Meeting the Matching Content Challenge to Cognitive Phenomenology

In recent philosophy of mind, the cognitive phenomenology debate has been waged on a variety of fronts. Some have focused on the nature of conscious occurrent thought, and how the phenomenal character of thought relates to its intentional properties. Tim Bayne and Tom McClelland (2016) purport to identify a novel challenge to proponents of cognitive phenomenology on this latter front. In particular, their target is a claim they find endorsed in the cognitive phenomenology literature:

**phenomenal content thesis (PCT):** occurrent thoughts have a distinctive kind of non-sensory phenomenal character, the nature of which is determined by their intentional content.

Proponents of PCT argue that the phenomenal character of thought is determined by the intentional content of thought.¹ For instance, the thought that “There is a coffee mug before me” has a different phenomenology than the thought that “There is a water bottle before me,” and the difference in phenomenal character is determined by the difference in thought content.²

Bayne and McClelland raise a puzzle for proponents of PCT which they call the matching content challenge. The challenge is as follows. Suppose that PCT is true—that the phenomenal character of thought is determined by its intentional content. Suppose also that representationalism about perceptual phenomenology is true, and the phenomenal character of perceptual experience is determined by the intentional content of that experience.³ Now, consider two different sorts of experiences: call the experience of visually perceiving a blue wall ten meters before me \( V \), and call the experience of judging that there is a blue wall ten meters before me \( T \). Intuitively, these two experiences have the same contents. If, however, both PCT and representationalism about perceptual phenomenology are true, then we would expect there to be some overlap in phenomenology between \( V \) and \( T \). After all, PCT and representationalism about perceptual phenomenology both say that the phenomenal character of their respective experience types is determined by the intentional content of a given experience, and \( V \) and \( T \) have the same content. But, Bayne and McClelland hold, no phenomenological overlap is discernable—seeing that there is a blue wall before me seems **utterly different**, phenomenologically, than consciously judging that there is a blue wall before me. The proponent of PCT thus owes an explanation as to why there is no phenomenal property common to \( V \) and \( T \) despite their shared content. Bayne and McClelland conclude, one explanation is that it’s not the case that the phenomenology of thought is determined by thought content—that PCT is false.

I have two goals in this paper. The first goal is to repair Bayne and McClelland’s formulation of the matching content challenge. As we will see, when Bayne and McClelland argue against the claim that \( T \)’s phenomenal character is determined by its intentional content, they seem to construe the

---

¹ Bayne and McClelland cite Horgan and Graham (2012), Horgan and Tienson (2002), Siewert (1998), Pitt (2004), and Smithies (2014) as endorsing PCT.
² Bayne and McClelland bracket any contribution to the phenomenal character of a thought made by the thought’s attitude type (belief, desire, entertainment, etc.).
³ Representationalism (sometimes called intentionalism) about perceptual phenomenology is a popular view about the nature of (sensory or perceptual) phenomenal consciousness. For representative expositions, see Dretske (1995), Tye (1995), Lycan (1996), Byrne (2001), and Chalmers (2004).
determination relation as one of supervenience. I show that, so construed, the matching content challenge is invalid.

The second goal is to respond to the repaired version of the matching content challenge. I give two responses on behalf of the cognitive phenomenologist. First, I argue that, against Bayne and McClelland, there is phenomenological overlap between $T$ and $V$ in virtue of their sharing content. This is done by appeal to phenomenal properties that are determinable. Second, I argue that the cognitive phenomenologist need not be committed to $T$ and $V$ sharing phenomenal character despite their shared content. This is done by appeal to their contents being represented under different manners of presentation. The general lesson of the two responses is that Bayne and McClelland have not identified a problem particular to cognitive phenomenology, but rather emphasized existing problems for representationalism about phenomenal consciousness generally.

The paper proceeds as follows. I first lay out the matching content challenge as formulated by Bayne and McClelland, clarifying each of the premises. The next section repairs the challenge by strengthening the determination relation between phenomenal properties and intentional properties. The final two sections give responses to the repaired matching content challenge.

**The matching content challenge to cognitive phenomenology**

Bayne and McClelland’s argument against PCT can be put in the following *reductio ad absurdum* form:

- **PCT, for reductio**
  
  (1) $T$’s phenomenal character is determined by $T$’s intentional content.

- **Stipulation**
  
  (2) $V$ and $T$ have the same intentional content.

- **Representationalism about perceptual phenomenology**
  
  (3) $V$’s phenomenal character is determined by $V$’s intentional content.

  from (1)-(3)
  
  (4) $V$’s phenomenal character and $T$’s phenomenal character are determined by the same intentional content.

  from (4)
  
  (5) There is a common phenomenal element present in $T$’s phenomenal character and $V$’s phenomenal character.

- **Introspective datum**
  
  (6) There is not a common phenomenal element present in $T$’s phenomenal character and $V$’s phenomenal character.

**Conclusion**

Therefore, it is not the case that $T$’s phenomenal character is determined by $T$’s intentional content.

I now briefly comment on each of the premises.

(1) is a statement of the phenomenal content thesis, which Bayne and McClelland seek to undermine, assumed for reductio. (2) is the *stipulation* that $T$ and $V$ have the same content. This premise is crucial for generating the challenge—Bayne and McClelland hold that sameness of content
should result in some shared aspect of phenomenal character. (3) is a statement of representationalism about perceptual phenomenology. This is the perceptual analogue to PCT.

(4) follows from (1)-(3). If T’s phenomenal character is determined by its intentional content, V’s phenomenal character is determined by its intentional content, and V and T have the same content, then both T and V’s phenomenal character are determined by the same intentional content.

(5), Bayne and McClelland hold, follows from (4). The idea is that if phenomenal character reflects intentional content in both perceptual experiences and thought experiences, and a perception and a thought have the same content, then there should be at least some common phenomenal element—some common phenomenal property instantiated within the composite phenomenal experience of perception and the composite phenomenal experience of thought—between T and V.

(6) is an introspective datum: introspection does not seem to reveal any shared phenomenal quality between a visual experience of there being a blue wall before you and an experience of judging that there is a blue wall before you. Once the contribution to the overall phenomenal character of the experience made by the attitude is bracketed off, Bayne and McClelland maintain that there remains no shared phenomenal property contributed by the same intentional content between T and V.

The conclusion follows from the contradiction derived in (5) and (6). The starting assumption, PCT, generates a contradiction, so it is false. In order to avoid this result, the proponent of PCT will have to deny one of the premises of the matching content challenge. Bayne and McClelland survey the prospects for denying (2), the stipulation that T and V have the same intentional content. I argue that there are responses to the matching content challenge that do not deny that T and V have the same content. Before this, however, I show that the challenge as currently formulated is invalid and thus must be repaired.

Repairing the challenge

The matching content challenge as formulated above is invalid because (4) does not follow from (5). Just because T’s phenomenal character and V’s phenomenal character are determined by the same intentional content, it need not be the case that T and V have a phenomenal property in common.

The culprit is the nature of the determination relation that Bayne and McClelland attribute as holding between intentional content and phenomenal character. When discussing this relationship, they often use different language. Not only do they characterize the relationship as one of “determination” (28), but also “reflection” (27-29), “fixation” (30, 35), and “contribution” (30-1). What to make of these different ways of referring to the relationship between the intentional and the phenomenal is unclear, but there is some evidence that they intend a supervenience between the phenomenal and the intentional when they say the following: “The fundamental point that lies at the heart of the matching content challenge is that identity of content ought to be accompanied by identity in (an aspect of) phenomenal character” (32). If the relationship is one of supervenience, however, then (4) does not entail (5). In general, if some supervenient set A supervenes on some supervenience base C, and some other supervenient set B also supervenes on supervenience base C, it does not follow

---

4 In particular, they focus on different ways on interpreting the claim that conscious thoughts like T have conceptual content, and this difference in content kind is responsible for their being no phenomenal overlap between T and V.
5 Page numbers are to Bayne and McClelland (2016).
that $A$ and $B$ share any properties. But this is precisely the move made by Bayne and McClelland when they infer (5) from (4). $T$'s phenomenal character and $V$'s phenomenal character both supervene on the same intentional content, and they claim that this entails that $T$ and $V$ should have some phenomenal property in common. But, in a slogan: common supervenience base does not entail common property.

Supervenience is too weak a relation between the intentional and the phenomenal for it necessarily be the case that $T$ and $V$ share a phenomenal property. The relation must be strengthened. Construing the determination relation as one of identity rather than supervenience is sufficient for the move from (4) to (5) to go through. Making this repair gives us a new-and-improved version of the matching content challenge:

\[ PCT, \text{ for reductio} \]

(1) There is a part of $T$, phenomenal property $P$, that is identical to $T$'s intentional content.

\[ \text{Stipulation} \]

(2) $V$ and $T$ have the same intentional content.

\[ \text{Representationalism about perceptual phenomenology} \]

(3) There is a part of $V$, phenomenal property $Q$, that is identical to $V$'s intentional content.

\[ \text{from (1)-(3)} \]

(4) $P$ and $Q$ are identical to the same intentional content.

\[ \text{from (4)} \]

(5) So $P$ and $Q$ are identical.

\[ \text{Introspective datum} \]

(6) But for all phenomenal properties of $T$ and of $V$, there exist no $P$ and $Q$ such that $P$ and $Q$ are identical.

\[ \text{Conclusion} \]

Therefore, it's not the case that there is a part of $T$, phenomenal property $P$, that is identical to $T$'s intentional content.

Again, the starting assumption, PCT, generates a contradiction, and is therefore false. The remainder of the paper gives two responses on behalf of the cognitive phenomenologist.

---

6 Other than, of course, the property of having a common supervenience base. Considering analogous cases is illustrative. Suppose facts about moral value supervene on natural facts, and suppose that facts about prudential value also supervene on natural facts. Sharing a supervenience base does not by itself entail that the set of moral facts and the set of prudential facts have a property in common.

7 Horgan and Tienson (2002), Chalmers (2004), Pautz (2008) are sympathetic to representationalism about phenomenal consciousness being put in terms of identity between the phenomenal and the intentional. Note that I am claiming that positing the relation between intentional content and phenomenal character as one of identity is sufficient for $T$ and $V$ sharing a phenomenal property; it need not be necessary, as I am open to other relations sufficing for this result.
First Response: *P* and *Q* share determinable phenomenal properties

Bayne and McClelland hold that *T*, my experience of consciously judging that there is a blue wall before me, and *V*, my experience of a visually perceiving a blue wall before me, share no phenomenal character.8

The claim that *T* and *V* do not have *any* phenomenal property is too strong, as it is plausible that *T* and *V* have certain highly determinable phenomenal properties. Consider, for instance, the property of *being phenomenally conscious*. This property is a phenomenal property if anything is. *T* and *V* are both, it is assumed, conscious experiences. If *T* and *V* are both conscious experiences, then they share the phenomenal property of being phenomenally conscious. If they did not have this property in common, then there would be no shared subject matter in describing *T* and *V* as both being conscious experiences.9 So it’s not the case that *T* and *V* have *no* phenomenal property in common.

That there exist highly determinable phenomenal properties should thus be common ground between Bayne and McClelland and proponents of PCT. Are there other, more fine-grained determinable phenomenal properties besides the property of being phenomenally conscious? There is reason to think so. Pleasure is a good candidate. The phenomenal character of the taste of chocolate and the phenomenal character of solving a difficult proof are both pleasurable, though this determinate property has different determinants across the two experiences.10 Reflecting on cases familiar to debate over representationalism about perceptual phenomenology yields a similar verdict. Consider one’s tactile experience of feeling a circular-shaped saucer and one’s visual experience of seeing a circular-shaped saucer. “Being phenomenally conscious” does not exhaust the qualitative similarity between one’s tactile experience and one’s visual experience. It is plausible that both experiences represent the *same* determinable property of being circular. Intuitively, there is something qualitatively similar between these two experiences, namely, the determinable property of being circular. There are, of course, determinate properties of representing-tactile circularity and representing-visual circularity, that we tend to focus on when introspecting. But the existence of the determinate properties entail the existence of the determinable properties.

Is there any principled reason why we cannot run the same argument for conscious experiences *T* and *V*? It is similarly plausible that *T* and *V* both represent the property of “being a blue wall before me.” There is something qualitatively similar between the two experiences, other than their both simply being phenomenally conscious—the property of “being phenomenally conscious” again does not exhaust the qualitative similarity between one’s conscious thought and one’s visual experience. They both possess the determinate phenomenal property of “being a blue wall before me.” Their determinants are the modal-specific properties corresponding to the attitude types, and it’s this difference in manner of representation that can explain the intuition we have that there is no phenomenal overlap. There *is* phenomenal overlap between *T* and *V*, because their respective parts, *P* and *Q*, are identical to this determinable phenomenal property (even if the overall phenomenal differences between *T* and *V* make introspection difficult).11 If this is correct, then the cognitive

---

8 It might be responded that my experience of *T* involves some *mental imagery* of a blue wall—I can close my eyes and “see” or “picture” a blue wall before me when I have *T*. This quasi-perceptual phenomenology that might accompany *T* is not, however, what Bayne and McClelland have in mind when they deny that *T* and *V* have any common phenomenal element.

9 Speaks (2015, p. 185) makes a similar point when discussing representation of same content across different sensory modalities.

10 This is Crisp’s (2006) view of pleasure.

phenomenologist can respond to the matching content challenge by denying (6): for all phenomenal properties of \( T \) and of \( V \), there does exist some \( P \) and \( Q \) such that \( P \) and \( Q \) are identical: the determinable property of being a blue wall before me.\(^{12}\)

**Second response: impure representationalism**

A related way the cognitive phenomenologist can respond to the (repaired) matching content challenge is by invoking a distinction between pure representationalism and impure representationalism. Pure representationalism is the claim that phenomenal character is determined by intentional content.\(^{13}\) Impure representationalism says this, and more: phenomenal character is determined by intentional content *being represented in a certain way*, where “in a certain way” is a manner of representation.\(^{14}\)

The way in which the cognitive phenomenologist can invoke impure representationalism is straightforward. The cognitive phenomenologist can deny the move from (4) to (5). That is, they can deny that just because \( P \) and \( Q \) are identical to the same content that they therefore must be identical to each other. This is because the intentional content can be represented through different manners of representation, thereby resulting in \( P \) and \( Q \) that are not identical even if both are equivalent to the same intentional content. We have already seen an instance of the same content being represented under different manners of representation with regards to perceptual experiences. Content that is the same across different sensory modalities is an instance of this: one can visually represent a plane overhead, and one can auditorily represent a plane overhead.\(^ {15}\)

To see how manners of representation arise in cases of cognitive experiences, notice that one can token the same content in a vast variety of different contexts. Suppose one consciously judges that “there is a blue wall before me” in the context of picking out a new color to paint one’s bedroom, and then suppose that one then consciously judges that “there is a blue wall before me” in the context of playing a video game in which one encounters a blue wall. In both contexts, the content—that there is a blue wall before me—is the same, and yet the total phenomenal character of one’s conscious thought diverges. This is because the same content need not make the same, isolable contribution to one’s overall phenomenal character in different contexts. The overall phenomenal character of one’s context will presumably be determined by the variety of phenomenally conscious mental states that one is in a given context. But this does not entail that we should be able to discern the same phenomenal property across different contexts, even when the tokening the same content. The various modes of representation that make up the context one is in can *intertwine* in their contribution to a subject’s overall phenomenal character.\(^ {16}\)

\(^{12}\) If one were to deny that appeal to determinable phenomenal properties reveals a shared phenomenal property between \( T \) and \( V \), then they would assume the burden of explaining why similar moves making use of impure representationalism do not work in the cases of shared intentional content across different sensory modalities. Perhaps this is possible; regardless, the point is that the problem is not one novel to cognitive phenomenology.

\(^{13}\) Dretske (2003) appears to be a pure representationalist.

\(^{14}\) Manners of representation are not the same as modes of presentation; differences in manners of representation amount to different mental characterizations of the same content, while differences in the modes of presentation amount to differences in content. Other impure representationalists include Lycan (1996), Tye (2000), and John (2005). For their part, Bayne and McClelland neglect discussion of manners of representation, instead focusing on modes of presentation.

\(^{15}\) This example is from Block (1995).

\(^{16}\) This response motivated by Chudnoff’s (2013) phenomenal holism, which holds that some phenomenal characters can only be instantiated by experiences that are parts of certain wholes.
So, just because $P$ and $Q$ are identical to the same content, this need not entail that they are identical to one another. They can be represented under different manners. This means that the cognitive phenomenologist can hold (4) without thereby also holding (5).

**Conclusion**

I first shored up the notion of representationalism at work in Bayne and McClelland’s matching content challenge by construing the relation between the intentional and the phenomenal as one of identity rather than supervenience. I then argued that the matching content challenge can be solved by responding in two ways, neither of which force the cognitive phenomenologist to hold that the contents of one’s conscious thought and one’s perception are different. First, the cognitive phenomenologist can insist that there is some shared determinable phenomenal property between one’s conscious thought that there is a blue wall before me and one’s visual perception of a blue wall before me. Failing this, the cognitive phenomenologist can explain why there is no shared phenomenal property between one’s conscious thought and one’s perception by appealing to impure representationalism, on which phenomenal character is determined by intentional content and the manner in which that content is represented.

The lesson of these responses is that, in laying down the matching content challenge, Bayne and McClelland have not identified a problem unique to those endorsing PCT. Rather, the problem is one that is familiar to representationalism about phenomenal consciousness in generally, simply extended to representationalism about cognitive consciousness. The matching content challenge can be solved to the extent that these extant problems can be solved. At any rate, those endorsing PCT are on as stable ground as representationalists are in general. Given the overall promise of representationalism, this seems to be ground stable as any.

---

17 See Smithies (2019) for an instance of representationalism about phenomenal consciousness extended to cognition.


19 Thanks to audiences at [omitted for blind review] and [omitted for blind review]. Thanks especially to [omitted for blind review] for incredibly helpful feedback on multiple drafts and in conversation.
References


