

Property Dualism, Epistemic Normativity and the Limits of Naturalism

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ABSTRACT

This paper examines some consequences of the (quasi-)epiphenomenalism implied by a property dualistic view of phenomenal consciousness. The focus is upon the variation of phenomenal content over time. A thought-experiment is constructed to support two claims. The weaker claim exhibits an incompatibility which arises in certain logically possible situations between a conscious subject's epistemic norms and the requirement that one be aware of one's conscious experience. This could be interpreted as providing some epistemic grounds for the postulation of bridging laws between the physical/functional and phenomenal domains. The stronger claim has it that the ontology of property dualism is not properly able to account for the certainty I have of being phenomenally conscious. The problem is viewed as resulting from the neglect of the intensional context involved in a proper representation of the argument for property dualism. It is argued that only a transcendental move can do justice to this certainty I have.

Keywords: Phenomenal consciousness, property dualism, transcendentalism, naturalism

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This paper examines the implications of the (quasi-)epiphenomenalism that is implied by property dualistic views of phenomenal consciousness (Chalmers, 1996; Robinson, 2004), as well as by the monistic metaphysics of pan-protopsyhism (Strawson, 1999). For most of the paper, I shall focus upon Chalmers's theory, but the argument also applies to these other views. Rather than address issues directly connected with the causal isolation of phenomenal consciousness, I shall be concerned with the epistemology of our access to conscious experience. A thought experiment is constructed to show that such access requires a relation of dependence between the psychological and phenomenal dimensions of our consciousness. This leads to two possible conclusions. The weaker one is that such dependence tells us something about the epistemology of phenomenal experience. In particular, it could provide epistemological grounds for an assumption made by Chalmers about the natural link between physical/functional properties and phenomenal properties in a property dualist metaphysics. The stronger one is that property dualism requires these

additional dependence assumptions to account for the phenomenal knowledge it is grounded upon.

Chalmers's argument

In 'The conscious mind', David Chalmers (1996) develops a multifaceted argument to show that the phenomenal nature of conscious experience is not reducible to functional properties of a physical substance. For Chalmers, this conclusion is inevitable if one is to 'take seriously' the justified belief that we are phenomenally conscious (what he calls 'phenomenal realism'). The argument turns, in particular, on the logical possibility of zombies that share their physical/functional relational properties (hereafter P/F properties) with us, but experience no phenomenal properties (hereafter Φ properties). It can be summarized as:

- (1) Zombies are conceivable ('epistemic gap')
- (2) If zombies are conceivable, they are (metaphysically) possible
- (3) Zombies are possible ('ontological gap')
- (4) Φ -properties do not logically supervene upon the P/F realm.
- (5) There are non-P/F properties.

This conclusion is generally taken to mean that physicalism is false.¹

(2) has been the most debated premise (e.g. Tye, 1995, Levine, 1993, Loar, 1997, Papineau, 2002)², but the more fundamental divide is with those philosophers who reject premise (1) (e.g. Dennett, 1991, 2005, Churchland, 1996). The grounds for rejecting premise (1) amount to the claim that it is a misunderstanding of the phenomenal which gives rise to the belief that zombies are possible. And the error, it is argued, is analogous to that made by vitalists who claim that a system could have all the appropriate biochemical properties without being alive. The mistake is to assume there is something ineffable (Dennett, 1988) that remains unaccounted for, once a description of what it is to be conscious has been given in terms of P/F properties. The claim is therefore that the phenomenal can and must be conceptualized in terms of functional features of a physical system. I shall not examine these various criticisms, but take premises (1) and (2) are true, and assume that the argument is valid as it stands.

Note that Chalmers's PD includes the following additional claim. If the property of psychological awareness (hereafter Ψ -awareness) characterizes 'a state wherein we have access to some information, and can use that information in the control of

behavior' (Chalmers, 1996, p. 28), properties of Ψ -awareness are assumed to logically supervene upon P/F properties. They are therefore *independent* of Φ properties. This supervenience claim is however not fundamental to PD; I shall indicate where I make use of it.

A key feature of PD is that it rests upon the assumption that we have a justified belief that we are phenomenally conscious. This has implications for the relation between Ψ -properties and Φ -properties. For it requires that we have cognitive access to, i.e. that we be *Ψ -aware of the contents of our Φ experience* (Chalmers, 1996, p.221). This does not imply that 'to have an experience is automatically to *know* about it' (ibid., p.197). Rather, 'we have the ability to notice our experiences' (ibid., p.221), i.e. to make the contents of our Φ experience into the object of a cognitive belief. Such a belief corresponds to what Chalmers calls a second-order phenomenal judgment, such as the judgment that my Φ experience is currently that of a red object. This is a judgment about the content of the first-order phenomenal judgment 'It's red'.

Such phenomenal judgments and their verbal expression lead to difficulties that Chalmers discusses at some length. One of these concerns the *issue of self-knowledge*. Φ -properties are irrelevant to the causal explanation of behavior, on the assumption of the closure of the physical realm³: this is the quasi-epiphenomenalism of Chalmers's position.⁴ And Chalmers notes the difficulties raised by this quasi-epiphenomenalist position: 'for second- and third-order phenomenal judgments (...), explanatory irrelevance seems to raise real problems' (ibid., p.182). Indeed, given the zombie has identical behavior to mine, he therefore makes the same claims about being Φ -conscious (causal closure of the physical realm), and, on the assumption of logical supervenience of Ψ upon P/F properties, he forms the same phenomenal judgments⁵ as I do. How do I know, therefore, that I am not a zombie? Chalmers answers that it is precisely because I *have* Φ experience. This provides the *epistemic warrant* for my belief. Such a warrant characterizes the epistemology of conscious experience. Below, I shall identify a logically possible situation which raises problems for this epistemology.

Thought-experiment

Consider Mary, Lucy and Lucy₁ who are identified as follows. Similarly to Jackson's (1982, 1986) famous scientist, Mary (who, for this argument, does not need to have perfect physical knowledge) is here assumed to have been brought up in a secluded

black and white part of the real world. At time T , while she is looking at a black-and-white rose, she is instantaneously transported out of her colorless isolation for the first time, finds herself looking at a red rose. Her real-world sister Lucy has not suffered such isolation and had a normal upbringing in the real world. She has been looking at the red rose before and after T . But Lucy has a twin-sister $Lucy_1$ ⁶ living in a possible world W_1 defined as follows: it is identical to our world W , but for the fact that before T , visual Φ -properties are all black and white (see figure 1). PD tells us that $Lucy_1$ does not report anything new at T when looking at the rose. This is because Lucy's behavior is identical to $Lucy_1$'s since these two twin-sisters have identical physical properties. Thus, if at time $T' > T$, all three are asked the question: 'Did you experience a change in your phenomenal experience at time T ?', Mary is the only one who will answer positively. However, intuitively, $Lucy_1$'s situation is more akin to Mary's than to Lucy's.

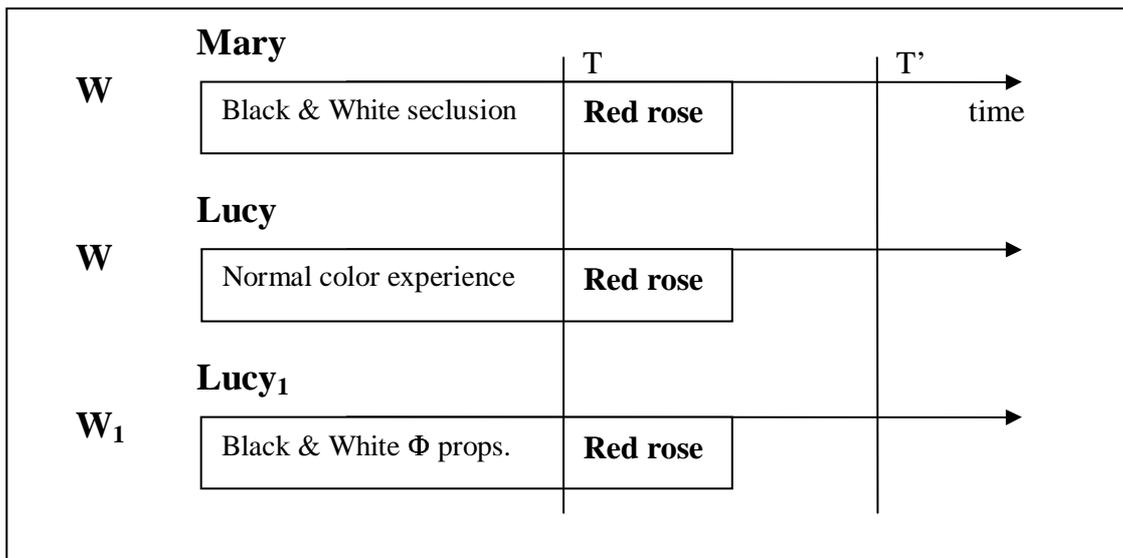


Figure 1

The counter-intuitiveness of this result is, as such, no objection to PD. But consider $Lucy_1$'s mental states. As noted above, we have Ψ -awareness of our Φ experience. That means that the Φ experience of a red rose is available for the formation of a phenomenal belief and the expression of a phenomenal judgment. $Lucy_1$'s phenomenal experience during the interval $[T-\Delta T, T+\Delta T]$ is apparently that of a change in the properties of her Φ experience featuring the novelty of the experience of 'red'.

Let us therefore *assume that Lucy₁ has a phenomenal experience of the change during [T-ΔT, T+ΔT]*. No verbal report can express the experience of such change: since Lucy₁'s phenomenal reports, as her behavior, supervene upon the P/F domain, they are identical to Lucy's. But if Lucy₁ is Φ-conscious of a change in the phenomenal properties she is experiencing, she can be Ψ-aware of this change. This leads to a potential conflict among Lucy₁'s beliefs. At time T', Lucy₁ is expressing the belief that there is no change at T. Since she can be Ψ-aware of a change, she can therefore hold the belief that there is a change at T. That is, Lucy₁ is potentially simultaneously holding two contradictory beliefs, or expressing one belief in good faith, while holding the opposite belief to be true.⁷ But this is not rationally possible, i.e. the epistemology of conscious experience is not compatible with such a discrepancy among her beliefs.⁸ By this, I mean that in such a situation, it is not possible for the subject to have proper epistemic access to her phenomenal experience. So this first interpretation clashes with *epistemic normativity*. We note that this interpretation is also not allowed if one accepts that properties of Ψ-awareness supervene upon P/F properties. Indeed, there could be no Ψ-awareness of a Φ change in that case.

The only way of resolving the incompatibility would be to assume that it is not possible for Lucy₁ to be Ψ-aware of the change in Φ properties she experiences. Lucy₁'s Ψ-awareness is thus apparently "malfunctioning" when compared with Lucy's. Although a state of Ψ-awareness denotes an access to information which may be prone to errors for various reasons, a mental state cannot be described as providing access to some information if the information is never available. Since Lucy₁ is in the situation of not being able to have access to the information that there has been an alteration of Φ properties, she is not able to be Ψ-aware of her phenomenal experience at time T. This result is however incompatible with Chalmers's claim that we can be Ψ-aware of the contents of our Φ experience. This claim must apply to any logically possible situation in which there is Φ-consciousness, and therefore to Lucy₁'s case.⁹ We find that this interpretation of the situation clashes with the *requirement of Ψ-awareness of the content of conscious experience*. Note that this requirement, insofar as it is the requirement of a "proper" access to information, is intrinsically normative, the normativity being that implied by the correct grasp of informational content. Lucy₁'s situation has thus identified an incompatibility in a logically possible situation between the basic *norms of rationality* and the requirement of the possibility

of Ψ -awareness of the content of our conscious experience. I shall refer to the claim that there is such an incompatibility as the **Incompatibility claim** or **claim A**.

Another consequence of the situation $Lucy_1$ finds herself in (whether we assume that she is Ψ -aware of the phenomenal change or not), is that, although she claims to know certain truths about her Φ experience, many such claims are not justifiable. More specifically, if we consider Lucy's claim that the Φ properties of her conscious experience do not change at time T, it is not well grounded. This is because $Lucy_1$'s identical claim is false and Lucy cannot know she is not $Lucy_1$. The uncertainty thus concerns all claims about the nature of her Φ experience, i.e. what Chalmers (1996) refers to as second- and higher-order phenomenal judgments. Lucy's first-order phenomenal judgments, i.e. those which directly express a Φ quality that is being experienced, remain arguably reliable, although only insofar as they are instantaneous. Whether such instantaneous judgments are actually possible depends to a certain extent upon one's understanding of time, an issue I shall not examine here.¹⁰ For the sake of simplicity I shall describe the uncertainty as characterizing Lucy's Φ judgments in general.

Note that the situation is different from that of the identical judgments made by my zombie-twin and myself which Chalmers considers. Here, Lucy and $Lucy_1$ are both Φ -conscious so no appeal to a privileged epistemic situation can ground Lucy's belief she is not experiencing variations in her phenomenal properties, i.e. so called *dancing qualia*.¹¹ And yet, Lucy's justified belief that she is Φ -conscious, should involve a knowledge of whether Φ -properties change or not. Since it cannot, it would appear that the fundamental assumption upon which PD rests, i.e. the certainty of being Φ -conscious, is not adequately represented within PD. I shall refer to the claim that the certainty of one's Φ judgments is not properly represented within PD as my stronger **Uncertainty claim**, or **claim B**.

Before examining the implications of these claims, I shall consider some objections to the argument.

First objection

One may query the assumption I have made *that $Lucy_1$ has a phenomenal experience of the change in Φ properties*. If there were no such experience, there would be no

requirement to have Ψ -awareness of its content, and the identity of $Lucy_1$ and Lucy's Ψ -properties would no longer be problematic.

To specify the claim that is at the core of this objection, we must look into what is involved in the epistemology of phenomenal experiences. Chalmers (2003, 2004) distinguishes between different types of phenomenal concepts and associated phenomenal beliefs. Suppose I am looking at a red apple. Four concepts of phenomenal redness can be distinguished. The 'community relational concept' *red-c* is 'the phenomenal quality typically caused in normal subjects within my community by paradigmatic red things'. The 'individual relational concept' *red-_I* is the 'phenomenal quality typically caused in me by paradigmatic red things'. The demonstrative phenomenal concept *E* refers to the phenomenal property of that which is the object of the subject's ostension (here, phenomenal redness). Finally, there is the *pure phenomenal concept* *R* that refers directly to the phenomenal property, i.e. 'in terms of its intrinsic phenomenal nature' (ibid.). This concept is *direct* insofar as it is not mediated. Corresponding to this concept *R*, is a *pure phenomenal belief* which is *direct*, i.e. the belief that one's experience is *R*.

When Mary comes out of her black and white isolation, the knowledge she acquires is that the experience she is now having has 'such-and-such quality', where "such-and-such" refers to the content of concept *R*. The content of this knowledge can therefore be encapsulated in the proposition $E=R$. Other knowledge that she also acquires is that of the truth of the following propositions: $red-c = R$ and $red-I = R$.

The objection I am considering is motivated by Chalmers's claim that 'the lifetime of a direct phenomenal concept is limited to the lifetime of the experience (or the instantiated quality) that constitutes it' (2003). One can argue that there can be no direct phenomenal concept of a temporal variation of an instantiated quality if such a concept only picks out a quality that is exactly contemporary with the concept. As above, this appeals to a notion of instantaneity one might resist on the grounds of one's theory of time; it is also somewhat implausible in the light of basic psychological facts about perception¹², but I shall endorse it for the sake of argument. On this assumption, the proposed objection can now be seen as providing a clear challenge to the assumption I have made so far, namely that Lucy has a phenomenal experience of the change in Φ properties. For, if there is no direct pure phenomenal concept of such a change, it might seem that there cannot be any intrinsic property

corresponding to the alteration of the Φ experience. This would imply that there is no requirement of Ψ -awareness of such a change.

But this would amount to assuming that there can be no pure phenomenal concept when there is no direct pure phenomenal concept. One must then ask, how is it that Mary is aware of changes in the Φ properties she is experiencing as a result of her move out of her black and white isolation? Since the direct phenomenal concepts that contain her black and white experiences are no longer accessible, there must be another story as to how it is possible for her to remember her past experiences and compare them to her current colored Φ properties.

To explain this, Chalmers introduces another type of pure phenomenal concepts that are not direct. These are *standing* phenomenal concepts, which make up the content of *standing* phenomenal beliefs. These concepts are formed on the basis of past experiences, e.g. what it is like to see a red tomato. And Chalmers (ibid.) claims that 'beliefs involving standing phenomenal concepts will inherit justification by a priori inference from direct phenomenal beliefs'. Therefore, the belief that my current phenomenal experience is different from the one I had a moment ago involves a direct phenomenal concept of my current experience and a standing phenomenal concept of my former experience. It is justified because of the constitution of the first belief by experience and of the second by constitution of a belief through experience together with a priori inference.¹³

If we look at Lucy₁ after T, we find that she holds a standing belief about her experience before T, B_{T-}, and another pure belief (standing or direct) about that after T, B_{T+}. She should therefore be in a position to judge that the contents of these beliefs B_{T-} and B_{T+} are different. That is, we do find after all that Lucy₁ ought to be Ψ -aware of the change in Φ properties. But this clashes with the impossibility of formulating any phenomenal judgment about this change.

As previously, there are two ways of interpreting the situation. If we assume that Lucy₁ is Ψ -aware of the difference in the content of these beliefs, we end up in a situation where Lucy₁ has contradictory beliefs, which is incompatible with *epistemic normativity*. As before, if we accept the claim of logical supervenience of Ψ -awareness upon P/F properties, this interpretation is not valid.

If we rather assume that Lucy₁ has no Ψ -awareness of the phenomenal change at T, this means that she does not have a proper grasp of the content of at least one of the

two beliefs B_{T-} or B_{T+} (since she cannot differentiate these contents). Since this is systematic and cannot therefore be due to faulty memory impinging upon the constitution of B_{T-} , it means that there is a “malfunctioning” of her Ψ -awareness insofar as she is not properly aware of the content of the Φ experience before T or after T (or both). This is incompatible with Chalmers’s claim that it is possible to be Ψ -aware of the content of any Φ experience. So we have a clash with the *requirements of Ψ -awareness of conscious experience*. As before, this claim is intrinsically normative insofar as it involves pointing out the required correctness of the grasp of a certain informational content. This upholds the Incompatibility claim (claim A).

The argument for the Uncertainty claim (claim B) then follows as previously since Lucy cannot be sure of not being $Lucy_1$.

Second objection

The previous discussion throws up a second possible objection to the Uncertainty claim (claim B). The PD proponent could retreat to a position in which my certainty of being Φ -conscious is indeed whittled down from a certainty in my usual Φ judgments,¹⁴ to a minimal justified belief in the existence of something, although I should have doubts about anything that could be said about it. This PD position would be unassailable for anyone who accepts Chalmers’s claim against the eliminativist, that once all the functions have been accounted for, there remains *something it is like* to be conscious. And this is the bone of contention between PD on the one hand, and the eliminativist (and the closely related reductive functionalist) position on the other. To this, I would respond that this view is practically indefensible since it is not possible to believe anything reliable *about the something* in question (barring instantaneous beliefs, which are dubious entities anyway). That is, the disconnection between the phenomenal and my cognition would render the basic claim of being justified in believing one is Φ conscious unable to account for the certainty which, in my everyday life, I take truths about Φ properties and their interrelations to be endowed with.¹⁵ This would severely damage the case for PD.

Third objection

The Uncertainty claim (claim B) is grounded upon the relevance to the epistemic status of Lucy’s phenomenal knowledge, of the consideration of a logically possible

world such as that inhabited by $Lucy_1$. To require Lucy to be justified in believing she is not $Lucy_1$ might seem like requiring me to be able to exclude the logically possible scenario that I am a brain in a vat for my statements about the external world to be justified. I do in fact believe I am justified in making statements about the external world. Similarly, on this view, I am justified in claiming to have beliefs about my Φ experience within PD.

This is an important objection which cannot easily be dismissed. My response is that there is an important difference between the two kinds of epistemological situations. The brain-in-the-vat hypothesis has to cope with many constraints resulting from the corroboration in the public domain of my statements about an external world. So the brain-in-the-vat is a very tightly constrained hypothesis that cannot be excluded on the best possible evidence. On the contrary, the epiphenomenal status of Φ -consciousness allows the wildest variations of Φ properties to take place without any impact upon my behavior. There are many possible scenarios that cannot be excluded. The lack of specific constraints upon these scenarios rather isolates the purported actual scenario. This is characterized by constant Φ properties for given P/F properties, or the *co-variation of Φ properties with P/F properties for a given subject* (i.e. that Φ properties only vary when P/F properties ‘relevant’¹⁶ to that subject do). On what grounds do we assume such co-variation?

A plausible answer lies in its representing the simplest possible theory accounting for the evidence. In the same way, arguably, we assume that any portion of reality that is not perceived by anyone does not momentarily disappear or vary in ways which are at odds with its behavior when perceived. The assumption of co-variation of Φ properties with P/F properties is however not obviously simpler. Imagine a great variety of fast moving patterns. The assumption that the actual Φ properties do not change throughout is arguably simpler than that of co-variation.

At this point, it seems that the objector should claim her assumption of the co-variation of Φ properties with P/F properties is the most “natural” as regards the judgments we form about our Φ experience. That is, the reason why skepticism about the claim that we have reliable access to Φ properties is misplaced is because the most “natural” hypothesis is that Φ properties vary with P/F properties, so that when we form the judgment that something has changed color, it actually has. Any other

hypothesis as to the nature of Φ properties would, on this account, have to be motivated by something like an evil-demon assumption.

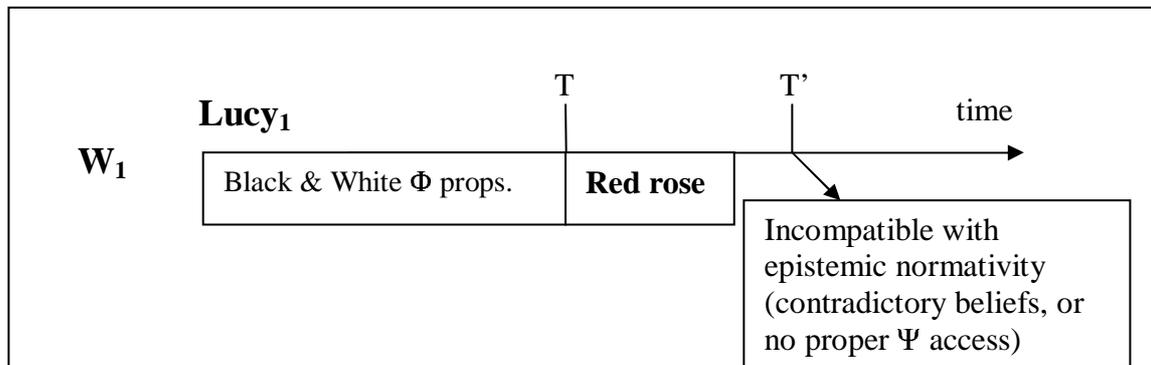
This objection however overlooks the extent to which the (quasi-) epiphenomenalism implied by PD is problematic and counter-intuitive, as Chalmers (1996, p.150) himself points out. In PD, Φ properties are not relevant to accounting for the judgments which are made about them. On what grounds would one view the co-variation assumption as the most “natural” one?¹⁷ To reinforce the point, one need only compare the reductive functionalist account. This has the advantage that it allows for the experience of the redness of the tomato to be the trigger for the desire to eat it for instance, and that the foul taste of the moldy bread triggers disgust (e.g. see Dennett’s heterophenomenology, 2005). Here it is certainly the case that doubts about the variation of Φ properties without variation of P/F properties have no place. But with (quasi-)epiphenomenalism, Φ properties are not anchored in the P/F domain. On what grounds would one therefore view their co-variation as enjoying a privileged epistemic status? One could, on the contrary, plausibly hold the view that the reductive functionalist is right about how *most* of the phenomenal nature of experience can be translated into P/F terms. The only disagreement would be about whether there is some extra aspect that we could call ‘ Φ property’, which is not thus being accounted for. This would amount to a form of PD which, against the reductive functionalist, would hold that there is a *constant phenomenal property* (at last constant during episodes of consciousness), the ‘feel of being conscious’ for instance (which would have no causal role). This shows that PD does not provide a framework that makes the co-variation assumption appear as the most “natural” one.

The discussion could of course be extended here, and I would not claim that the arguments put forward so far are sufficient to silence the objection that such cases as Lucy₁’s do not pose a threat to Lucy (or my) confidence in the reliability of her Φ judgments. At least, they aim to show, in the light of the current state of the debate around the nature of Φ consciousness, how the situation described in the thought-experiment instils doubts about one’s knowledge of Φ properties which do not reflect what we take to be our true epistemic relation to them. A proper representation of the certainty I attach to my Φ judgements would therefore not appear to be available within the framework of PD in its current form.

The dialectical situation

Assuming the argument above to be correct, what is the dialectical situation? Whether we assume $Lucy_1$ to be Φ -conscious of the change in Φ properties at time T (original account of the thought-experiment) or not (account proposed in the first objection), two problems have been identified through the proposed thought-experiment.

The first (Incompatibility claim) is that logically possible scenarios have been identified which exhibit an incompatibility of the requirement of the possibility of Ψ -awareness of conscious experience, with the norms of rationality. This can take on one of two forms: either incompatibility of two contradictory beliefs, or incompatibility with the normativity implicit in the notion of access to information (see figure 2). If the claim of the supervenience of Ψ -awareness upon the P/F domain is upheld, the latter is the only possibility.



The second (Uncertainty claim) is that the consideration of such logically possible scenarios shows that the certainty that one attaches to one's Φ judgments is not properly represented in PD as it stands.

Implications for Property Dualism of the Incompatibility claim alone

Claim A identifies an incompatibility between a subject's epistemic norms and the requirement of Ψ -awareness of conscious experience in situations characterized by the variation of Φ properties independently of the variation of P/F properties. Let us assume this claim holds, but that the Uncertainty claim (claim B) does not.

According to claim A, epistemic normativity requires that the kind of world W_1 considered above be inaccessible to us. This means that, for a given subject, Φ properties must alter when and only when P/F properties alter. This result can be understood as a dependence of the epistemology of conscious experience upon the nature of P/F properties. In a naturalistic framework, the required co-variation would be interpreted as involving a causal relationship. That is, for any given subject, causal

laws which connect P/F properties to Φ properties would be required, thus accounting for their co-variation.¹⁸

In this connection, we note that Chalmers (1996, p.125), having shown that Φ properties do not logically supervene upon P/F properties, proposes to assume that they supervene naturally. That is, he *postulates* the existence of bridging laws which link P/F properties to Φ properties in the actual world. Later (Chalmers, 1996, p.248-9), he refines this view with the principle of organizational invariance. This specifies that it is in virtue of functional properties that a system has the Φ properties it possesses. We can now see that claim A spells out in what sense *this naturalistic postulation of bridging laws could be given some grounding in the epistemology of conscious experience*: the rational coherence of the beliefs of a subject with conscious experience requires that a subject's Φ properties be linked to P/F properties by bridging laws.¹⁹ Rational norms cannot, of course, directly provide proper grounds for ontological claims in a naturalistic framework. But, if some naturalised account of normativity were available (e.g. Laudan, 1990), this would lead to such a grounding role. This naturalistic solution is however not without problems, as we shall see at the end of the paper.

Another issue which must be mentioned pertains to the status of Ψ -awareness properties. Insofar as Ψ -awareness of the content of Φ experience within the constraints of epistemic normativity requires the co-variation of Φ and P/F properties, issues of epistemic normativity have a bearing upon properties of Ψ -awareness. This is true, whether or not the claim of the supervenience of Ψ -awareness upon P/F properties holds. The reason is to be found in the non-supervenience of the content of Φ judgments upon the P/F domain (Chalmers, 2003), together with the temporal variation of content considered in the thought-experiment. Insofar as a change of content must itself be the object of a possible state of Ψ -awareness, the *normativity implied by Ψ -awareness of Φ content* is made explicit.

More specifically, the normative question which arises for states of Ψ -awareness is whether I have a proper access to the information I am related to in this state of Ψ -awareness. What is meant by "proper" is here cashed out in terms of the reliability of my access to *content over time*: different contents must be detectable as such. The consideration of the temporal dimension thus brings out the covert *epistemic normativity* which lies in the notion of Ψ -awareness. To be Ψ -aware of some

information, it is necessary to be able to successfully access this information: this means, minimally, that an alteration of the informational content be detectable.

Implications for property dualism of the Uncertainty claim

Claim B shows that, to have the conditions of justification of our Φ judgments satisfied, amounts to the need to somehow anchor Φ properties to what we take as unproblematic, or at least as the basis for our explanations, i.e. P/F properties. This need arises from skeptical worries that are a direct consequence of the quasi-epiphenomenalism characterizing PD. The anchoring is one which, as above, amounts to the condition of co-variation of Φ with P/F properties for a given subject.

Of course, a possible move for a naturalistic theory of Φ consciousness would consist in assuming here that these conditions of justification are fulfilled by natural laws. But this is an unwarranted move. It might be argued that this is after all the move we made with claim A. Additionally, it would appear to be a standard move for other philosophical questions. Thus, in the case of skepticism about the external world, it is the move made by empiricist epistemology when it adopts a realist ontology. This is indeed what is involved in saying that, if my knowledge is one of a world of objects, and that a justification for this is that there exist an independent world of objects affecting my senses, then I am warranted in adopting a realist ontology. In fact this latter move is connected with the implicit claim that the best way to account for our empirical knowledge is by viewing the cognitive subject as a receptivity embedded in a such a pre-given natural world. This claim is generally not made explicit insofar as it is widely agreed to be a “natural” claim to make. It is with Kant’s transcendental turn that the meaning of this claim is first properly questioned.

In contrast with the discussion of the Incompatibility claim, what is at stake here cannot be the incorporation of the co-variation claim as a natural fact into a given ontological picture. For, unlike the situation in which the empiricist adopts a realist ontology, the Uncertainty claim exhibits a severe tension within PD. Without co-variation, the epistemic foundation upon which the argument for PD rests is threatened, since there is no room for the kind of epistemic warrant we take to be attached to this premise within the framework of PD. It is therefore the status of PD itself which is at stake. In the same way that PD criticises the reductive functionalist’s misunderstanding of the nature of the phenomenal, PD can now be taken to task for an unsatisfactory representation of the epistemology of Φ judgements. At this juncture,

the mere stipulation of a co-variation of Φ with P/F properties would be an *ad hoc* move designed to save a theory in trouble, much as the appeal to strong metaphysical necessity which the argument for PD rejects as an *ad hoc* move to save materialism (Chalmers, 1996, p.138). For precisely because of PD's quasi-epiphenomenalism, the proponent of PD who has released Φ properties from their anchoring in the P/F realm, cannot find factual grounds for postulating co-variation of Φ with P/F properties.

The only way forward for PD must therefore lie in making explicit and defending its claim to involve a satisfactory account of how well-grounded Φ judgements are possible.²⁰ This involves reformulating Chalmers's argument as the conjunction of an epistemological claim together with a hypothetical one. This reformulation views it as first making the claim that my Φ judgements are justified, and second, showing that if my Φ judgements are true, then PD follows.

Reconstructing the argument

More specifically, Chalmers's argument as presented at the start of the paper ((1) to (4))²¹ ought to be viewed as the following *hypothetical argument*:

($\forall X$)(X's Φ judgements are true) \rightarrow (X has Φ properties which do not supervene upon the P/F domain)

which I abbreviate as:

($\forall X$) ($\phi(X) \rightarrow \sim S(X)$)

To this I now add the epistemological claim that I am justified in asserting I am Φ -conscious. This means that we have the conjunction:²²

a: $J[\phi(I)]$ (I am justified in believing my Φ judgements are true)

($\forall X$) ($\phi(X) \rightarrow \sim S(X)$)

so, in particular:

b: ($\phi(I) \rightarrow \sim S(I)$)

From this conjunction, it does not necessarily follow that:

$J[\sim S(I)]$ (I am justified in believing that my Φ properties do not supervene upon the P/F domain)

This is because of the *intensional context* introduced by the operator J. As with all issues relating to intensional contexts, the problem lies in the limitations of my perspective as a knower.

But, the problem addressed in this paper goes further than this: if I now add the premise (b') that I know that (b) is true, i.e. that I know the presumed truth of Chalmers's argument:

$$\mathbf{b}' : \mathbf{K}[\varphi(\mathbf{I}) \rightarrow \sim\mathbf{S}(\mathbf{I})]^{23}$$

there remains an issue of opacity. That is, I cannot simply conclude that $\mathbf{J}[\sim\mathbf{S}(\mathbf{I})]$. For, if I were justified in holding $\sim\mathbf{S}(\mathbf{I})$ to be true, i.e. that PD in its present form holds, then $\mathbf{J}[\varphi(\mathbf{I})]$ would become questionable, as a result of the Uncertainty claim.

To illustrate how such a two-stage *opacity problem* arises, consider the following analogy. Cecily, who lives in the country with her guardian Jack, believes that the cousin Jack told her about (and whose real name is Algernon) is her fiancé. She also has some justification for this belief insofar as she recently met and became engaged to a man who introduced himself as her cousin. Additionally, if the cousin Jack told her about (Algernon) is Cecily's fiancé, her fiancé is not called Ernest.

Formally, we therefore have:

$$\alpha : \mathbf{J}[\mathbf{F}_C(\mathbf{A})] \text{ (Cecily is justified in believing that the cousin A Jack talks about is her fiancé)}$$

$$\beta : (\mathbf{F}_C(\mathbf{A}) \rightarrow \sim\mathbf{E}(\mathbf{C})) \text{ (If cousin Algernon is Cecily's fiancé, Cecily's fiancé is not called Ernest)}$$

However, Cecily is not justified in believing that A is not called Ernest. Indeed, she holds no such belief: Jack refers to A as Ernest and A introduced himself as Ernest.

But, further, let us now assume that Cecily comes to know (β) (a knowledge that will be referred to as condition (β')): this happens because Gwendoline, jealous at the thought that another has a fiancé called Ernest, tells her: 'if the cousin you were told about is your fiancé, then your fiancé's name is not Ernest'.²⁴ But this is not sufficient to dispel the opacity. For her justification for $\mathbf{F}_C(\mathbf{A})$ is connected with a belief incompatible with the truth of $\sim\mathbf{E}(\mathbf{C})$, since a man who introduced himself as her cousin Ernest is her fiancé. As a result, the conjunction of (α) and (β') is unstable. The upshot of this instability will be that Cecily doubts (α), i.e. that the cousin A Jack is talking about is her fiancé, if (β') is indeed a piece of established knowledge. Her choosing to doubt (α) is prompted by her strong desire to have a fiancé called Ernest. $\mathbf{J}[\mathbf{F}_C(\mathbf{A})]$ therefore no longer holds. The *opacity* of the intensional context is therefore only going to be fully lifted once Cecily acquires the knowledge that *whoever is her fiancé* is not called Ernest, a fact which is central to the dynamics of Oscar Wilde's plot.²⁵ I shall refer to this fact as:

$$\tau : (\forall \mathbf{X}) (\mathbf{F}_C(\mathbf{X}) \rightarrow \sim\mathbf{E}(\mathbf{C}))$$

The requirement for knowledge of τ follows from:

$$\delta : (\sim\mathbf{K}[(\forall \mathbf{X}) (\mathbf{F}_C(\mathbf{X}) \rightarrow \sim\mathbf{E}(\mathbf{C}))] \wedge \mathbf{K}[\mathbf{F}_C(\mathbf{A}) \rightarrow \sim\mathbf{E}(\mathbf{C})]) \rightarrow \sim\mathbf{J}[\mathbf{F}_C(\mathbf{A})]$$

$$\text{or: } \sim\mathbf{K}[\tau] \wedge \beta' \rightarrow \sim\alpha \quad (\text{I})$$

Thus, insofar as Cecily knows that *certain logically possible worlds* are excluded, namely those where τ is false, justifying $F_C(A)$ leads to a justification of $\sim E(C)$, so that:

$$\begin{array}{l} \gamma: \mathbf{K}[\tau] \\ \alpha: \mathbf{J}[F_C(A)] \text{ (Cecily justifiably believes that the cousin A Jack talks about is her fiancé)} \\ \beta': \mathbf{K}[F_C(A) \rightarrow \sim E(C)] \\ \gamma \wedge \alpha \wedge \beta' \rightarrow \mathbf{J}[\sim E(C)] \end{array}$$

$$\mathbf{J}[\sim E(C)] \quad (\text{II})$$

whereby (β') is surplus to requirement since it is entailed by $\mathbf{K}[\tau]$ (but is kept to illustrate the analogy). Note that, through the acquisition of knowledge $\mathbf{K}[\tau]$, Cecily's justification for believing the cousin Jack is talking about is her fiancé is revised so as no longer to be connected with his being called Ernest.

To return to our case, my being justified in believing in the truth of my phenomenal judgements does not lead me to being justified in believing there is an ontological gap between Φ and P/F properties. And the additional premise, that I know that the existence of an ontological gap can be derived from the premise that one is phenomenally conscious (premise (b')), still leaves me with the problem identified in this paper. Namely, my knowing that $\varphi(I) \rightarrow \sim S(I)$ (the argument establishing the ontological gap of PD) is incompatible with my belief $\varphi(I)$. So my justification for $\varphi(I)$ becomes questionable.

As in the case of the Ernest example, the solution must therefore lie in the acquisition of the knowledge that certain logically possible worlds are excluded. Namely, worlds in which Φ and P/F properties do not co-vary are to be excluded.

There are, however, two important differences between this and the Ernest case. First, the lifting of the veil of opacity does not lead to a revision of my belief that $\varphi(I)$. Although Cecily revises her belief in $F_C(A)$, here the belief in $\varphi(I)$ cannot easily, if at all, be changed, even if the justification for it becomes questionable. It contains a core belief which is incorrigible (about the existence of phenomenal experience in the present) and the belief I know my phenomenal properties over some duration of time is very strongly ingrained. What follows is therefore rather an unresolved epistemic tension and what needs to be revised is the nature of the ontological gap.

Second, unlike the case of predicates F_C and E , there are no (empirical) facts we can resort to when dealing with the problem of Φ -consciousness and which would play a role comparable to that of τ .²⁶ The required condition T has to be found elsewhere.

Starting with the first point, we note that what the thought-experiment has shown in the form of the Uncertainty claim, is that, if I am not justified in believing the condition:

T (For any subject, Φ properties co-vary with P/F properties)

, then $J[\varphi(I)]$ no longer holds²⁷. We therefore have:

$$\mathbf{d}: (\sim\mathbf{J}[\mathbf{T}] \wedge \mathbf{K}[\varphi(\mathbf{I}) \rightarrow \sim\mathbf{S}(\mathbf{I})]) \rightarrow \sim\mathbf{J}[\varphi(\mathbf{I})]$$

$$\text{or: } \sim\mathbf{J}[\mathbf{T}] \wedge \mathbf{b}' \rightarrow \sim\mathbf{a} \quad (\mathbf{I}')$$

This is analogous to (I) in the Ernest example. T therefore provides a condition that is required to modify the bare ontological gap as it is currently defined. But, as we observed in the second point, T is not grounded independently as a fact. So, lifting the veil of opacity will not involve acquiring new factual knowledge. Rather, it will result from the exclusion of certain logically possible worlds as *not epistemically accessible*. This means that the motivation for taking T as defining a further restriction upon possible worlds is not metaphysical. Since it lies rather in the threat posed to the justification of my Φ judgements, the motivation is *epistemic*. It delivers the required exclusion of possible worlds as a *transcendental condition* required by the justification of my Φ beliefs, according to the schema:

a: $\mathbf{J}[\varphi(\mathbf{I})]$ (I am justified in believing my Φ judgements are true)

b': $\mathbf{K}[\varphi(\mathbf{I}) \rightarrow \sim\mathbf{S}(\mathbf{I})]$ (I know the truth of the argument for PD)

($\sim\mathbf{J}[\mathbf{T}] \wedge \mathbf{b}'$) $\rightarrow \sim\mathbf{a}$ (Uncertainty claim)

$\mathbf{J}[\mathbf{T}]$ (I am justified in believing the transcendental condition of co-variation)

As in (II), I claim that this condition allows the move in the intensional context considered above:

c: $\mathbf{J}[\mathbf{T}]$

a: $\mathbf{J}[\varphi(\mathbf{I})]$

b': $\mathbf{K}[\varphi(\mathbf{I}) \rightarrow \sim\mathbf{S}(\mathbf{I})]$

$\mathbf{c} \wedge \mathbf{a} \wedge \mathbf{b}' \rightarrow \mathbf{J}[\sim\mathbf{S}(\mathbf{I})]$

$\mathbf{J}[\sim\mathbf{S}(\mathbf{I})]$

(II')

Note that, although I have shown the necessity of J[T], I have not shown, but only assumed its sufficiency. There could, in fact be other conditions apart from this particular one, in which case, J[T] could be taken to stand for being justified in believing all these conditions. I take it, however, that the burden of proof is on an objector to show that this transcendental condition is not sufficient.²⁸

The conclusion is that I am justified in believing that the status of Φ properties is characterised by $\sim S(I)$ conditionally upon being justified to believe T, which I am if my Φ judgments are justified. This means the ontological gap is now transformed, and characterised by condition T, i.e. the constraint of co-variation of Φ and P/F properties.²⁹ So, exhibiting the two-stage opacity problem contained within my proposed “full” argument for PD (with its epistemological dimension made explicit) shows that *the solution lies in an epistemically motivated restriction upon possible worlds*, i.e. in exhibiting a *transcendental condition* required by the coherence of our usual epistemic norms with the particular epistemology of Φ consciousness.

Implications of the transcendental argument

This introduction of a transcendental dimension in the argument is implied by the objective of taking seriously the claim that one’s Φ judgments are justified: since an epistemological claim is the first and key premise of the argument for PD, its conditions of validity cannot be overlooked.

One might ask what implications this has for the status of claims that are made about Φ consciousness in PD. The results of a transcendental argument cannot define the ontological status of Φ properties independently of the subject’s epistemic perspective since the argument rests upon an epistemic claim. Rather, the transcendental argument identifies what can justifiably be asserted about Φ properties, given the constraints of our epistemic perspective. These constraints could be summarized under the heading of *epistemic normativity*. We note that, although epistemic limitations are at stake, the position arrived at is distinct from McGinn’s mysterianism (1991). Two reasons can briefly be mentioned to clarify the difference. First, epistemic normativity is not explained in terms of any restrictions upon our epistemic powers. For McGinn, our type of mind is ‘cognitively closed to’ any property P of the brain in virtue of which states of consciousness are instantiated, i.e. P is beyond our grasp (McGinn, 1995, p.282). The epistemic limitations discussed in this paper are rather connected with

fundamental normative concepts such as the coherence of systems of belief, ... which certainly characterize human cognition, but not by opposition to a higher form of cognition. Second, unlike McGinn's position, the claim here is that knowledge of Φ properties has been obtained. But it is not independent of the epistemic perspective, i.e. it concerns what can be asserted given the constraints of this perspective. The inescapability of this perspectival result is where the ontological investigation of a perspective-free naturalism would appear to reach its limits.³⁰

Property dualism is thus now understood as characterizing Φ properties from our epistemic perspective. We know nothing about the phenomenal independently of this perspective, i.e. about what it is in itself. This result is perhaps not altogether surprising given that the phenomenal is essentially private. In this private sphere, the phenomenal is experienced *in itself*, but this does not amount to any knowledge. And the impossibility of communicating the intrinsic nature of this experience means that no objective knowledge of it is possible. Thus, in contrast with the Kantian in itself which lies separated from us by the outer bounds of possible knowledge, the phenomenal is too intimate to be objectively knowable. It is thus *too close* to us to fall within the bounds of possible objective knowledge.

Having reformulated the argument for PD, we may now return to the issue of the proper interpretation of Φ consciousness which underpins the starting point of the argument for P. This issue motivates the reductive functionalist's objection to the identification of an epistemic gap. Against this, Chalmers (1996) objects that it does not amount to taking consciousness seriously. This means that the reductive functionalist's disagreement about (1) (which is the first step in the argument for $\phi(I) \rightarrow \sim S(I)$ – see towards the beginning of the paper) is motivated by a disagreement about $J[\phi(I)]$. Indeed, for the reductive functionalist, this justification is nothing more than the justification that results from the existence of certain functional dispositions. Thus, insofar as I am disposed to find this red tomato appetizing, I have a justification for the claim I have a particular phenomenal experience when perceiving it.

This has the apparent advantage of enabling a *naturalistic ontological investigation* to go ahead. But it does this at the cost of overlooking the nature of the justification which really accrues to my phenomenal judgments. The latter does not rest upon any publicly available criteria. And this is expressed in the fact that it would be nonsensical for me to say that "I am justified in believing that this feels this way to

me because ...” where the dots contain a ground for my claim. This shows that a proper analysis of $J[\phi(I)]$ does not let it be further grounded in an ontological fact. To recognize this is to reveal the limits of the naturalistic investigation and point to the need for a transcendental perspective upon the nature of the phenomenal. This is the proper way to understand the claim made by PD.

The proposed transcendental move should not be seen as closing down avenues of investigation³¹, but on the contrary providing a framework in which *synthetic a priori* truths about Φ consciousness can be justified. Aside from the co-variation claim discussed here, Langsam (2001), for instance, claims that the relational nature of consciousness is such a truth. Insofar as we have found Φ consciousness to be involved in transcendental conditions defined by epistemic normativity, one could investigate to what extent the relational nature of Φ consciousness is a further *synthetic a priori* truth.

Another avenue of investigation which is opened by this transcendental move consists in identifying exactly *what* the synthetic a priori claims about the existence and nature of Φ consciousness are conditions of. The issue of epistemic normativity which accounts for the derivation of the transcendental condition of co-variation is connected with an apparently limited area of the domain of Ψ awareness, that of our phenomenal grasp of the external world. This is limited in two respects. First, it exclusively concerns our cognitive grasp of the external world. Second, and more fundamentally, it tells us little about the role of Φ consciousness: co-variation of Φ and P/F properties is required for the Ψ -awareness of Φ properties, but why does experience have a phenomenal character at all?

The first issue leads to questioning whether it is only our experience of the external world which has a phenomenal character. If, on the contrary, all our thinking were to have a Φ dimension, as Horgan and Tienson (2002) have suggested, the synthetic a priori claims about Φ consciousness would have a much broader range of applicability. Investigating the phenomenal dimension of thought is an important task which may uncover closer links between the phenomenal and the cognitive.

The second issue may benefit from progress on the first issue. But we must also remember that the epistemic normativity defining the transcendental condition of co-variation is that of the whole of the agent’s beliefs. That is, it is the requirement of coherence of the standards of justification particular to the phenomenal, with those

which prevail for our beliefs about the objective world, which define this condition. Understanding the role of the phenomenal may therefore be helped by examining to what extent it is involved in defining the relation of a subject to a world of objects. It might turn out that it is by enabling the subject to relate to an object that synthetic a priori truths about Φ consciousness operate as transcendental conditions, in line with Searle (1990) and others'³² claim that a phenomenal perspective is essential to there being an intentional relation. This issue cannot however be examined here.

Concluding comment

I shall conclude with a general observation about the structure of the above argument. The problem which leads to adopting the co-variation of Φ and P/F properties as a transcendental condition can be understood from a transcendentalist perspective as an instantiation of a more general problem. Assume there are transcendental conditions of knowledge, intelligibility, ... A general problem arises for attempts to give a naturalistic account of the properties these conditions concern. Consider a claim about properties of Φ -consciousness which purports to be a transcendental condition, e.g. of knowledge. There are only two options for a naturalistic account of such a condition. The first is to take these properties of Φ -consciousness as reducible to P/F properties. The second is, on the contrary, to "widen" the domain of nature to encompass these as a new set of fundamental properties. If these properties do indeed define proper transcendental conditions, the following problems will arise from these moves.

In the case of a reduction, the picture it paints of the natural world must be such that it is faithful to our experience of the world. Therefore, it will require the transcendental conditions in question as underlying presuppositions. This means that what is described as part of the picture cannot be these transcendental conditions, or is at most some aspect of them (e.g. second-order properties). The physicalist reduction of Φ properties would thus not actually be fully grasping the properties themselves, hence the failure of reductive functionalist accounts.

In the case of the enlargement of the natural world, the result is that the issue of the relation of the new to the old natural properties (P/F properties) arises. The transcendental conditions can then be viewed as relational properties between these two groups of properties. But such laws binding the new to the old properties are very different from usual natural laws. This is because there is a necessity attached to them, namely that of normativity: we cannot grasp a world in which these properties are not

instantiated. This is not only unusual, but it is inherently problematic for the naturalistic theory, and *this is a problem which is encountered even if the Incompatibility claim (claim A) alone is accepted*. This follows because these relations are both part of a scientific theory about the natural world (therefore contingent), and necessary conditions of our grasp of the world in question. This unstable status is not acceptable, as can be seen, for instance on Popper's criterion for the scientific nature of a theory. A theory is scientific only if there are circumstances under which the claims made by the theory would be falsified. But this, precisely, cannot apply to such transcendental conditions.

Thus the hypothesis that there are transcendental conditions for our grasp of the world is given additional corroboration by its providing us with a powerful tool to account for the problems encountered in naturalistic accounts of some of the mental properties involved in this grasp.

* * * * *

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¹ Galen Strawson (1999) understands his monism as a form of physicalism insofar as there is reducibility to the realm of intrinsic + relational physical properties.

² There is no space here to go into the interesting debate which this issue has given rise to.

³ This assumption is fairly uncontroversial as long as quantum physical properties are not at issue.

⁴ It is only epiphenomenalism as such if causally explanatory irrelevance entails there is no causal role. Pan-protopsychnism would however allow such a causal role to exist without an explanatory role.

⁵ In line with Chalmers's understanding of phenomenal judgments, I take these to be mental items, not necessarily expressed in any behavior.

⁶ These two twin-sisters must both answer to the same name, e.g. 'Lucy'.

⁷ Chalmers (1996) considers the related problem of the rationality of the zombie making phenomenal judgments. The zombie claims that he is Φ -conscious. Chalmers observes that, although there is a sense in which he is wrong, he is ‘negatively rational’ insofar as he does not make any ‘invalid inferences [or] other such errors of reasoning’ (Chalmers, 1999). But even such negative rationality can no longer be said to characterize Lucy₁.

⁸ This is not a case where the incompatibility is due to some opacity: Lucy₁ potentially holds the two beliefs at the same time and in the same context.

⁹ Altering PD so as to weaken the claim that we are Ψ -aware of the content of our Φ experience to a claim that only applies to certain worlds, e.g. those where Φ -properties co-vary with a subject’s P/F properties, is the kind of restriction I shall introduce further.

¹⁰ One could dispute whether such an instantaneity without duration is actually a reality, for instance on the grounds of one’s theory of time (see Dummett, 2000).

¹¹ Note that the problem arises because the whole of the claim that I am Φ -conscious cannot be justified using the special first-person justification (Chalmers, 1996, p.196-7) of phenomenal beliefs which lies in their being acquired through a form of ‘acquaintance’. Rather, we also need our beliefs to be reliable. Note this does not contradict Chalmers’s claim that justification of Φ beliefs cannot rely exclusively upon reliability (ibid., p.194).

¹² The way we perceive movement when watching a film does suggest we have a Φ experience of the change from one slide to the next.

¹³ Note that there is no claim of infallibility of such a priori procedures.

¹⁴ This certainty concerns at least judgements about the Φ properties of the conscious experience which has just elapsed and that which is present. I obviously have less confidence in my recollection of older conscious experiences, as this relies upon more than my short-term memory.

¹⁵ Knowledge of Φ properties requires internal reliability, mirroring the reliability of our experience of the external world. This reliability has to be over time. There is however no such reliability if yesterday’s statement ‘This is red’ can be taken as possibly not referring to the experience of phenomenal red it refers to today. Since there is no way of “tagging” my experiences independently (as argued in Wittgenstein’s private language argument), I would not have the required justification.

¹⁶ The notion of ‘relevance’ defines a class that includes all properties characterising the physical make-up, the behavior and the mental state of that subject.

¹⁷ If we do not assume that Ψ properties logically supervene upon P/F properties, we might arguably have such grounds, but here, a theory of how Ψ and Φ properties are related would be required. Moreover, the issue of a dissociation between Ψ properties and our behavior (including our speech) would lead to another set of problems.

¹⁸ These laws are defined for a given subject of experience. Lifting this conditioning is another task that a naturalistic account would have to deal with.

¹⁹ This falls short of Chalmers’s stronger bridging laws in two respects. First, the laws based upon epistemic normativity are subject specific. Second, and relatedly, they do not concern intrinsic Φ qualities, but their variation only.

²⁰ The conceptualisation of Φ experience as essentially private goes hand-in-hand with a notion of epistemic warrant differing fundamentally from that associated with the reductive-functionalist picture.

²¹ I am hereby taking (4) as the conclusion of Chalmers’s argument (as (5) follows from it trivially).

²² I shall consider a fixed subject denoted by ‘I’ (e.g. Lucy or me), although, since this is valid for any subject, one could quantify over all possible subjects.

²³ I use the operator K, rather than J, to indicate that the entailment is true, not only justified.

²⁴ Gwendoline may, e.g. have surmised that Algernon must be the man in question. In any case, it is true, and I am going to assume it is reasonable to say Cecily knows it. Note that my example is freely adapted from Oscar Wilde’s (2000) play.

²⁵ Both the female characters primarily want to be engaged to someone called Ernest.

²⁶ In particular, knowing the universal proposition $(\forall X)(\phi(X) \rightarrow \sim S(X))$ does not, in contrast with $(\forall X)(F_C(X) \rightarrow \sim E(C))$ in the Earnest case, provide the required knowledge to dispel the opacity. The analogy with the Earnest case is rather structural: it illustrates how two-stage opacity can arise. The nature of the opacity identified in the case of Φ consciousness is unique.

²⁷ As we saw, it arguably holds if the content of the assertion is radically reduced to the pure present, but this is not what I take to be what is meant by this assertion as it is made in practice.

²⁸ I am dealing with this issue quite casually insofar as it is not central to this paper. My purpose is to show that there is (at least) one transcendental condition, by identifying it. To motivate my claim that this particular T suffices, I would remark that epistemic normativity must translate in terms of coherence over time for a single subject’s beliefs.

²⁹ Unlike the Earnest case, the condition which lifts the veil of opacity is a justified belief, as opposed to knowledge. Knowledge is excluded, as there is no knowable fact here. However, once the transcendental argument has established a transcendental setting, the notion of truth changes to a perspectival one. Once this notion of truth is in place, K[T] therefore holds. Note that, in both arguments, all that is required is a justified belief. Thanks to Ron Chrisley for pointing out the need to clarify this issue.

³⁰ There is another way of looking at the need for the transcendental move by focusing upon the tension between the *prima facie* ineffable private nature of Φ properties and the *intuition* that they are explanatorily relevant to our behavior (namely in accounting for our Φ judgments). This can be argued to generate an antinomial conflict. As Kant analyses it, such a conflict arises from a dialectical opposition, that is when an underlying assumption leads to conflicting conclusions (Kant, 1997, A502-4/B530-2). Here, the assumption is that the ontological status of Φ properties is a possible object of knowledge.

The PD thesis takes the phenomenology of Φ consciousness as its guide and leads to a quasi-epiphenomenalism that is incompatible with the certainty we attach to our grasp of Φ properties over time. The antithesis is the reductive-functionalist or eliminativist position: it is driven by the apparent causal efficacy of Φ properties (for instance in accounting for Φ judgments) by re-conceptualizing them in terms of P/F properties. But in so doing, it is always open to the objection that what is here described are not the Φ properties which we have experience of.

So, on the one hand, the demands of the phenomenology of Φ -consciousness lead to isolating Φ properties in a PD framework, while on the other, their apparent causal efficacy leads to a view that cannot conclusively be shown to capture the true nature of Φ properties. This antinomy can only be resolved by removing the common assumption, namely that the ontological status of Φ properties is a possible object of knowledge.

³¹ I am here alluding to the impatience displayed by those who take it that understanding consciousness is a scientific issue, and who openly deplore those philosophers who view the issue of Φ consciousness as a 'hard problem' (Dennett, 2005; Damasio, 2000).

³² An important avenue of investigation would involve examining the extent to which some authors in the phenomenological tradition are committed to such a claim (e.g. Husserl, 1975).