson 2013). In order to be inconceivable without a disposition to roll, we must also stipulate that the spherical object is solid, heavy and so on (Coates 2023), which are all dispositional properties (solidity being the disposition to resist intrusion into overlapping space, heaviness the disposition to fall to the ground, etc.). Physical shapes therefore do not seem inconceivable without their effects *qua* shapes alone.

predictable without induction—all physical causal relations and laws must be confirmed a posteriori and inductively. Neither can any physical effects be explained without appeal to laws or regularities, and the physical laws themselves are brute and inexplicable.<sup>13</sup> This shows that the criteria are not trivial to satisfy, and is also the basis for restricting the view to phenomenal properties.

The argument will proceed as follows. I will first argue that some phenomenal properties satisfy a *conditional* version of each criterion: roughly, that they are inconceivable without, as well as predict and explain, their particular actual effects (such as avoidance rather than pursuit, in the case of pain) conditional on the assumption *that they necessitate any effects at all.* 

I will then offer two versions of the full argument, an unconditional and a conditional version. According to the unconditional argument, phenomenal properties satisfy absolute, unconditional versions of the criteria *in principle*, although this may be hard to demonstrate in practice. According to the conditional argument, phenomenal properties can only satisfy the conditional criteria, but this still supports PP in combination with some additional claims.

For simplicity, I will refer to these arguments as the inconceivability argument (or individually as the unconditional and conditional inconceivability argument, respectively), even though they also involve prediction and explanation.

### **3.1** Pain, Pleasure and Their Effects

As noted, the inconceivability argument will in the first instance be based on pain and pleasure. I will use "pain" and "pleasure" to refer to phenomenal properties, or to what it is like to be in pain or have pleasure in a broader, physiological or biological sense.

Pain seems to have the effect of making any subject (or creature) who experiences it try to avoid it, whereas pleasure seems to have the effect of making any subject who experiences it try to sustain or pursue more of it (at least very roughly speaking).

<sup>&</sup>lt;sup>13</sup> At least at the fundamental level. Non-fundamental physical laws may of course be explicable in terms of (as well as a priori predicable from and inconceivably false given) more fundamental laws, but the most fundamental laws will be brute.

This is not to say that pain and pleasure *always* produce these effects, only that they do so in the absence of interference. We often endure or even pursue pain and ignore or even avoid pleasure given interference from other motives. For example, we might endure pain in order to avoid a greater pain in the future, as when cleaning a wound in order to avoid a more painful infection, or to attain as greater pleasure in the future, as when doing a painful exercise in order to enjoy the benefits later. Some also pursue pain because it leads to a greater pleasure at the same time, as in masochism (Rachels 2000; Moen 2016),<sup>14</sup> or because they consider it morally or spiritually meaningful, as when inflicting self-punishment or in some religious rituals. But, as noted, causal powers need only necessitate their effects in the absence of interference, or *ceteris paribus*. And there is no clear indication that any subject, human or animal, pursues pain purely for its own sake, or in the absence of any interfering motive,<sup>15</sup> and vice versa for pleasure.

I will also take it that the immediate or proximate effect of pain is to make subjects who experience it *try* to avoid it, and for pleasure to make subjects who experience it *try* to pursue or sustain it. That is, their immediate effects are mere tryings, efforts or volitions towards avoidance and pursuit/sustainment respectively. These efforts or volitions can be regarded as purely mental (or internal) events, which may or may not succeed in further causing the actions or results they are aimed at. And in order to constitute causal powers, pain and pleasure need only necessitate their proximate, volitional effects; they need not necessitate successful actions.

<sup>&</sup>lt;sup>14</sup> As Moen explains: "... masochists do not appear to like pain in general. Masochists like specific pains in specific contexts. If the pain is of the wrong kind, if it is too intense, or if it occurs in the wrong context, the masochist reacts to the pain just like everyone else does. What, then, accounts for the apparent value of the limited range of pains that masochists pursue? The answer seems to lie in the role that these pains play in the sexual settings of which they are part. These settings seem to provide masochists with an adrenaline rush, with the excitement of pushing their boundaries, with intense sexual pleasure, with an endorphin high, and, for some, with a cathartic experience" (2016: 9). Masochists thus seem to pursue pain for the sake of such accompanying pleasures, not for itself. This account also seems supported in scientific literature. According to one comprehensive review (Dunkley et al. 2020), pain in the masochistic/sexual context might trigger the release of endogenous opioids and as well as other mechanisms that generate pleasure. In addition, it may trigger analgesic effects, such that the pain is diminished rather than merely overridden, and in some cases, possibly altogether transformed, such as to no longer constitute pain.

<sup>&</sup>lt;sup>15</sup> Objections to this claim, such as the phenomenon of pain asymbolia, will be discussed later.

This pre-empts one of Hume's main objections to the idea that we might experience mental powers—a possibility he considered at length—namely that the connection between volitions and actions fail to satisfy his criteria to the same extent as the connection between physical causes and effects. Specifically, he notes that we cannot predict a priori whether a volition or effort will be successful, which also entails that they conceivably come apart (1999: 137). This may be correct, even assuming the absence of interference. But even if volitions are conceivable without successful actions, motives such as pain and pleasure could still be inconceivable without corresponding volitions (however, an argument that there may still be a *partially* intelligible necessary connection between volitions and actions will be discussed in section 5.7).

#### **3.2** Inconceivability

Is it conceivable that pain—in and of itself and in the absence of any further motive—fails to make some subject at least *try* to avoid it? Or that pleasure, similarly, fails to make some subject at least *try* to pursue or sustain it?

It may be conceivable—at least *prima facie*; whether it is inconceivable in principle or ideally will be discussed later—that pain is contingently *followed* by something else than avoidance attempts, as per the regularity theory of causation. It may also be conceivable that pain is connected to something else than avoidance attempts by an irreducible law that exists externally to and independently of it, as per the governing laws view. Or, that pain necessitates something else than avoidance in virtue of some non-phenomenal features, such as its purely physical characteristics—though in that case, it would not really be pain in the phenomenal sense, but rather pain in some physical sense, that is conceived as having the different effects.

What does not seem conceivable, however, is that pain *makes* a subject do anything else than avoid it *in virtue of how it feels*, i.e., that it necessitates anything else than avoidance in virtue of its own phenomenal nature. To see this, try to imagine an instance of strong pain—such as the pain of stepping on a sharp nail, or a bad toothache (or some other strong pain one may have experienced)—as vividly as possible in terms of how it feels. This feeling or quality can only be described as intrinsically disagreeable and repulsive. It therefore seems inconceivable that it would make any subject do anything else than try to avoid it *in virtue of feeling like this*. Similarly, the feeling of pleasure can only be described as intrinsically agreeable and

attractive. It therefore seems inconceivable that it would make a subject do anything else than try to pursue or sustain it *in virtue of feeling like that*—even though it might conceivably have other effects in virtue of something else, such as contingent regularities, governing laws or physical characteristics.

One might think this assumption—that pain and pleasure necessitate their effects in virtue of how they feel (as opposed to in virtue of something else, or not at all)—renders the inconceivability trivial, reflecting merely the analytic truth that "if pain and pleasure necessitate their effects, then they cannot have different effects". But the inconceivability does not depend on assuming that pain and pleasure necessitate their *particular*, actual effects, it only depends on assuming that they necessitate *some* effects or other, or that they necessitate their effects *whatever they may be*. It is not analytically true that "if pain and pleasure necessitate (respectively) avoidance and pursuit/sustainment attempts in particular". But it still seems inconceivably false.

Also note that the assumption does not have the same result in purely physical cases. Assuming that massive objects, such as billiard balls, necessitate *some* effects, it is still conceivable that they necessitate different effects than their actual ones; for example, that they do not transfer motion on impact, or do not fall to the ground when dropped (cp)—at least if mass is understood as a qualitative or categorical property, such as in terms of how it looks or feels,<sup>16</sup> rather than in terms of its actual functions or dispositions (given which mass would be conceptually or constitutively related to its effects rather than distinct from them, as discussed before). And already mentioned, if pain or pleasure are understood as physical properties (or conceived in terms of some physical characteristics) they can conceivably have

<sup>&</sup>lt;sup>16</sup> Some would argue that these are not categorical properties of mass (but rather, e.g., mental properties that mass is disposed to produce in observers), and that no physical properties are categorical or qualitative at all—they are all purely dispositional or relational. If so, the equivalent assumption cannot really be made about physical properties. If so, given PP, this would explain why causal powers should be looked for in the realm of the phenomenal rather than the physical: assuming causal powers must involve categorical or qualitative properties (i.e., that there are no *pure* powers, as discussed in section 6.2), and no physical properties are categorical or qualitative but phenomenal properties are, then phenomenal properties are the only known candidates for being causal powers. This is connected to the challenge phenomenal powers poses for physicalism to be discussed later.

different effects even given the assumption that they necessitate their effects, but not when understood as phenomenal properties (or conceived in terms of their phenomenality).

The inconceivability of pain and pleasure having different effects conditional on the assumption must therefore indicate some real connection to their effects in virtue of their phenomenality, not just a logical connection in virtue of the assumption, as the assumption alone does not generate any inconceivability with respect to particular effects at all.

### 3.3 Prediction

Can experience of pain and pleasure enable us to predict their effects a priori, or without induction? Imagine someone—call her Maya—who suffers from congenital insensitivity to pain and has therefore never experienced it (in this respect, she is similar to Frank Jackson's Mary (Jackson 1982), but with respect to pain rather than red). She has also grown up in a very secluded environment where she has learned very little about it: she might know that there is some bodily state people call "pain", but not that it is generally disliked and avoided (in this respect, she is very different from Mary, who has complete physical knowledge related to her missing experience). But one day, Maya's insensitivity is miraculously cured, and she experiences pain for the first time. It seems she will then be able to instantly predict that this is a feeling she and every other creature who experiences it will try to avoid—at least if she assumes it has the effects that it has in virtue of feeling like that. She does not need to experience pain and observe whether they have the same reaction as well, and then apply inductive reasoning. Rather, it would seem predictable based on a single experience of pain. The effects of pleasure would seem predictable on the same basis.

One might object that prediction without induction may be possible in physical cases as well, given the assumption that physical properties have *some* powers—indicating that the predictability derives from the assumption alone rather than the nature of phenomenal properties. That is, if one assumes that causes generally necessitate their effects, it may seem that from observing any event, physical or phenomenal, following another only a single time, one can infer that it will keep following in the future.

But a cause observed for the first time might be followed by a number of different events, where not all of them are among its effects—some might rather be effects of other co-

occurring causes. It is also possible that the cause fails to manifest its effect because other causes interfered to prevent it. Hence, in physical cases, prediction based on a single instance must presuppose the absence of confounders and interference. And it seems such a presupposition would itself have to be confirmed inductively.<sup>17</sup> Induction would thereby be implicitly involved after all.

In the case of pain and pleasure, however, prediction seems possible even in the presence of confounders or interference. When experiencing pain for the first time, it seems Maya would be able to identify her avoidance attempt as being caused by the pain even if other events happened to follow it as well. For example, if she suddenly felt hungry, or made an effort toward something else at the same time as her effort to avoid pain, she would not perceive these events as caused by the pain in the same way as the avoidance effort.

In addition, the effect would seem predictable in cases where it was prevented from manifesting. Consider a scenario where Maya experiences pain for the first time in the following way. She knows she is going to learn what pain is like by touching an electrocuting wire. She is also determined to study the nature of pain because she has a passionate interest in phenomenology. When she touches the wire, she endures the pain, until the current is turned off and the pain ends by itself, which is possible because her interest and curiosity constitute an interfering motive. In this way, she will experience pain, but not witness it actually making her try to avoid it. It seems she would nevertheless infer that pain *would* make her try to avoid it were it for of this or any other interfering motive. This cannot be explained by the assumption alone.

### 3.4 Explanation

Why does pain have the effect of making subjects try to avoid, rather than pursue it? Or why does the regularity "people try to avoid pain (in the absence of interfering motives)" hold?

<sup>&</sup>lt;sup>17</sup> In fact, Hume himself made a similar point: that physical effects can indeed be predicted without induction being directly involved, assuming the absence of "foreign and superfluous circumstances", but this absence must be confirmed inductively (Hume 2007: 73) (thanks to Galen Strawson for pointing this out).

Knowing how pain feels, the answer is obvious: people avoid pain *because it feels like this*, or because of its plainly repulsive and disagreeable quality.<sup>18</sup>

This explanation invokes only the qualitative nature of pain, rather than anything functional or dispositional.<sup>19</sup> Nor does it invoke any regularities or laws—on the contrary, the quality of pain explains the regularity "people tend to avoid pain (*cp*)" rather than the other way around.

The explanation also has an *ultimate* character, in the sense of ending any regress of further explanatory questions, by appeal to something self-explanatory rather than brute and unexplained. If you know how pain feels, it is self-explanatory why anyone who experiences it would attempt to avoid it (*cp*). There is also no further question of "why does pain feel like *this*, or have *this* repulsive quality?"—if it did not, it would not be *phenomenal* pain.<sup>20</sup>

One might have further questions such as: "why does pain *in the physical sense* feel like this?", "why are some physical properties (such as c-fiber firings) correlated with pain and not others?" or "why is pain caused by stepping on nails but not by cutting one's hair?". But these are questions about regularities between pain and its (physical) correlates or causes, not about the original regularity between (phenomenal) pain and its volitional effects.

<sup>&</sup>lt;sup>18</sup> Strawson (1994) makes similar remarks about the explanatory power of phenomenal properties.

<sup>&</sup>lt;sup>19</sup> One might object that the description of pain as repulsive and disagreeable is literally dispositional (or functional) rather than qualitative, as "repulsive" just means "having a disposition to repel" and "disagreeable" just means "having a disposition to make subjects disagree or dislike". But these terms can *also* be understood in a qualitative sense, i.e., as pointing to the qualities that have or ground these dispositions (without thereby being constituted by the dispositions). The qualitative sense of these terms may be derivative of the dispositional sense (i.e., the dispositional sense is probably the original and more literal sense). But this is only because there cannot really be any literal or direct descriptions of phenomenal qualities given that these qualities are widely regarded as ineffable, i.e., not directly describable (Nagel 1974). Still, when communicating with other subjects who know a phenomenal quality (or a comparable one) from their own experience, we may take them to be indirectly describable by using terms that are literally or originally non-qualitative (such as the aforementioned dispositional terms) in a qualitative sense.

<sup>&</sup>lt;sup>20</sup> Appealing to the nature of pain in this way ("if it did not feel like this, it would not be pain") does not render the explanation analogous to the aforementioned explanations of the charge law in term of the nature of charge ("if it did not behave like this, it would not be charge"). The problem with the latter explanation is not that it appeals to the *nature* of properties (as both explanations do), but that it appeals to the *dispositional* nature of properties (which only the explanation in terms of negative charge does), which renders them conceptually or constitutively rather than causally connected to their effects.

As before, the same points can be made about pleasure: knowledge of how pleasure feels explains why any subject is attracted to it—without presupposing any regularities or laws— assuming it necessitates its effects in virtue of feeling like that.

### 3.5 The Unconditional Inconceivability Argument

In this way, pain and pleasure appear to satisfy *conditional*, but still clearly non-trivial, versions of the inconceivability, prediction criteria, and explanation criteria. But one might think phenomenal properties could also satisfy *unconditional* versions of the criteria, at least in principle. I will first consider an argument according to which this is the case. I will then offer an argument based on the criteria being only conditionally satisfiable. For simplicity, the arguments will be presented mainly in terms of pain and the inconceivability criterion, but analogous claims will hold for pleasure and the other criteria.

The unconditional inconceivability argument starts from drawing a distinction between *ideal* and *prima facie* conceivability. Ideal conceivability is roughly conceivability for a reasoner with no relevant cognitive or epistemic limitations. In general, ideal conceivability is regarded as the proper criterion of possibility (and ideal inconceivability for impossibility/necessity), and *prima facie* (i.e., non-ideal) conceivability only an imperfect indicator of it (Chalmers 2009).

The argument then claims that it is ideally inconceivable that pain fails to cause avoidance attempts (*cp*) *simpliciter* (that is, even in the absence of the assumption). Or put another way, it is not ideally conceivable that the assumption is false, i.e., that pain does not necessitate any effects in virtue its phenomenal character, or that the regularity theory or the governing laws view—or epiphenomenalism (i.e., that pain has no effects at all)—is true for pain.

To sum up the unconditional inconceivability argument:

- (1) Some phenomenal properties are *ideally* inconceivable without specific effects, predict them without induction and explain them without appeal to laws.
- (2) If some properties are *ideally* inconceivable without their specific effects, predict them without induction and explain them without appeal to laws, then they necessitate these effects and thereby constitute causal powers.

#### (3) Some phenomenal properties constitute causal powers.

The connection between ideal inconceivability and necessity, expressed by premise 2, is fairly solid (or at least arguably as solid as any criterion could be, in this context). What mainly needs defense is premise 1, according to which ideal inconceivability obtains in the first place, because—as already admitted—it may seem *prima facie* conceivable that pain necessitates no effects at all. When (or if) *prima facie*—but non-ideally, according to the premise—conceiving of this we must therefore be making some kind of mistake. But what kind of mistake could this be?

First, it could be that when we conceive of pain not necessitating avoidance (*cp*), we are really conceiving of pain that is not really *painful*, *hurtful* or *affective*, in a phenomenal or qualitative rather than functional sense, and is thereby lacking some phenomenal component or dimension. The idea that pain may have the complexity to allow for this will be discussed in more detail below, in relation to pain asymbolia, a medical condition in which patients report to experience pain that "doesn't hurt" and they have no inclination to avoid (even in the absence of interference). To prefigure, asymbolic pain may be understood as lacking some phenomenal, rather than merely functional, component or dimension of normal pain, which may be essential to its repulsive power. When conceiving of pain that does not cause avoidance attempts, we might therefore be conceiving of something like asymbolic pain rather than the normal, full-blown version.

If we succeed in conceiving of full-blown pain with all its phenomenal components or dimensions, in contrast, it will not be conceivable that it has different effects—regardless of the assumption that it necessitates *some* effect (or because the falsity of this assumption would itself be inconceivable). The reason why we typically need to explicitly make the assumption is that this is only clear on ideal phenomenological reflection, and most of us are not capable of this.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> The assumption may also play the role of preventing us from actively making the opposite assumption that pain does *not* necessitate any effects in virtue of its phenomenal character (i.e., that the regularity theory, the governing laws view, or epiphenomenalism, is true for pain). This opposite assumption would be incoherent for an ideal conceiver. But for non-ideal conceivers like us, conceivability may be dominated by explicit logical

Another possibility is that, when conceiving of pain having different effects, we are conceiving of pain with all its components and dimensions, but simply fail to conceive of it vividly enough—in Humean terms, we are entertaining merely a bleak copy of the original impression. Perhaps only actual occurrent pain is vivid enough to render the necessary connection to its effects fully clear. But when actually experiencing pain (or at least pain that is strong enough to render its power sufficiently salient and noticeable), the pain itself will be so distracting that we cannot focus on verifying subtle phenomenologico-metaphysical judgments. But ideal phenomenological observers (who perhaps master meditative techniques enabling one to contemplate the pain with being distracted by it)<sup>22</sup> may be able to verify it.

### 3.6 The Conditional Inconceivability Argument

Those who nevertheless remain skeptical of ideal, unconditional inconceivability may still consider the conditional argument. According to this argument, mere conditional inconceivability, as well as prediction and explanation, of pain without an avoidance attempt still supports that it necessitates this effect (cp).

This argument can be summed up as follows:

- (1) Some phenomenal properties are inconceivable without *specific* effects, predict them without induction and explain them without appeal to laws, assuming they necessitate *some* effects.
- (2) If (1), then we have a positive conception of how some phenomenal properties *could* necessitate their effects and thereby constitute causal powers.
- (3) If we have a positive conception of how some phenomenal properties *could* constitute causal powers, then they (actually) constitute causal powers.
- (4) Some phenomenal properties constitute causal powers.

considerations, and so actively assuming that pain and pleasure *can* have different effects would prevent us from noticing any phenomenal components or dimensions in virtue of which it *cannot*.

<sup>&</sup>lt;sup>22</sup> One might think this offers a counterexample to the claim that subjects always avoid pain cp. But the effect of meditation on pain can be accounted for in a number of ways compatible with PP, as will be discussed in section 5.6.

Premise 1 of this argument has already been defended (though objections will be discussed in later sections), but premises 2 and 3 require both elaboration and defense.

Whereas the unconditional argument spoke of ideal, in contrast to *prima facie*, inconceivability, premises 2 and 3 of the conditional argument rely on a further distinction between *positive* and *negative* conceivability (Chalmers 2009). Negative conceivability is simply to be able to conceive of something without logical or conceptual contradiction. Positive conceivability (i.e., having a positive conception) is to be able to imagine something in concrete, qualitative detail.<sup>23</sup>

Positive conceivability arguably provides far stronger evidence of possibility than mere negative conceivability, at least in cases where the properties in question have a concrete or qualitative nature in the first place. One might also argue that negative conceivability is only evidence of logical and conceptual possibility, whereas positive conceivability is required as evidence of *real* possibility, at least when it comes to concrete as opposed to merely abstract properties or entities. Consider, for example, the question of "impossible colors", i.e., of whether there can be colors that no human is able to experience (but other creatures might), or a color accurately describable as, e.g., "brighter than yellow but not white". This is (clearly, for the former, and at least arguably for the latter) negatively conceivable, as there is no (clear) contradiction in either idea. But this alone seems like very weak evidence of their real possibility, whereas positive conceivability would be very strong evidence.

Now, the fact that pain is conditionally inconceivable without (and seems to predict and explain) the effect of making subjects try to avoid it, assuming it necessitates *some* effects, or constitutes *some* kind of power, seems to show that we can positively conceive of how pain *could* necessitate this specific effect and thereby constitute a repulsive causal power in particular. In other words, it shows that we can imagine, with a significant degree of qualitative detail, how pain would be *capable* of necessitating its effects or playing the role of a specific causal power. This is the main basis for premise 2.

<sup>&</sup>lt;sup>23</sup> This also requires the absence of contradiction; hence, positive conceivability implies negative conceivability, but not *vice versa*.

Premise 3 can then be defended in at least two different ways. Firstly, one may note that any argument that causal powers are actual presupposes that they are *really* possible. For example, according to one influential argument, causal powers should be posited based on an inference to the best explanation for the regularities that we see in the universe, which must otherwise be regarded as a giant "cosmic coincidence" (Strawson 1987; Mumford 2004; Bird 2005). However, if it is not positively conceivable *how* any properties could play the role of explaining regularities, then such an inference would seem unjustified (Beebee 2006; Psillos 2009),<sup>24</sup> despite there being no logical or conceptual contradiction in the role itself. The conditional inconceivability argument, according to which phenomenal causal powers are positively conceivable and thereby really possible, can be combined with this or similar arguments, according to which causal powers should be posited if, but arguably also only if, they are really possible.

A second option is to argue that pain directly *appears* powerful, or to actually make or force us to try to avoid it (*cp*)—it does not appear to be contingently followed by it. In debates about the phenomenology of agency, this is often emphasized with respect to the connection between intentions or volitions and resulting actions—i.e., that intentions or volitions clearly appear to cause actions in a non-Humean way (Horgan et al. 2003; Esfeld 2007), and the same seems to hold for phenomenal motives such as pain and volitions with respect to volitions. The inconceivability may be taken to confirm that this is really an appearance of necessitation.<sup>25</sup> But the conditionality of this inconceivability implies that the appearance could still be non-veridical. However, as a general principle, appearances should be trusted in the absence of defeaters—and in this case, one might argue that there are no clear defeaters (as in the discussion of objections below, where I attempt to refute many potential ones).

This makes for two different supporting arguments for premise 3. First, an *argument for real possibility*—not sufficient in itself to establish the actuality of powers, but that can be if combined with other arguments (such as an inference to the best explanation for observed

 $<sup>^{24}</sup>$  As Psillos puts it, with a quote from Wittgenstein: "a nothing could serve just as well as a something about which nothing could be said" (2009: 132).

<sup>&</sup>lt;sup>25</sup> If the conditional inconceivability does not hold for the connection between intentions or volitions (as it seems to me it does not), this may show that the appearance is not as clear or revelatory on this case—this will be discussed below.

regularities, i.e., the "cosmic coincidence" argument). Second, an *argument from appearance*—which may be sufficient in itself (insofar as the positive conception constitutes an appearance of necessity and there are no defeaters).

### **4** The Harmony Argument

My second argument for PP presupposes the same connections of inconceivability, prediction and explanation, but merely conditional versions. This argument could be regarded as yet another supporting argument for premise 3 of the conditional inconceivability argument (discussed in the previous section), but it could also, and will in what follows, be regarded as an independent argument.<sup>26</sup>

The argument starts from noting that the actual psychophysical regularities or laws covering human and presumably animal behavior exhibit a certain *harmony*. The laws are such that pain tends to cause avoidance behavior and pleasure tends to cause attraction behavior (or at least their physical realizers do, assuming physicalism). This seems harmonious, or in alignment with how things *should* be, in that if the laws were otherwise, especially if they were completely opposite, this would be very bad (at least on the assumption that pain is bad and pleasure is good). Firstly, if people tended to pursue pain, and avoid pleasure, there would be a lot more pain and a lot less pleasure in the world. In addition, if we found ourselves compelled to behave like this, life would seem fairly absurd, which would be an additional bad thing in its own right.

Furthermore, these regularities or laws seem contingent or as they could be otherwise (at least *prima facie* or without the assumption that pain and pleasure necessitate *some* effects, as per PP). In the same way we can conceive of the laws of physics being different (gravity being weaker, identically charged particles attracting rather than repelling each other, and so on),

<sup>&</sup>lt;sup>26</sup> The argument is based on the evolutionary argument (Mørch 2017), according to which phenomenal powers offers the best explanation of why correlations between pain and harmful stimuli and pleasure and beneficial stimuli evolved. In order to explain these correlations, one must also explain the psychophysical regularities that are the explanandum of the harmony argument. The harmony argument can thereby be regarded as a simplification of or abstraction from the evolutionary argument.

we can (*prima facie* and without the assumption) conceive of pain causing attraction or indifference, or jumping or dancing, or whatever it may be.<sup>27</sup>

The psychophysical regularities therefore seem to cry out for an explanation: why are they the way they are and not otherwise? Is it just a fortunate coincidence?

One candidate explanation is analytic functionalism (Armstrong 1968; Lewis 1983). According to analytic functionalism, our concepts of pain and pleasure are functional or dispositional concepts; for example, the concept of pain may be analyzable along the lines of "the kind of state that subjects will tend to avoid". Given this view, the actual psychophysical laws would be necessary, but not really causal; rather, they would be merely conceptual or constitutive.

The main problem with analytic functionalism, however, is that we clearly seem to have *phenomenal concepts* that pick out pain and pleasure in terms of their qualities or what they are like (see Chalmers 2010), rather than in terms of their functions or dispositions. The phenomenal concept of pain, for example, would be roughly the concept of "feeling like *this*", when pointing to an occurrent or remembered experience of it. The psychophysical regularities still hold when formulated in terms of phenomenal concepts, even though, in that case, they would not be conceptually true. This cannot be explained by analytic functionalism.

Another explanation is theism (Cutter and Crummett forthcoming): <sup>28</sup> there exists a benevolent God who created the regularities because they are good. But many will reject this

<sup>&</sup>lt;sup>27</sup> Assuming physicalism, the psychophysical laws are grounded in the physical laws, so to imagine them being different would be equal to imagining some physical laws being different. Given dualism, the psychophysical laws would be fundamental, and so one could conceive of them being different while the physical laws remain the same. On Russellian monism, to be discussed in more detail below, it is typically also considered conceivable that phenomenal properties vary independently of physical causal structure.

<sup>&</sup>lt;sup>28</sup> Cutter and Crummett coin the term "psychophysical harmony", and also point out a number of other psychophysical harmonies that they argue are also best explained by theism—though many of them could also be explained by PP, if the view can also be applied to other phenomenal properties, as will be discussed in section 5.7.

explanation in view of various objections to theism (such as the problem of evil, lack of other good evidence, and so on).

A third explanation is the multiverse hypothesis, according to which the fundamental laws (which must either include or ground the psychophysical regularities) are actually different in other universes. This hypothesis is often invoked to explain another fact that may come across as highly fortunate, namely that the physical laws (or constants involved in them) are such as to allow for life to arise, i.e., the fine-tuning problem. According to the multiverse hypothesis, most universes do not have such laws, but a few do. The fact that we live in one of these few is explained by appeal to the anthropic principle, according to which if we did not live in a universe with laws friendly to life, we would not exist in the first place.

The harmonious psychophysical regularities can be regarded as problem of *hedonic* finetuning. But when it comes to this problem, the anthropic explanation does not quite work, because if we did live in a universe where the laws were such that, e.g., pain caused attraction, we could still exist (only in a more miserable way). The multiverse explanation is insufficient to explain the psychophysical regularities (even granted that it may be sufficient to explain the life-friendliness of the laws).

One might conclude from this that the psychophysical regularities just cannot be explained. But another candidate explanation is PP. By simply assuming that phenomenal properties necessitate their effects in virtue of how they feel (as before, without specifying *which* effects), we can predict that, and explain why pain causes avoidance and pleasure attraction in particular, as per the harmony we observe, rather than something else.

Or more precisely, PP allows us to explain why all subjects *try* to avoid pain and attract pleasure. To complete the explanation, we must also add that tryings tend to cause the actions they are aimed at (cp). This could be posited as an brute principle,<sup>29</sup> or one could try to derive

<sup>&</sup>lt;sup>29</sup> It could be objected that by positing a brute link from volition to action, then all this explanation achieves is to replace two brute laws (pain tends to cause avoidance *and* pleasure tends to cause attraction) with two others (phenomenal properties necessitate their effects in virtue of how they feel *and* volitions tend to cause corresponding actions). However, if PP applied to other phenomenal properties as well, as discussed in section 5.7, these two principles can explain a number of psychophysical laws in addition to those regarding pain and

it from a deeper source (in section 5.7, I will consider the idea that volitions have phenomenal powers as well, which unlike the powers of motives such as pain and pleasure are only *partially* experienced—in that case, the principle and PP can be unified). Inference to the best explanation for the harmonious psychophysical regularities should therefore, according to the harmony argument, favor PP.

One might object that another option is to simply leave the regularities brute and unexplained (or as grounded in underlying physical laws that are). But it seems like bad practice to reject a good explanation in favor of no explanation at all. To reject the explanation in terms of phenomenal powers, one should therefore either point to an alternative, better or at least equally good explanation of the regularities, point to why PP fails to explain them after all, or give objections according to which the view is implausible (in the same way many would do with theism).

In the following sections, I will consider a number of objections, both to the view itself and its explanatory and predictive capacity. If they can successfully be responded to, the harmony argument should add significant support to the view.<sup>30</sup>

## **5** Objections

I will now consider objections. First, there are objections according to which the inconceivability, as well as the predictiveness and explanatoriness of phenomenal properties—I will refer to these jointly as "the connections"—can be explained as a result of some merely conceptual, constitutive, psychological or normative connection rather than a causal one grounded in real phenomenal powers.

pleasure. If so, the explanation would reduce a high number of psychophysical laws to at most two, and such reduction is generally regarded as an explanatory virtue.

<sup>&</sup>lt;sup>30</sup> One could also summarize the argument in Bayesian terms: the psychophysical laws are (subjectively) improbable in that there are multiple ways they could be different; PP (conjoined with some principle connecting volitions to actions) raises their probability to near 1; therefore, PP is confirmed. If PP has a low prior, this confirmation would not matter much, but PP is *prima facie* quite intuitive, which should contribute to a high prior.

Second, there are objections according to which there is no real correlation (even *ceteris paribus*) between pain, pleasure and their alleged effects in the first place, or according to which PP has implausible implications.

### 5.1 Analytic Functionalism

Could the connections between pain and pleasure and their effects be merely conceptual? As discussed, the assumption that pain and pleasure necessitate *some* effects in virtue of how they feel does not render it conceptually true that they necessitate avoidance or pursuit/sustainment attempts in particular. But it could still be conceptually true by virtue of the concepts of pain and pleasure themselves. This would follow from analytic functionalism, also discussed, according to which our concepts of pain and pleasure pick them out precisely by their functions or dispositions to produce their particular effects.

Now, analytic functionalism can be dismissed as strictly false, on the basis that we clearly seem (as a matter of psychological fact) to possess non-functional and non-dispositional concepts of phenomenal properties, such as phenomenal concepts that pick them out simply by how they feel, rather than by their effects. Still, we might possess functional or dispositional concepts of pain and pleasure *in addition* to our phenomenal concepts. And one might think the connections result from switching to these functional or dispositional concepts, perhaps unconsciously or inadvertently.

However, the connections clearly seem to appear also when thinking of pain and pleasure by means of purely phenomenal concepts. For example, it is not conceptually true that something that feels like *this* (when pointing to an experience or vivid memory of pain) has the function or disposition to produce avoidance attempts, but it still seems inconceivable that it does not (at least given the assumption that it necessitates *some* effect, which as discussed is not a source of conceptual truth). The connection thereby seems *synthetic* (indeed, synthetic a priori) rather than analytic, to put it in Kantian terms.

To make sure one is not inadvertently switching from a phenomenal to a functional concept when encountering this inconceivability, one may focus intensely on how pain feels, perhaps by evoking a particularly vivid memory of particularly strong pain, or even by inducing a present experience of it (e.g., by pinching oneself). It would seem that the more one focuses on the feeling of pain, the clearer the inconceivability will be.<sup>31</sup> The inconceivability is therefore not well explained as deriving from functional or dispositional concepts only, nor are the other connections (which will behave in the same way).

### 5.2 **Psychological Connections**

Another possibility is that the connections result from a purely psychological association. On the one hand, we may have formed a strong habitual association between pain and pleasure and their effects based on frequent experience of one following the other—in accordance with Hume's original theory of how causes and effects falsely appear necessarily connected. They could also be innately associated. Studies (e.g., Leslie and Keeble 1987) suggest that small children have expectations about how mechanical causal interactions will go—for example, that motion will be transferred in collision, instantly and without delay, or that there is no action a distance—without any prior basis in experience. These expectations may be implanted by evolution because they were somehow useful for our ancestors. One might think innate associations between pain and pleasure and their effects have evolved in the same way.

The hypothesis of an innate, evolved association is especially well-suited to explain how we would be able to predict the effects of pain and pleasure without induction. The habitual learning hypothesis could only explain why we *think* we would be able to predict it—though this may also be all that needs explanation, since the predictability can hardly be tested in a real experiment, and the thought experiment strictly speaking only reveals what we *think* is predictable. However, neither innateness nor learning are well-suited to explain the inconceivability or explanatoriness.

Firstly, no other known psychological associations, learned or innate, seem to result in the outright inconceivability of the associated items coming apart. For example, even though it might be unexpected, or seem unnatural or wrong, that mechanical interactions go differently, we can easily conceive of it if we try.

<sup>&</sup>lt;sup>31</sup> That is, if one switches to a functional concept, the inconceivability of "pain makes someone pursue it cp" may be maximally clear. But the particular inconceivability that seems to derive from the phenomenal concept alone becomes clearer the more vividly one imagines the feeling of pain.

Second, other psychological associations generally seem brute rather than explicable. For example, if we consider *why* it would be that, e.g., action at a distance is impossible (a strong candidate for an innate causal belief), we cannot find an explanation—it just brutely seems that way. But with pain and pleasure, it seems perfectly intelligible why their effects could not be otherwise, knowing how they feel.

Other psychological explanations of the connections may also be attempted. For example, sometimes inconceivability can be psychologically explained by the target being too complex for our cognitive abilities, or involving unknown concepts or unknown phenomenal qualities not comparable to any we have previously experienced (such as the phenomenal qualities associated with bat sonar navigation (Nagel 1974), or "impossible colors", as discussed previously, that may be possible for, e.g., birds), rather than as a reflection of real impossibility. But the scenario of pain and pleasure necessitating different effects is just a simple recombination of already familiar qualities and relations. In addition, inconceivability based on psychological limitations typically have the character a lack of positive conceivability rather than a direct appearance of impossibility, and the inconceivability related to pain and pleasure clearly involves the latter.

### 5.3 Rational or Normative Connections

One might think we have difficulty conceiving of pursuing pain, or avoiding pleasure, not because it is impossible, but simply because it would be deeply irrational or immoral (Goff 2020).<sup>32</sup>. That is, the connections could be explained away as merely normative rather than causal.

According to one version of this view, we mistake this deep irrationality or wrongness for inconceivability: perhaps the wrongness of, e.g., pursuing pain makes it too unpleasant or uncomfortable to conceive of, or perhaps it is just far beyond anything we would normally consider that it appears impossible. But we could still conceive of it in principle.

According to another version, it is (at least partially) constitutive of rationality or morality to avoid pain and pursue/sustain pleasure (when we have no reason not to, i.e., *cp*). If so, it would be inconceivable that pain and pleasure have different effects on a *rational* or *moral* 

<sup>&</sup>lt;sup>32</sup> Jon Simon has also raised the same objection in conversation.

person, but this would again reflect only a constitutive connection (i.e., if a rational or moral person did not avoid pain and pursue pleasure, *cp*, they would not be rational or moral after all), not a causal connection.

In response to either version, first note that the relations between pain, pleasure and their effects could very well be *both* normative and causal, so there is no need to resist the view that not avoiding pain or not pursuing/sustaining pleasure (when there is no reason not to) is in some sense irrational or wrong.

Against the first version, claiming a confusion between inconceivability and wrongness, one can further press the inconceivability by challenging its deniers to try to conceive of the normatively wrong scenario despite the alleged discomfort or strangeness. The prediction will be that they are still unable to. Another point to consider is that it may be conceivable that anti-realism about values (moral or prudential) is true, or at least some theory of value according to which pain is not bad and pleasure is not good, is true. Conceiving of such a theory would not seem to make any difference to the conceivability of pain or pleasure having different effects, indicating that the latter is not grounded in normativity.

Against the second version, claiming that avoiding pain and pursuing/sustaining pleasure is constitutive of rationality (or morality), one could insist that this simply is not part of what "rationality" means, but this would just be a verbal quibble. A better approach is to grant that there may be (or allow the stipulation of) a concept of rationality of which avoiding pain (etc.) is constitutive—call this concept *rational<sub>hedonic</sub>*—and then ask: is it conceivable that any subject is *not* rational in this sense, i.e., is a non-rational<sub>hedonic</sub> subject really conceivable— assuming pain and pleasure necessitate their effects on subjects in virtue of how they feel? This seems as inconceivable as the original scenario and would establish the exact the same result, since it is really just a redescription of the same scenario.

#### 5.4 The Desire Theory

One might think pain and pleasure are merely constitutively related to their effects, based not on analytic functionalism but rather on the desire theory of pain and pleasure (also known as like/dislike theory or response theory) (Brandt 1979; Hall 1989; Heathwood 2007). According to this theory, we do not desire pleasure because it is antecedently good (phenomenally or otherwise); rather, pleasure is good because we desire it, and *mutatis*  *mutandis* for pain. Pleasures are thereby constitutively desired and pains are constitutively abhorred (i.e., desired against). Desires may in turn be constitutively connected to their goals, such as sustaining pleasure or avoiding pain. Together, this would result in a constitutive connection from pain and pleasure to corresponding efforts.

In response, note that one of the main motivations for the desire theory is the claim that there is no other plausible explanation of why pleasure is always desired and pain always abhorred. But otherwise, the desire theory is widely recognized as deeply counterintuitive, and even as directly appearing false: it clearly appears that we desire pleasure because it feels good and that abhor pain because it feels bad, rather than the other way around.

PP offers an alternative explanation of the same facts. For example, one might say that to desire pleasure is to be motivated to pursue it (cp) and this is explained by how pleasure feels—and similarly for pain and the desire to avoid it. PP thereby has the same explanatory power as the desire theory, while being far more intuitive and in accordance with how things clearly appear to be. It should therefore not be rejected in favor of the desire theory.

### 5.5 Pain Asymbolia

Pain asymbolia is a medical disorder where patients report feeling pain that "doesn't hurt" and they have no inclination to avoid. Rather, they react to it with indifference or even defiance. According to the standard analysis of this disorder, due to Grahek (2007) there is no good reason to doubt that this description of pain asymbolia is accurate, i.e., to think asymbolics are wrong to categorize what they are experiencing as pain, or that they must have some hidden motive to not resist it. If this is right, it seems pain cannot necessitate avoidance attempts after all, even in the absence of interference.<sup>33</sup>

However, pain asymbolia is compatible with a necessary connection involving pain in a narrower sense. If this sense were purely functionally or dispositionally defined, e.g., as "the kind of pain experiences that make subjects avoid it", it would reduce the connection to a

<sup>&</sup>lt;sup>33</sup> According to Grahek, pain asymbolia is also the clearest candidate case of pain and aversion coming apart other potential examples, such as morphine-induced experiences, are more easily explained away as too different from normal pain to truly be examples of it. I will therefore set other purported cases of disassociation aside.

merely conceptual or constitutive one. But there are indications that asymbolic pain can be distinguished from normal (i.e., non-asymbolic) pain by virtue of its phenomenology. That is, even though asymbolics identify what they are feeling as pain, asymbolic pain and normal pain still *feel* different: they are two different phenomenal experiences, which nevertheless have enough in common to both fall under the same general concept of pain.

This interpretation is supported by Grahek (see also Bain (2014)), who concludes that what pain asymbolia really shows is that normal pain, which appears as a simple and unified feeling, is really complex. Normal pain is a combination of two components: "On the one hand, there is pure pain sensation, and on the other hand, there is the pure feeling of unpleasantness, defying any further sensory specification" (Grahek 2007: 111). Furthermore, both components are phenomenal. Not only can the sensory component be experienced without unpleasantness, as in pain asymbolia. Unpleasantness is also a phenomenal quality (or a *feeling*, as Grahek describes it as quoted above), and it is also possible to experience unpleasantness by itself: there are reports of a condition opposite of pain asymbolia, where patients report having the experience of pure unpleasantness whose character they could not specify in any further detail (Grahek 2007: 108-111).

Alternatively, one might think that pain and pleasure have two (or more) phenomenal *dimensions* (see Moen 2013), rather than components—in the same way that colors have dimensions such as hue, brightness and saturations. In the case of pain asymbolia, the affective dimension (or hedonic tone, as it is often referred to) drops out or goes to neutral, whereas in the case of pure unpleasantness, the sensory dimension does.

In this way, pain is a bit like flavor. One might be surprised to learn that the experience of flavor has two phenomenal components, taste and smell. Even though flavor appears to us a unified experience, it is really a combination of qualities from two different modalities. But if we have a cold and lose our sense of smell, we might still say that food has flavor, only that the flavor is very dull. In the same way, asymbolic pain still counts as pain because one phenomenal component or dimension, the sensory one, is sufficient for the pain concept (or at least some legitimate version of it) to apply, although it is not sufficient to incline us toward avoidance. For that, the affective unpleasantness would also be required.

There is no evidence that people can have experiences which include an unpleasant/painful affective component without trying to avoid them (cp), so this kind of pain could still necessitate avoidance attempts. If the components are both phenomenal, this kind of pain could be individuated by how it, or its affective component, feels, rather than by its function or disposition, thereby avoiding collapse into any kind of analytic functionalism or dispositionalism.<sup>34</sup>

Given this, the claims and arguments that pain is a causal power should strictly speaking be reformulated in terms of *phenomenally normal* pain, understood as including the affective component (or negative hedonic tone), rather than pain in general. Or more simply, I will stipulate that by "pain" I mean "phenomenally normal pain", in both previous and all following arguments.

#### 5.6 Dependence on Beliefs or Attitudes

I have claimed that that pain makes all subjects try to avoid it, and pleasure makes all subjects try to pursue/sustain it, given the absence of interfering motives, but without any further conditions. One might think the connection depends on various further conditions, such as specific beliefs or attitudes, which prevent the connection from being necessary or causal after all, or that these conditions rather than the pain or pleasure are the real causes.

Firstly, one might think the connections depend on believing that pain (I set pleasure aside again, for simplicity) is dangerous, and that this belief rather than the pain itself is the cause of avoidance. But if so, we would not take painkillers for knowingly harmless headaches, <sup>35</sup> or accept anesthesia (and the small risk that always comes with it) at the dentist (and other places where anesthesia functions mainly to prevent phenomenal pain, rather than reflexes, tensions and so on).

<sup>&</sup>lt;sup>34</sup> Does this imply that the sensory part of pain has no causal power, only the affective part? Below, I will discuss what kinds of powers sensory phenomenal properties in general might have, and this could also apply to the sensory part of pain.

<sup>&</sup>lt;sup>35</sup> Some (e.g., Cutter and Tye 2014) try to explain why it is rational to take painkillers in other ways, but intuitively, we do it to avoid the pain itself, and there is no clear evidence against this.

Secondly, one might think the connection depends on specific attitudes (rather than beliefs) towards the pain, such as fear of the pain. The painkiller example may counter this too: people are typically not scared of headaches (or their physiological causes) but still try to avoid them by taking painkillers. Still, it clearly seems that fear of pain can make one's overall experience worse, as fear may have a repulsive power on its own, distinct from (and adding to) the repulsive power of pain.

A similar worry derives from Buddhism. Buddhist teachings may be interpreted as suggesting that, via practices such as meditation, one can learn to not be affected by pain at all, because aversion to pain is grounded simply in various attitudes towards it that meditation helps remove. But the effect of meditation on pain can also be understood in other ways compatible with PP. Firstly, meditation could remove aversion to pain by eliminating or changing the experience of pain itself, such that it no longer really constitutes pain at all. Second, meditation may remove fear and other attitudes that make our inclination to avoid pain stronger, but without removing our core aversion (thus, meditation just makes us less but not completely averse to pain). Third, it could produce a feeling of bliss and peacefulness much stronger than the pain so as to almost drown it out (and thus induce something that can be classified as a strong interfering motive).

If pain during meditation is experienced exactly as normal, however, but with absolutely no inclination to avoid it, this would be incompatible with PP. There will probably be some meditators who affirm this, but also others who deny it. Since meditators need not be regarded as infallible, ideal phenomenological observers or reporters (at least not all of them), the existence of some incompatible accounts cannot be regarded as decisive evidence against PP.

Another issue is that pain may only make subjects try to avoid it given that they believe avoiding it is possible. Someone experiencing a headache, for example, might at first try various things, such as painkillers, resting, trying to focus on something else, and so on. If none of this works, the person might just give up and accept the pain, without making any further attempts at avoiding it. More generally, the issue is that, as noted by Davidson: "we cannot intend what we know to be impossible" (1991: 4). Also, in addition to believing *that* whatever we intend or try is possible, we might also need a specific idea about *how* we could try to achieve it.

But even if there is such a requirement on volitions, it poses no fundamental threat to phenomenal powers. If trying to avoid pain depends on believing it is possible (and having some idea about how), this does not mean the belief itself would be sufficient to cause the trying—the pain will still be necessary. And as long as pain is not functionally defined as, for example, a desire which in combination with relevant beliefs about possibility will imply actions, then its powers depending on certain beliefs would not imply that the connection to efforts is constitutive or otherwise non-causal. Just as causation can depend on the absence of interference, it could also depend on the presence of background conditions, and beliefs about possibility might just be one of them.

### 5.7 Other Phenomenal Properties

I have defended PP as holding for pain and pleasure. But could the view also hold for other phenomenal properties? If not, one might think PP renders other phenomenal properties epiphenomenal or, alternatively, implies an objectionably disunified view of phenomenal causation, according to which some phenomenal properties are powers while others obey the regularity theory or the governing laws view.

PP can clearly be extended to other phenomenal properties that may be described as motivational or emotional (broadly speaking), such as those associated with hunger, fear (as already indicated), anger, love and so on. These experiences also clearly seem to have causal powers in virtue of how they feel.<sup>36</sup> For example, it seems hard to conceive of, e.g., anger feeling like love and still motivating aggressive behavior, in virtue of feeling like that.

It could also, potentially, be extended to conscious thought. According to the theory of cognitive phenomenology, thoughts are not purely functional, but are rather grounded in its own *sui generis* phenomenology (Pitt 2004; Bayne and Montague 2011; Kriegel 2015). If

<sup>&</sup>lt;sup>36</sup> Note that this claim does not presuppose psychological hedonism, i.e., that pain and pleasure are the only motivational experiences, and other experiences must be constituted by or conjoined to pain or pleasure to be efficacious. PP is compatible with such hedonism, but also allows that other phenomenal properties are efficacious in virtue of their own *sui generis* phenomenal character. Also note that emotions such as love and anger might have a cognitive or representational component that also makes some causal contribution in addition to their more sensory component (however, this cognitive component may also be phenomenally grounded, assuming cognitive phenomenology, to be discussed shortly).

thoughts have phenomenology, it could be regarded as having the functions it has in virtue of its phenomenal character in fundamentally the same way as pain and pleasure.

When it comes to sensory phenomenal properties, such as color and sound experiences, things are a bit less clear. At high intensities, these experiences can be painful or uncomfortable, as in the case of a loud sound or high heat, and thus have causal powers deriving from their painfulness. But at normal intensities, sensory phenomenal properties seem more motivationally neutral: they typically do not produce volitions on their own.

On the one hand, this could be because sensory properties actually *have* no causal powers on their own—they only have causal powers in combination with relevant beliefs. For example, given a belief that redness represents danger, phenomenal redness will motivate us to avoid the danger, but without any relevant beliefs, it has no effects. In other words, sensory phenomenal properties may actually be epiphenomenal on their own—though not in right combinations, which should be sufficient to avoid epiphenomenalism proper or in the objectionable sense—and this is why we do not experience them as intrinsically powerful considered by themselves.

It could also be that sensory phenomenal properties have the power to produce beliefs rather than volitions. Langsam (2011) argues that sensory properties have the intelligible power to produce beliefs about the external world (when attention is directed outwards) or about their own existence and nature (when attention is directed inward). By having the power to produce beliefs, sensory phenomenal properties can influence volitions indirectly, since these beliefs can cause volitions when combined with relevant motives.

Sensory phenomenal properties may also have direct motivational powers, i.e., powers to produce volitions, on their own. For example, it seems possible that phenomenal colors have very *weak* powers, which we do not notice because they are always drowned out by vastly more powerful emotional experiences that are always present to some degree at the same time. But if color experiences were had in complete isolation from other much more powerful qualities, we would notice their powers. For example, it might turn out that phenomenal redness is intrinsically exciting and phenomenal blueness is intrinsically calming (these particular associations might of course be entirely culturally contingent, but there could be others that are not).

Another issue is the causal powers of volitions or efforts. As mentioned, Hume claimed that this connection does not fulfill his criteria. This seems strictly correct: it does seem conceivable, and so on, that volitions fail to produce successful actions even assuming the absence of interference. But does this mean volitions cannot be powerful?

There is clearly *some* epistemic connection between volitions and corresponding actions. Volitions have an intrinsic directedness or intentionality, and it seems far from contingent that volitions at least *tend* to produce the actions they are directed at. One might think this is because volitions are dispositional properties constituted by the tendency to produce the actions they are aimed at. But volitions, or their directedness or intentionality, also seem to have a phenomenal aspect, as per the theory of phenomenal intentionality (Horgan and Tienson 2002; Mendelovici 2018) (which is closely related to the theory of cognitive phenomenology discussed previously). If so, the epistemic connection between volitions and corresponding actions could indicate that we do experience the phenomenal powers of volitions, but this experience is less revelatory of their powers than the experiences of motives such as pain and pleasure.

That the experience is less revelatory could perhaps be explained by the fact that, for the relation between volitions and actions, we only have direct access to one of the relata: the volition, which exists within our own minds, but not the action, which exists outside of it.<sup>37</sup> When it comes to the relation between motives and efforts, we have access to both relata, as they both exist within the mind, and, perhaps, in order to fully experience a necessary connection one must directly access all its relata. Given this, and the fact that we experience causal powers more fully in motivation (and can thereby verify the real possibility of causal powers in general), legitimizes inferring that volitions constitute powers as well, despite lacking a fully revelatory experience of this.

<sup>&</sup>lt;sup>37</sup> One might object that, when it comes to mental actions, such as calculating or remembering, we can also conceive of the volition without the successful result (cp), such as trying to remember but failing to. However, one might think mental actions always or at least often involve interactions with different brain modules that are not strictly speaking part of your conscious mind. This could explain why the experience is not fully revelatory even for mental action.

## **6** Implications

### 6.1 A New Response to Hume

The inconceivability argument for PP offers a new response to Hume's claim that we have no experience of causal powers. As noted, Hume's main argument against this presupposed the criteria of inconceivability and prediction—but there are different interpretations of what else went into it.

On a common interpretation, Hume adopted strict *concept empiricism*, the view that all concepts are derived from experience (or in his terms, that all ideas are copied from impressions). Given concept empiricism, if we have no experience of causal powers, we also have no concept of them, and so it is entirely meaningless to posit them.

The unconditional inconceivability argument offers a direct response to Hume interpreted in this way. According to this argument, our experiences of pain and pleasure directly satisfy his inconceivability and prediction criteria, as well as the related explanation criterion—at least in principle or for an ideal conceiver.

The conditional inconceivability argument, in contrast, would fail to offer an adequate response. According to this version of the argument, pain and pleasure satisfy Hume's criteria only on the assumption that these properties necessitate *some* effects and thereby constitute *some* causal power. But given concept empiricism, we cannot meaningfully make this assumption without already having experienced necessitation or causal powers. The conditional argument would therefore be circular as a response to Hume interpreted as a concept empiricist.

The unconditional version of the argument also faces the problem that unconditional inconceivability (and so on) may not hold for non-ideal conceivers like us, and it cannot be firmly demonstrated (but at best only plausibly speculated) that it holds for ideal conceivers. So, while this response to Hume interpreted as a concept empiricist is new—and perhaps among the strongest available not premised on rejecting concept empiricism itself—it may not be entirely solid.

But there is also different interpretation according to which Hume was not a strict concept empiricist after all (Read and Richman 2000; Kail 2008). Rather, he allowed that we may

have a "relative" idea or concept of causal powers that is not derived from experience, that specifies them roughly in terms of their explanatory or metaphysical role, but leaves open their nature, or how they are able to fulfill the role. That is, we may have a concept of causal powers analyzable roughly as "some property that (somehow) necessitates particular effects" or "something (I know not what) that grounds necessary connections". But we have no experience or positive conception of anything that could satisfy this concept.

From here, the interpretation can be split in two. According to *the agnostic interpretation* (Craig 1987), if we have no experience or positive conception of anything that could satisfy the concept, we are not justified in asserting that causal powers exist or are even possible, though we cannot deny it either. According to *the skeptical realist interpretation* (Strawson 2000), we are justified in asserting their existence (roughly based an inference to the best explanation for observed regularities), but we are completely ignorant about their nature.

The conditional inconceivability argument offers a direct response to Hume interpreted in either of these ways. According to this argument, the fact that pain and pleasure are inconceivable without their effects assuming they constitute necessitate *some* effects and thereby constitute *some* causal power shows that we experience properties that are least seem fully capable of satisfying the concept, and may also (defeasibly) appear to actually do so.

The unconditional argument would imply the same thing. But the conditional argument is easier to defend, and offers an equally good response to Hume on the agnostic or skeptical realist interpretation.

The kind of argument attributable to Hume on the agnostic or skeptical realist interpretation also seems more influential and significant today, given that strict concept empiricism has largely been abandoned (though see Prinz (2002) for a defense). The argument attributable to Hume on the agnostic interpretation, in particular, also maps closely onto the argument invoked by current day regularity theorists (see section 3.6) according to which positing causal powers based on an inference to the best explanation for observed regularities is unjustified without a positive conception to support their real possibility or bring concrete explanatory value. The conditional argument thereby offers a strong response to the arguably more forceful argument attributable to Hume, and in this way strengthens the contemporary case for realism about causal powers.

## 6.2 The Powerful Qualities View

PP also has implications for which version of the causal powers view should be accepted. There are three main versions of the causal powers view. *The mixed view* claims that some properties are powers, whereas others are qualities, and qualities are contingently related to their powers. *The pure powers view* claims that all properties are powers, and powers have no qualitative aspects or components (Mumford 2004; Bird 2007b, 2007a). *The powerful qualities view*, in contrast, claims that all properties are both powerful or qualitative (Martin and Heil 1999; Strawson 2008).

PP implies that phenomenal properties are both powerful and qualitative. But the relation between these features can be understood as different from what is standardly posited by the powerful qualities view. The standard version of the powerful qualities view takes qualities and powers to be symmetrically related: they are both co-fundamental and neither is grounded in the other. On one version, powers and qualities are identical (Martin and Heil 1999); on another, they are distinct but symmetrically related *aspects* of the same property (this version is often discussed but seldom defended).

According to PP, phenomenal properties are essentially and fundamentally qualitative, and their powers can be understood as *grounded* in their qualities. Grounding can be defined as a relation of metaphysical determination and explanation, which is asymmetrical (the ground explains the grounded, not vice vera) and necessary (if talking about full rather than partial grounds) (Schaffer 2009; Fine 2012). Given PP, phenomenal properties, *qua* qualitative, *constitute* causal powers, in the sense that they fit the description, or play the role, of necessitating their effects, and constitution is typically regarded as a form of grounding.<sup>38</sup>

The relation between phenomenal properties and their powers is also asymmetric in that is possible to derive the powers of pain from its qualities (as per the prediction criterion), but it does not seem possible to infer the quality of its pain from its power. For example, someone like Maya who has not (yet) experienced pain cannot deduce how it feels from being told what kind of power it has, she must directly experience it—in the same way that Jackson's

<sup>&</sup>lt;sup>38</sup> At the same time, when X constitutes Y, one may often say that X *is* Y; hence, it would not be incorrect to say that phenomenal properties *are* powers, either.

Mary (Jackson 1982) cannot deduce what it is like to see red from any non-phenomenal information (including information about powers) but must rather directly experience it.

The view that qualities ground powers has previously been proposed or defended by Coates (2020, 2023); Tugby (2021); and Builes (2024). The case of phenomenal properties has also been pointed to as illustrative of how a property can be both powerful and qualitative (Jacobs 2011; Tugby 2012; Van Gulick 2016; Coates 2020). Both the grounding view and pointing to phenomenal properties as illustrative may serve to answer an important objection to the powerful qualities view (Taylor 2017), according to which it is difficult to make sense of how one and the same property can have two separable aspects or components, without really splitting into two.

By pointing to the connections of inconceivability, prediction and explanation – which have not otherwise been invoked in support of either the grounding view, the powerful qualities view in general, or any phenomenal illustration of it – PP offers additional details about *how* exactly phenomenal properties appear both powerful and qualitative, how they could ground powers *qua* qualities, and why this is indeed the correct description of them.

It thereby supports that the powerful qualities view, and the grounding version in particular, is both coherent and correct—or at least correct for phenomenal properties. But on the assumption that all properties have the same fundamental nature, it would support that the view holds generally.

## 6.3 Pan(proto)psychism

I have already addressed Hume's objection to mental powers according to which the connection from volitions to actions fails to satisfy his criteria: PP may grant this because it only claims that we experience (at least in a fully revelatory way) a necessary connection from phenomenal properties to volitions, not from volitions to actions.

But he also had another objection relevant also to non-volitional powers.<sup>39</sup> According to this objection, we cannot experience mental powers because it would imply a form of

<sup>&</sup>lt;sup>39</sup> As well as not based on theological premises. Hume also had several objections of this kind, but here I will leave them aside.

panpsychism, i.e., that all things have mental or phenomenal properties. More specifically, Hume considers the experience of exerting effort against physical resistance, and claims that this experience is in fact the basis for an idea of causal power. But he dismisses this idea as "vulgar" and "inaccurate", for the following reason:

It may be pretended, that the resistance which we meet with in bodies, obliging us frequently to exert our force, and call up all our power, this gives us the idea of force and power. It is this nisus or strong endeavour, of which we are conscious, that is the original impression from which this idea is copied. But, first, we attribute power to a vast number of objects, where we never can suppose this resistance or exertion of force to take place; [...] to inanimate matter, which is not capable of this sentiment. (Hume 1999: 139, fn 13)

That is, if we experience mental powers—and no other kinds of powers—then positing causal powers everywhere is equal to positing mental properties everywhere, including in inanimate matter. But inanimate matter cannot have mental properties (i.e., be capable of "sentiment"). Therefore, we cannot experience mental power after all.<sup>40</sup>

Could there be an implication from PP to panpsychism, as suggested by this objection? There are at least two ways this could be supported. First and most obviously, one could invoke concept empiricism, to argue that if we only experience phenomenal powers, and all concepts are derived from experience, then we cannot meaningfully posit any non-phenomenal powers. But this argument can of course be easily dismissed simply by rejecting concept empiricism.

Another, less easily dismissible, argument is based on the reasoning attributed to Hume on the agnostic interpretation, as well as current day regularity theorists, according to which we may have a primitive concept of causal power roughly as "the kind of property that necessitates particular effects". But in order to be justified in positing such properties, we need a positive conception of something capable of satisfying the concept. If phenomenal properties are able to satisfy the concept, but no (positively conceivable) non-phenomenal properties are—at least not in the sense of (conditionally) satisfying the inconceivability, prediction and explanation criteria, and if these criteria are satisfied by phenomenal powers,

<sup>&</sup>lt;sup>40</sup> See Mørch (2019a) for an overview of other philosophers who have also made a connection between experience of mental powers and panpsychism, either in support of latter, or as a *reductio* of the former.

they should arguably also apply to a conception of non-phenomenal powers—then we are not justified in positing non-phenomenal powers but only phenomenal powers.

In response, a proponent of non-phenomenal powers could reject the premise that we should not posit properties without a positive conception of them, i.e., posit causal powers with an unknown nature. One problem with this response is that it may not be fully compatible with physicalism. Physicalism is standardly defined as the view that all fundamental properties can be exhaustively described by physics (or some completed/future physics roughly continuous with ours) (Braddon-Mitchell and Jackson 1996; Chalmers 1996), and unknown powers are (*qua* unknown) outside of physics.<sup>41</sup> One might hold metaphysical properties such as powers are not at odds with the spirit of physicalism, even if they strictly fall outside physics. But if the nature of physical powers is completely unknown,<sup>42</sup> how can it be ruled out that their nature is really phenomenal, or otherwise not in the spirit of physicalism?

Another response is to argue that non-phenomenal powers are not completely unknown, but rather positively conceivable on the basis of phenomenal powers. That is, from our concept of phenomenal power, we can abstract away a concept of non-phenomenal power with positive content, and this content may even align sufficiently with physicalism.

However, by taking the concept of a phenomenal power and abstracting away the phenomenal, one is not left with much positive content at all, or at least not any that suffices to generate connections of inconceivability, and so on. For example, one might think of a physical power as analogous to pain except somehow not experienced. But there is nothing

<sup>&</sup>lt;sup>41</sup> Alternatively, there is the negative definition (Montero and Papineau 2005). according to which physicalism requires that all fundamental properties are fundamentally non-mental, as well as fundamentally non-protomental, and without other attributes not in the spirit of physicalism. Unknown powers also fit uneasily with physicalism in this sense, precisely because, if unknown, we cannot be sure they have no such attributes.

<sup>&</sup>lt;sup>42</sup> Typically, it seems, physicalists who are also realists about causal powers assume that physical causal powers can be fully captured by a description such as "the property of being directed towards repulsion" or similar, which if exhaustive would rule out any mysterious nature incompatible with the spirit of physicalism. However, this would not satisfy the criteria for a positive conception of causal powers assumed by the inconceivability argument (i.e., it does not describe or point to a property distinct from but inconceivable without, and predictive/explanatory of, repulsion). And if such a criterion is fulfilled by phenomenal powers, one at least needs to explain why it should not also hold for physical powers.

clearly inconceivable about *unexperienced* pain not necessitating avoidance, nor anything else. And to the extent that there is, such properties would seem more accurately described as *protophenomenal*—in the sense of non-phenomenal but more continuous with the phenomenal than any other known properties—rather than physical.

In this way, PP is at least clearly suggestive of a form of panpsychism or panprotopsychism, or alternatively, a kind of "mysterianism" about the nature of physical powers,<sup>43</sup> which may not be fully compatible with physicalism. At least, this is a challenge to those who accept phenomenal powers but want to resist both pan(proto)psychism and positing unknown powers.

To the extent that a form of pan(proto)psychism does follow, however, this need not be regarded as an objection to the view. In recent years, a form of pan(proto)psychism—known as Russellian monism—has been widely defended as a viable solution to the mind–body problem that may avoid the main problems of both physicalism and dualism (Strawson 2006; Alter and Nagasawa 2012; Chalmers 2013; Goff 2017). Briefly, unlike physicalism, Russellian monism does not reduce the phenomenal to the non-phenomenal (it is rather fundamental or reducible to the protophenomenal only), but unlike dualism, offers them it a causal (or explanatory) role compatible with physical causal closure as the intrinsic relata or categorical grounds of physical properties.

One might worry, however, that PP is not compatible with this kind of pan(proto)psychism, but rather only with less defensible kinds. Briefly, Russellian monism claims that all physical properties are relational or dispositional. But relations require relata with intrinsic properties, and dispositions require categorical grounds. Phenomenal properties are intrinsic and categorical, and the only such properties we know. Phenomenal or protophenomenal properties should therefore be posited the intrinsic relata of all physical relations, or the categorical grounds of all physical dispositions.

<sup>&</sup>lt;sup>43</sup> The term *mysterianism* is used to describe McGinn's (1989) view that the physical properties that explain phenomenal consciousness are unknown or "noumenal". In a similar way, it could describe the view that physical causal powers are unknown.

If dispositional properties are understood as powers, and categorical properties are understood as wholly non-dispositional, there would be a conflict between Russellian monism and PP. PP claims that phenomenal properties are powers and physical properties are not. It would follow that phenomenal properties are dispositional, not categorical, and that physical properties are non-dispositional, contrary to Russellian monism.

But given Russellian monism, dispositional properties can also be understood in a purely relational sense, as discussed in section 2 (this is supported by the fact that the claim is all physical properties are relational, or structural, is often put forth by Russellian monists as interchangeable with the claim that they are dispositional). Accordingly, physical properties could be considered dispositional even if not powerful.

Categorical properties, on the other hand, can be understood as non-relational (i.e., intrinsic), or at least not *purely* relational, rather than as non-powerful. They can also be defined as qualitative, which is compatible with also being powerful (as per the powerful qualities view), just not with being *purely* powerful. As emphasized, phenomenal powers are qualitative as well as powerful, and although they ground relations, or dispositions in the relational sense, they are not constituted by them. Thus, they can be classified as categorical rather than dispositional. This resolves the apparent conflict with Russellian monism.

To the extent that PP suggests pan(proto)psychism, then, this need not be regarded as a problem, but could rather be defended by appeal to the arguments for Russellian monism.

## 7 Conclusion

The phenomenal powers view (PP) claims that phenomenal properties—most obviously pain (or phenomenologically normal and affective, and hence non-asymbolic, pain) and pleasure, but plausibly all other kinds of phenomenal properties as well—(metaphysically) necessitate their effects, *ceteris paribus* or in the absence of interference from competing motives (and perhaps also the presence of background conditions, such as beliefs about possibility).

I have supported this by two arguments, the inconceivability argument and the harmony argument. According to the inconceivability argument, pain and pleasure are inconceivable without trying to avoid it or pursue/sustain it (cp), respectively, at least on the assumption that they necessitate *some* effects in virtue of their phenomenal character (without specifying

which effects). They also predict their effects without induction, and explain them without appeal to regularities, given the same assumption.

The unconditional version of the argument claims that for an ideal conceiver, pain and pleasure would satisfy these criteria even without the assumption (i.e., that they necessitate *some* effect), or equivalently, that it is ideally inconceivable that the assumption is false.

The conditional version assumes the criteria can only be satisfied conditional on the assumption, and that the assumption is conceivably false (even ideally). According to the argument, this still shows that we have a positive conception of how pain and pleasure *could* necessitate their effects, and perhaps also that they *appear* to necessitate them (where the appearance is defeasible, but not defeated).

Second, there is the harmony argument, according to which the assumption that phenomenal properties necessitate their (unspecified) effects in virtue of how they feel (i.e., PP generally stated) predicts and explains why pain causes avoidance in particular and pleasure causes pursuit/attraction in particular. This offers the best explanation of why these laws are as (harmonious as) they are and not otherwise.

The inconceivability argument can also respond to Hume's arguments against us having any experience of causal power. The unconditional inconceivability argument offers a direct response to Hume interpreted as a strict concept empiricist, according to which our experiences of pain and pleasure fully satisfy his criteria for an such experience—at least in principle or for ideal conceivers.

The conditional argument offers a response to Hume interpreted an agnostic, according to whom we may have a concept of causal power not derived from experience, but without experience or other source of a positive conception, we are not justified taking this concept to be satisfied or even satisfiable by anything in reality. According to the conditional argument, the fact that pain and pleasure satisfy Hume's criteria in a conditional way shows we experience something that could satisfy the concept.

PP thereby strengthens the case for realism about causal powers. It also supports the powerful qualities view with regards to the nature of causal powers; in particular, the version whereby

powers are grounded in, rather than identical to or a symmetric aspect of, corresponding qualities, since phenomenal powers seem to have this structure.

Since only phenomenal properties seems to satisfy the criteria, even conditionally, PP also suggests either that the nature of physical powers is mostly unknown or that all causal powers are phenomenal or at least protophenomenal. But this should not be regarded as problematic, as phenomenal powers are fully compatible with Russellian monism, which can be considered a highly defensible theory of the relation between the phenomenal and the physical.

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