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PANIC theory and the prospects for a representational theory of phenomenal consciousness

URIAH KRIEGEL

ABSTRACT   *Michael Tye has recently argued that the phenomenal character of conscious experiences is "one and the same as" (1) Poised (2) Abstract (3) Non-conceptual (4) Intentional Content (PANIC). Tye argues extensively that PANIC Theory accounts for differences in phenomenal character in representational terms. But another task of a theory of phenomenal consciousness is to account for the difference between those mental states that have phenomenal character at all and those that do not. By going through each of the four qualifiers of PANIC, we argue that PANIC Theory fails to account for this difference in genuinely representational terms. We suggest, furthermore, that the reasons it fails are likely to be endemic to all representational theories of phenomenal consciousness.*

1. Introduction: PANIC theory

The Representational Theory of Mind (RTM) holds that "all mental facts are representational facts" (Dretske, 1995, p. xiii). RTM is attractive to naturalists, since they believe that all representational facts are natural facts [1]. If all mental facts are representational facts, and all representational facts are natural facts, then all mental facts are natural facts.

A powerful objection to RTM is that facts about *phenomenal consciousness* are not representational facts. What are these facts? They fall into two groups: (i) facts about a mental state *x* having a *different* phenomenal character from a mental state *y*, and (ii) facts about a mental state *x* having phenomenal character *at all*. In the first group are facts about phenomenal differences among different conscious experiences. In the second group are facts about the difference between mental states with *no* phenomenal character—e.g. belief, desire, and the other propositional attitudes [2]—and mental states that *do* have phenomenal character. An example of (i) is the fact that Smith's auditory experience of a piano an hour ago was phenomenally different from her auditory experience of a bagpipe yesterday. An example of (ii) is that both her auditory experiences had *a* phenomenal character at all, as opposed to

Uriah Kriegel, Department of Philosophy, Brown University, Box 1918, Providence, RI 02912, USA, email: uyk@brown.edu

her *belief* that Jones is a good pianist, which does not have *any* phenomenal character.

Call facts of these two types *phenomenal facts*. Proponents of RTM have recently attempted to argue that phenomenal facts *are* representational facts after all. Perhaps the most comprehensive defense of such a representationalist theory of phenomenal consciousness has been developed by Michael Tye. In a pair of books [3], Tye develops and defends the *PANIC Theory* of phenomenal consciousness, according to which phenomenal character is "one and the same as" a specific kind of representational content. The relevant content has *four* distinguishing properties. It is:

(a) Poised
(b) Abstract
(c) Non-conceptual
(d) Intentional

We will see what these properties are as we go along. Tye calls Poised, Abstract, Non-conceptual, Intentional Content *PANIC*. The thesis of PANIC Theory is therefore:

> PT: The phenomenal character of a mental state S is "one and the same as" S's PANIC.

> PT entails—and perhaps is *defined by* the conjunction of—the following pair of theses:

(1) Two mental states S_1 and S_2 have *different* phenomenal characters iff S_1 and S_2 have different PANICs; and,
(2) S_1 has *a* phenomenal character and S_2 does *not* have a phenomenal character iff S_1 has *a* PANIC and S_2 does *not* have a PANIC.

(1) and (2), if true, would account for phenomenal facts of both groups mentioned above. Smith's auditory experience of a piano and her auditory experience of a bagpipe have different phenomenal characters in virtue of the fact that they have different PANICs; and Smith's auditory experiences have phenomenal character *at all*, whereas her belief that Jones is a good pianist does not, in virtue of the fact that her experiences have PANICs *at all* whereas her belief does not.

For Tye, the purpose of theses (1) and (2) is to substantiate the idea that all phenomenal facts are representational facts; that phenomenal consciousness is not a counter-example to RTM. (1) is supposed to accommodate phenomenal facts of group (i) and (2) phenomenal facts of group (ii). That is, they are supposed to substantiate, respectively, the following theses:

(3) For any states S_1 and S_2, the fact (when it is a fact) that S_1 and S_2 have different phenomenal characters is a fact about the representational properties of S_1 and S_2; and,
(4) For any states S_1 and S_2, the fact (when it is a fact) that S_1 does and S_2 does *not* have phenomenal character at all is a fact about the representational properties of S_1 and S_2.

(3) accounts in representational terms for similarities and differences of phenomenal character; (4) accounts in representational terms for the difference between those mental states that *have* phenomenal characters and those that do not. Together, (3) and (4) substantiate—and perhaps *define*—a representationalist theory of phenomenal consciousness. In this way, PT protects RTM against the objection from phenomenal consciousness.

I am going to argue that this way of defending RTM fails. In particular, PT fails to defend (4). I shall argue that, when we look closer at what properties (a)–(d) are, we find that they are all inadequate for a defense of (4). That is, I shall argue that each of these properties fails to distinguish, in genuinely representational terms, mental states *with* phenomenal character from mental states *without* phenomenal character.

Before starting, it is important to get clear on what we mean here by "representational fact". By "fact" I will mean the instantiation of a property by a particular object, event, or state. A *representational* fact is the instantiation of a *representational* property by such a particular. A representational property is a property the particular has in virtue of its representational content. The representational content of the particular is *what* that particular *represents* (not, it is important to note, what does the representing). So a representational fact is the instantiation by a particular object, event, or state of a property the particular has in virtue of what it represents. To say that all mental facts are representational facts is therefore to say that all instantiations of mental properties by states of a subject are instantiations of properties these states have in virtue of what they represent.

2. An *a priori* suspicion

Representationalists typically focus on defending (3): they try to show that phenomenal differences among mental states can be captured in terms of differences in representational content. But (4) is just as crucial to the viability of a representationalist theory. Such a theory must show how the difference between mental states *with* and *without* phenomenal character is also a difference in representational content. That is, it must show how the difference between the whole class of phenomenal states and the whole class of non-phenomenal states can also be captured in representational terms [4]. This paper will focus on this latter task of representational theories of consciousness.

The problem is particularly acute because there are *a priori* reasons to suspect that no representational theory could account for the difference between phenomenal and non-phenomenal states. A representational theory must claim that the difference between phenomenal and non-phenomenal states is a difference in *what those states represent*. Therefore, a representational theory would have to identify certain environmental features that all and only phenomenal states represent. But *prima facie* it seems that every environmental feature can be represented either consciously or non-consciously. To suppose otherwise is to affirm the existence of environmental features which only lend themselves to *conscious* representation. It is implausible that the world should happen to contain such features.

Moreover, the representational theory entails that if these environmental features did not exist, we would not be phenomenally conscious—in the sense that we would never harbor phenomenal states—since we would be unable to represent these features. Thus a world without the right features in the environment would necessarily be a zombie world. That, again, is rather implausible.

Call this set of considerations the "*a priori* suspicion". This is the suspicion that no representational theory could ever account for the difference between phenomenal states and non-phenomenal states, because that would involve positing environmental features whose representation is necessarily phenomenally conscious. In what follows, we will approach Tye's PT with the *a priori* suspicion in mind, and try to see what strategies he deploys in attempt to overturn it.

3. Abstractness and intentionality

The burden of the present section is that properties (b) and (d)—abstractness and intentionality—cannot account for the difference between phenomenal and non-phenomenal states. This is because the representational contents of non-phenomenal states, such as beliefs, are also abstract and intentional in Tye's sense.

What is it for a content to be abstract? The requirement of abstractness is introduced by Tye to account mainly for illusions and other cases of misrepresentation (Tye, 2000, p. 62):

> [One] condition is that the relevant content be abstract, that is, that it be content into which no particular concrete objects or surfaces enter. This is required by the case of hallucinatory experiences …

A content is abstract just in case only abstract entities can "enter" into it. I will understand "entering into a content C" to mean being a *constituent* of C. Here is a genuine attempt to deal with the *a priori* suspicion: there is a certain class of objects—abstract objects—which phenomenal experiences represent.

The obvious problem with abstractness is that it provides a poor candidate for distinguishing phenomenal from non-phenomenal states. The reason Tye ascribes abstractness to the content of phenomenal states is that such states can misrepresent. But beliefs can misrepresent as well: x can believe that p when in fact not-p. If anything, it is the propositional content of beliefs that is paradigmatically abstract, since propositions are abstract entities if anything is. So the difference between states *with* phenomenal character and states *without* phenomenal character cannot be that the former have abstract content whereas the latter do not [5].

What about intentionality? Content is intentional, we are told, in the sense that it is *intensional* (Tye, 2000, pp. 54–55). When we speak of *propositional* content, content is intensional in that it does not sustain existential generalization and substitution *salva veritate*. But PANIC, being non-conceptual, is *non*-propositional content. So what is it for non-propositional content to be intensional? Tye's idea is to define the intensionality of the content of phenomenal states by reference to analogous logical features: from the fact that x perceives a yellow patch it does not follow that there *is* a yellow patch which x perceives (analogously to failure of

existential generalization); and from the fact that x perceives a yellow patch it does not follow that x perceives a patch to reflect a certain percentage of the color spectrum (analogously to failure of *salva veritate* substitution).

Whether or not this account of "experiential intensionality" can work, we encounter here the same problem we encountered with abstractness: the content of beliefs and the other propositional attitudes is intensional as well. So the difference between phenomenal states and the propositional attitudes cannot be that the content of the former is intensional whereas that of the latter is not.

4. Non-conceptuality

The difference between phenomenal states and non-phenomenal states—in particular, belief and the other propositional attitudes—must therefore reside in the property of poise and/or the property of non-conceptuality. This is what Tye himself tells us (Tye, 1995, p. 138):

> PANIC Theory entails that no belief could have phenomenal character. A content is classified as phenomenal only if it is nonconceptual and poised. Beliefs are not nonconceptual, and they are not appropriately poised.

If we grant that phenomenal states have non-conceptual content, then non-conceptuality would seem to make the perfect candidate for distinguishing them from the propositional attitudes, since the content of propositional attitudes is obviously conceptual.

According to Tye, the content of phenomenal experiences must be non-conceptual because a subject x can experience today a specific shade of red—say, red_{17}—even if x lacks the concept of red_{17} and could not even recognize a sample of red_{17} tomorrow [6]. I do not wish to contest this consideration here [7]. But the fact that x *can* experience red_{17} even though x does not possess the concept of red_{17} does not show that the content of phenomenal states must be *required* to be non-conceptual. At most, it shows that the content of phenomenal states must be *allowed* to be non-conceptual. For the content of phenomenal states to be *required* to be non-conceptual, it would have to be the case that x could *not* experience red_{17} if x *did* possess the concept of red_{17}. But this is obviously false. Thus, if by some miracle x came to possess the concept of red_{17}, x would not thereby lose the ability to have phenomenal experiences of red_{17}.

A super-sentient creature is conceivable (and also possible, as far as I can tell), who would possess a concept for every shade of red. Any shade of red the creature can discriminate today it can recognize (among hundreds of samples) tomorrow, as well as next year. It would be odd to deny this creature phenomenal experiences of red on account of its *augmented* sensory and cognitive abilities. Surely it is not the *limitations* of our sensory and cognitive abilities that give rise to phenomenality.

The difference between phenomenal states and non-phenomenal states cannot, therefore, reside in non-conceptuality. Although mental states that have phenomenal character typically also have non-conceptual content, it is not in virtue of having non-conceptual content that they have phenomenal character. For they would have phenomenal character even if their content was conceptual.

5. Poise

So now we are left with the property of poise as our last resort. What is it for a content to be poised? Tye writes (Tye, 2000, p. 62):

> This condition is essentially a functional role one. The key idea is that experiences and feelings, *qua* bearers of phenomenal character, play a certain distinctive functional role. They ... stand ready and available to make a direct impact on beliefs and/or desires.

That is, a content C is poised iff C plays a distinctive functional role D, a functional role presumably different from that of propositional attitudes. So perhaps the difference between mental states with and without phenomenal character is that the former are poised whereas the latter are not.

The problem is that Tye's characterization of poise commits a category mistake. What plays the functional role D is perhaps the mental state that *carries C*, but not C itself. Functional role is not an attribute of representational contents, but of the *vehicles* that *carry* these contents [8]. To talk of "poised content" is to that extent misleading: it is the state that is poised, not its content [9]. I conclude that poise is not really a representational property of phenomenal states, but a *vehicular* property (if you will).

In fact, the same is probably true, if less obviously, of non-conceptuality. Indeed, I would argue that non-conceptuality is a functional role property as well. For what does it mean to say that a state S represents a tree *conceptually*? It does *not* mean that the content of S is the concept of tree; for S represents a tree, not a concept. Nor does it mean that S represents the tree, intangibly enveloped by a concept. Rather, it means that S represents the tree in a certain *way*, a way that involves the mobilization of certain cognitive abilities, namely, abilities associated with possession of the concept of tree (e.g. the ability to recognize trees across times and places). This *way* of representing the tree will manifest itself in the functional role of S. A subject who does not possess the concept of a tree would not be able to form, on the basis of her tree experiences, such beliefs as "all trees have a trunk"; a subject who does, would. Thus to say that S's content is conceptual may be nothing more than to say that S would normally lead to the formation of certain beliefs; and to say that S's content is non-conceptual may be only to say that S would *not* typically lead to the formation of these beliefs. It is to comment on S's functional role.

What I am suggesting is that non-conceptuality, like poise, is not really a representational property, but a functional role property, of phenomenal states. It would be impossible to properly defend this view here, and I am not going to try. As we saw, non-conceptuality is anyway inadequate for distinguishing phenomenal from non-phenomenal states. Moreover, the corresponding point about poise will suffice for the main argument of this section, as we shall now see. Even so, let me register my contention that the notion of PANIC is, as it stands, a confused hybrid. It intermingles properties that belong to the representational content of experiences

and properties that belong, strictly speaking, to the experiences themselves, the vehicles carrying these contents.

The main argument of this section is basically this: if the only difference between a phenomenal state and a non-phenomenal state is that the former is poised and the latter is not, then given that poise is not a representational property, but a functional role one, the difference between phenomenal and non-phenomenal states is not a difference in representational properties—contrary to (4)—but a difference in functional role properties.

This point holds not only for the difference between phenomenal experiences and propositional attitudes. Tye seems to think that there are other mental states, beyond propositional attitudes, that have all it takes to be phenomenal except poise:

> States with non-conceptual content that are not so poised lack phenomenal character. Consider, for example, states generated in vision that nonconceptually represent changes in light intensity. These states are not appropriately poised.

According to Tye, then, there are states of the visual system—call them *V states*—that have non-conceptual representational content, but are not poised. So Tye takes them to be examples of non-phenomenal states. But what exactly is the difference between V states and phenomenal states, that the latter *do* and the former *do not* have phenomenal character? Tye seems to suggest that the only thing that disqualifies V states from being phenomenal states is that they are not poised. So the only difference between V states and phenomenal states is that the latter are poised whereas the former are not [10]. We have argued, however, that this is not a difference in these states' genuinely representational properties. It is only a difference in their vehicular properties. So the fact that V states have no phenomenal character whereas phenomenal experiences do is *not* a representational fact.

In the same vein, the property of poise is recruited by Tye to account for the lack of phenomenal character in blindsight: the mental states of the blindsighted subject are not phenomenally conscious (unlike the corresponding states of a normal subject) because they are not poised [11]. But again, this is not a representational difference. In general,

(5) Whenever S_1 has a full PANIC and the only difference between S_1 and S_2 is that S_2 is not poised (i.e. S_2 has only an ANIC), the fact that S_1 *does* and S_2 does *not* have phenomenal character is *not* a fact about the representational properties of S_1 and S_2.

Rather, it is a fact about the functional roles of S_1 and S_2. (5) is precisely the case with V states and blindsight. These cases show that,

(6) For *some* states S_1 and S_2, the fact that S_1 does and S_2 does *not* have phenomenal character is *not* a fact about the representational properties of S_1 and S_2.

Now, (6) is the explicit negation of (4). It states that two states can be exactly alike with respect to all their genuinely representational properties and still only one of

them will have phenomenal character. A theory that entails something like that cannot be seriously called representationalist.

Our line of criticism is that in PANIC Theory the properties that account for the difference between states *with* phenomenal character and states *without* phenomenal character are not representational properties, but functional role properties. This, too, is a way of dealing with the *a priori* suspicion raised in Section 2. The absurdity of positing environmental features that can only be consciously represented is avoided by quietly sliding to non-representational lines.

One way Tye might respond to our line of criticism is by arguing that we have been rash to determine that poise (as well as non-conceptuality) is a non-representational property. When a mental state S with content C plays the functional role D characteristic of poise, we have to distinguish two properties: (i) the property of playing D; and (ii) the property of being carried by a state that plays D. The former is a property of S, the latter is a property of C. S itself does not have property (ii), for S is not carried by a state that plays D, since S is not carried by anything. If we define poise as (ii), then poise is a property of the representational content of S. So it is a genuine representational property of S.

My rejoinder is that this move trivializes representationalism. Suppose we allow such properties as (ii) to count as *genuinely* representational. Then for any property F a mental state S has, the fact that S is F could be accounted for in terms of the fact that S has a representational content which is carried by an F state, and the fact that S has a representational content which is carried by an F state would count as a genuinely representational fact. A representational account of the fact that S is F would be correct *no matter* what F is. So the thesis that all mental states are representational facts would be trivially true. The question, however, is whether there is a *non*-trivial version of this thesis that is true.

6. Conclusion: PANIC Theory as disguised functionalism; and the prospects for a genuinely representationalist account of phenomenal consciousness

Every theory of phenomenal consciousness must account for the difference between mental states that *have* phenomenal character and mental states that *do not* have phenomenal character. A *representational* theory of phenomenal consciousness is a theory that does that by adverting to the representational properties of the mental states in question. A theory that does that by adverting to non-representational properties of the mental states in question is *not* a representational theory. In particular, a theory that does that by adverting to the functional role properties of the mental states in question is a *functionalist* theory. I have argued that PANIC Theory, despite its advertisement as a representationalist theory of phenomenal character, adverts to functional role properties in accounting for the difference between mental states that do and mental states that do *not* have phenomenal character. If so, PANIC Theory is really a functionalist theory of phenomenal consciousness.

To say that PANIC Theory is a functionalist theory is not to say that it is false

[12]. But it *is* to say that *if* it is true, then representationalism is false. In this respect, PANIC Theory defeats the purpose for which it was conceived.

Where does all that leave other versions of the representational theory of consciousness? That PT fails to account in genuinely representational terms for the difference between phenomenal and non-phenomenal states does not entail that other representational theories will fail to do so as well. But any genuinely representational theory would have to face the *a priori* suspicion. To my mind, the *a priori* suspicion reveals what is fundamentally wrong about a representational approach to phenomenality: if what makes a mental state have phenomenal character at all is that it represents certain features, then the existence of phenomenal consciousness is *conditioned* by the existence of the features in question, and conversely, it is the existence of the features in question, rather than the nature of conscious subjects, that introduces phenomenal consciousness into the world.

Acknowledgements

Notes

[1] In particular, they believe that representational facts are facts about causal-informational and/or teleological relationships between brain states and world states (see Dretske, 1981; Millikan, 1984, for some thorough accounts of representational facts along these lines).

[2] Some philosophers have argued that conscious propositional attitudes have phenomenal character as well (see e.g. Goldman, 1993). I have no quarrel with these philosophers. But even if the attitudes have phenomenal character, it is surely of a wholly different kind than the specially qualitative phenomenal character of sensory experiences. A theory of phenomenal character has to account for that difference. To make my point, I would have to put it in different terms: not in terms of the difference between mental states that have phenomenal character and those that do not, but in terms of those mental states that have the specific kind of phenomenal character that sensory experiences have and those that do not. In any event, Michael Tye—whose theory this paper discusses—believes that the attitudes do not have phenomenal character, as we will see later.

[3] Tye (1995, 2000).

[4] I am using the term "phenomenal state" to refer to mental states that *have* phenomenal character; and "non-phenomenal states" to refer to states without any phenomenal character (e.g. the belief that $2 + 2 = 4$).

[5] To my mind, the requirement of abstractness is also utterly implausible: it entails that even when we correctly perceive a tree, the particular concrete tree is not a constituent of the content of our perceptual experience. This means that the concrete tree is not what the experience represents, since in Tye's framework contents are what experiences represent. More generally, this requirement entails the absurdity that the concrete world is unrepresentable. The problem of misrepresentation is a problem, but making representational content abstract is not the solution

[6] Tye writes (2000, p. 61): "Color experiences … subjectively vary in ways that far outstrip our color concepts. For example the experience of the determinate shade, red_{29}, is phenomenally different from that of the shade, red_{32}. But I have no such concept as red_{29}. So, I cannot see

something as red$_{29}$ or recognize that specific shade as such. For example, if I go into a paint store and looks at a chart of reds, I cannot pick out red$_{29}$."

[7]   Some philosophers have contested the point, arguing that the content of a red$_{17}$ experience is conceptual: it does not deploy the concept of red$_{17}$, but it does deploy the (demonstrative) concept "this shade of red".

[8]   Here and afterwards, I speak of a vehicle *carrying* a content. There is perhaps something odd in thinking about the relation between vehicle and content as a *carriage* relation. But at least this usage of the term has the distinctive advantage of not being easily confused with more mundane uses.

[9]   In talking about poised content, all we may defensibly mean is that a given content is poised in that it is carried by a state that plays the right functional role. I will return to this possibility towards the end of this section.

[10]   It also makes sense for Tye to suggest that. Both types of states have non-conceptual representational content. And whether they have abstract and intentional content is irrelevant, since abstractness and intentionality cannot account for the difference between phenomenal and non-phenomenal states. The only relevant difference is that V states lack a certain distinctive functional role which phenomenal experiences have.

[11]   Tye writes: "It is worth noting that, given an appropriate elucidation of the 'poised' condition, blindsight poses no threat to the representationalist view … What is missing, on the PANIC theory, is the presence of appropriately poised, nonconceptual, representational states. There are nonconceptual states, no doubt representationally impoverished, that make *a* cognitive difference … But there is no complete, unified representation of the visual field, the content of which is poised to make direct difference in beliefs" (Tye, 2000, pp. 62–63; italics original).

[12]   Though one would expect the traditional problems of functionalism to bedevil disguised versions as well. In particular, I would predict a crisis for PANIC Theory in confronting the problem of absent qualia. Why should there be anything it is like to have a mental state which plays the right functional role *D* characteristic of poise? Conceivably, a functional duplicate of any human may have no phenomenal consciousness.

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