1. TWO IMPOSSIBLE SCENARIOS

The first premise of the argument against interpersonal intentionalism is that the following scenarios are impossible:

<table>
<thead>
<tr>
<th>Scenario A</th>
<th>Scenario B</th>
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<tbody>
<tr>
<td>Psychedelic phenomenology + constant representation of color properties</td>
<td>Constant phenomenology + psychedelic representation of color properties</td>
</tr>
</tbody>
</table>
| A subject is looking intently at a well-lit surface which occupies the whole of the subject’s visual field. Over the course of a few seconds, his experience goes from being (as we would put it, were we to describe the phenomenal character of the experience) bright-red-feeling (BRIGHT RED, for short) to being BRIGHT GREEN to being BRIGHT BLUE, and constantly repeats this pattern. And the subject’s memory is working normally — it’s working pretty much the way yours usually does when you have an experience lasting a few seconds. But, the whole time, he is visually representing the wall as red; it visually seems to him throughout that the wall is red; according to his experience, the wall is red throughout. | A subject is looking intently at a well-lit surface which occupies the whole of the subject’s visual field. The only thing notable about the phenomenology of his experience of the surface is its monotony. The phenomenal character of the experience is CHARCOAL GREY, and remains so for its duration. And the subject’s memory is working normally — it’s working pretty much the way yours usually does when you have an experience lasting a few seconds. Nonetheless, the subject is visually representing the color of the wall as rapidly changing from bright red, to bright green, to bright blue; it visually seems to him that the wall is changing from bright red, to bright green, to bright blue; according to his experience, the wall is changing from bright red, to bright green, to bright blue.
The claim that Scenarios A and B are impossible might seem too trivial to be worth arguing for. In a way, I agree: I think that it is pretty obvious that each of these scenarios is impossible. But the claim that these scenarios are impossible if, in another way, highly non-trivial, since (as I'll argue) quite a few theories of perceptual experience entail that they are possible. So let's consider a few objections to the claim that these scenarios are impossible.

1. One might object it is possible that psychedelic phenomenology could be combined with a judgement or belief that the color properties of the surface are constant; you could know, for example, that you just took a drug likely to produce psychedelic phenomenology. This is true but irrelevant.

2. Objection by example:

   Bob has contracted a rare disorder which systematically shifts the phenomenal character of his experiences of things which are the color of ripe bananas. Whenever Bob looks at something which is this color, he has an experience whose phenomenal character rapidly shifts from being bright red to being bright green to being bright blue, and constantly repeats this pattern. Despite this disorder, Bob lives a long and happy life, and gets used to the surprising appearance bananas present to him. After a while, whenever Bob has an experience with this sort of psychedelic phenomenology, Bob immediately takes the object to presented to be yellow — in just the “second nature” sort of way in which you take something which causes an experience with phenomenal character red to be red. Surely, at this point, when Bob comes across a banana, and has an experience with the phenomenal character just described, Bob now, after all these years, is visually representing the object as yellow.

   Replies: (i) why describe the case this way?; (ii) the example of color blindness; (iii) no parallel argument for the possibility of B.

3. Our intuition that these two scenarios are impossible turns on a conflation between differences in representation and representation as different. Let’s focus again on Scenario A. One might defend its possibility by saying that while psychedelic phenomenology of the sort described does entail that the subject represents the color of the surface as changing — that she represents it as different from one moment to the next — this does not entail that the color she represents it as being at one moment is distinct from the color that she represents it as being at the next moment. Reply: this makes the contents of the relevant experiences impossible, which is implausible.

4. Color constancy. Reply: (i) hold lighting fixed; (ii) looking at light source; (iii) no relevance to B (again).
2. PHENOMENISM AND PHENOMENAL VARIANCE

Consider the negation of an interpersonal intentionalist thesis about experiences of color:

*Phenomenism*: possibly, two subjects have experiences with different color phenomenology, but the same content.

If we can show that phenomenists are committed to the possibility of our scenarios, this will amount to an argument that at least one local interpersonal intentionalist thesis is true.

Phenomenists also endorse a stronger claim:

*Super-phenomenism*: possibly, two subjects have experiences with arbitrarily different color phenomenology, but the same content.

Why should phenomenists be super-phenomenists?


2. Spectrum shift examples. These make use only of small phenomenal differences. But if you put enough phenomenal differences together, you get a big one.

Super-phenomenalism entails

*Phenomenal variance*: Possibly, two subjects have experiences with arbitrarily different color phenomenology, but which represent the same color properties as instantiated.

Super-phenomenists seem to be committed to phenomenal variance, because it’s hard to see why *sameness* of the content of an experience of color should entail a *difference* in the color property represented; presumably if we hold fixed the circumstance of evaluation, sameness of content should entail *sameness* of color property represented.

So to show that phenomenism entails the possibility of Scenario A, it suffices to show that phenomenal variance entails the possibility of Scenario A. Scenario A just is an instance of phenomenal variance in which the pair of possible experiences are consecutive experiences of a single subject in which the subject’s memory is working normally. So, phenomenal variance entails the possibility of Scenario A unless one of the following three principles is true:
The interpersonal constraint

Two subjects can have experiences with arbitrarily different color phenomenology, but which represent the same color properties as instantiated; but this is not possible for two experiences of a single subject.

The time constraint

A single subject can, at different times, have experiences with arbitrarily different color phenomenology, but which represent the same color properties as instantiated; but this is not possible for two experiences of a single subject which are separated by an interval of time less than some minimal interval $t$.

The memory constraint

A single subject can have experiences with arbitrarily different color phenomenology, but which represent the same color properties as instantiated, so long as those two experiences are not related by a certain memory relation $M$; but this is not possible for two experiences of a single subject which are connected by $M$.

So, to show that phenomenism entails the possibility of Scenario A — and hence to show that a local interpersonal intentionalist thesis about visual experience is true — it suffices to argue against the interpersonal constraint, the time constraint, and the memory constraint.

3. THE INTERPERSONAL CONSTRAINT, THE TIME CONSTRAINT, AND THE MEMORY CONSTRAINT

The interpersonal constraint is, I think, the least attractive of these three. We can argue against the interpersonal constraint as follows:

*Argument against the interpersonal constraint*

Consider two subjects, A and B, having perceptual experiences which differ in phenomenal character but not in which color properties they represent as instantiated. If we consider sufficiently long-lived and protean individuals, it will always be possible to imagine a single subject who is at one time relevantly just like A and at another time relevantly just like B.1


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Argument against the time constraint

Consider two experiences of a single subject, $e_1$ and $e_2$, which are separated by the minimal time interval $t$. Because they are separated by $t$, it is possible that they differ arbitrarily in color phenomenology, but represent the same color properties as instantiated; to fix ideas let us suppose that at the time of $e_1$ the subject is such that RED experiences represent the property red, and GREEN experiences represent the property green, whereas in $e_2$ the subject is such that RED experiences represent the property green, and GREEN experiences represent the property red.

But presumably it is possible for the subject to have a perceptual experience, $e^*$, during $t$, which must have some color phenomenology — let us suppose that $e^*$ has the phenomenal character RED. What is the content of $e^*$? Since, by hypothesis, $t$ is the minimal interval of time by which two experiences alike in color content but distinct in color phenomenology must be separated, $e^*$ cannot represent the color red, since it is separated from $e_2$ by an interval less than $t$; and because it is also separated from $e_1$ by an interval less than $t$, it cannot represent the property green. And $e^*$ can't have some third sort of content since, by varying the description of $e_1$ or $e_2$, we could again generate a violation of the stipulation that $t$ is the minimal interval of time by which two experiences alike in color content but distinct in color phenomenology must be separated.

The only available reply open to the defender of the time constraint seems to be to stipulate that there can be no experiences in the interval $t$; experiences can differ in color phenomenology but be alike in color property represented only if separated by a sufficiently long experienceless interval.

This view seems to me a bit ad hoc. I think that it’s also open to a few different sorts of arguments:

1. From arbitrariness. The proponent of an “experienceless interval” view is going to end up treating very similar cases very differently. Suppose that we have a pair of subjects alike but for the fact that one underwent an experienceless interval of just long enough, and the other’s experienceless interval fell just short of the required length. Could this difference really be sufficient for the two to, from that point on, differ dramatically with respect to whether their visual representation of things as instantiating the property of redness is done via experiences with the phenomenal character RED or the phenomenal character GREEN?
2. From borderline cases. Whatever the minimal interval is, there will be borderline cases — cases of subjects whose experienceless intervals are very close to \( t \). Our choices about what to say about these borderline cases are familiar from other examples of vagueness. We can either say that there is a range of subjects for whom it is indeterminate whether or not the relationship between phenomenal character and content has switched, or we can say that there is a sharp cut-off point. But neither seems very attractive.

- We can’t say that borderline cases are ones in which the content of the subject’s experience after the interval is “indeterminate,” since it is very implausible that it can be indeterminate whether a visual experience of any phenomenal character represents an object as red or green. Imagine a visual experience of something which is half-red and half-green — would the experience represent the object as indeterminately-red-or-green all over?

- One might try to solve this last problem by going supervaluationist, and saying that the two “precisifications” of the experience’s content are: (i) red on left/green on right and (ii) red on right/green on left. On this sort of view it would come out true on every precisification, and hence true simpliciter — as it should — that the subject represents the left half of the object as having a different color than the right half. But there are other oddities. One is that, if we assume that it is impossible for a surface to be simultaneously red and green, it will follow that it is impossible for the viewed object to be such as to make the subject’s experience veridical (since, on the supervaluationist view, the experience will be veridical iff each of the two precisifications are true). But it does not seem that such a pedestrian experience could really have a contradictory content.

- So we’re forced to say that there must be a sharp cut-off point here — and, whatever the attractions of epistemic views of vagueness in other cases, it seems unattractive here. For one thing, it looks like the sharp cut-off point here would be (as in other cases of vagueness, on the epistemic view) undiscoverable, which in turn would make it hard to see how certain subjects could be in a position to know which properties their own current visual experiences would be representing objects as having.

Is this last option really so bad?

**Argument against the memory constraint**

Consider two experiences of a single subject, \( e_1 \) and \( e_2 \), which are not related by the relevant memory relation \( M \). Because they are not \( M \)-related, it is possible that they differ arbitrarily in color phenomenology, but have represent the same color properties as instantiated; let’s again suppose that at the time of \( e_1 \) the
subject is such that RED experiences represent the property red, and GREEN experiences represent the property green, whereas in e2 the subject is such that RED experiences represent the property green, and GREEN experiences represent the property red.

But memory relations (as Reid pointed out in his criticism of Locke’s theory of personal identity) are not transitive; in general, it is possible to remember some earlier experience, at which time you remembered some experience which you now can’t remember. So presumably it is possible that between e1 and e2 you have a perceptual experience, e*, which is M-related to both e1 and e2. But then we can argue in a way parallel to the argument against the time constraint that any assignment of content to e* will contradict the memory constraint.

However, one might also turn to discussions of personal identity for a solution to this problem. Even if ordinary memory relations aren’t transitive, we can use these relations to define a transitive relation. Using our initial memory relation M, we might define a new relation, indirect-M, as follows:

\[ e_1 \text{ and } e_2 \text{ are indirect-}M\text{-related iff there is a finite set of experiences such that (i) } e_1 \text{ is the first and } e_2 \text{ is the last, and (ii) every experience in the series other than } e_1 \text{ is } M\text{-related to an earlier experience in the series.} \]

But: let’s suppose that we have a subject who has two experiences, e1 and e2, which at the time of e2 are not M-related — and not indirect-M related either. The phenomenal characters and contents of experiences can’t depend on later developments in the life of the subject, so the contents and characters of these experiences must also be fixed at this time. Let’s suppose that this subject satisfies the conditions (whatever they are) for variance in color phenomenology with no variance in color property represented; so let e1 be a RED experience which represents red, and e2 a GREEN experience which also represents the color red. But now suppose that the subject later has another experience, e3, which has phenomenal character RED — and that e3 is M-related to both e1 and e2. e3 presumably represents some color property as instantiated — but which one? Not the color red, since e3 is M-related to e2; but also not any other color, since — given that at the time of e1 the subject is relevantly just like a normal, non-spectrum-inverted, human subject — we could vary the description of e1 to rule this out.

So the friend of the modified memory constraint must say that this sort of situation is not possible — once experiences e1 and e2 happen, this makes it metaphysically impossible for the subject to, later, have another color experience at which time she stands in the

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2 See the example of the general, the officer, and the schoolboy in Essays on the Intellectual Powers of Man (1785).
relevant memory relation to each of \( e1 \) and \( e2 \). But this is very hard to believe — why should this be impossible?

[Might one give a functionalist theory of memory which entails this result? something like that would be needed.]

4. **PHENOMENAL VARIANCE AND PROPERTY VARIANCE**

So far I’ve argued that phenomenism entails, falsely, the possibility of Scenario A — does it also entail the possibility of Scenario B?

To answer this question we have to consider the relationship between phenomenal variance and the reverse claim, that we can get arbitrary differences in color property represented while holding fixed color phenomenology:

*Property variance:* Possibly, two subjects have experiences which represent arbitrarily different color properties as instantiated, but have the same color phenomenology.

A plausible argument can be made that phenomenal variance and property variance are equivalent:

*That phenomenal variance entails property variance:*

Imagine (as phenomenal variance tells us is possible) that \( A \) is having an experience with phenomenal character \textit{RED} which represents the color property redness as instantiated, \( B \) is having an experience with phenomenal character \textit{GREEN} which also represents redness as instantiated. Now let \( A \) go on to have an experience with phenomenal character \textit{GREEN}; presumably it is possible that this represent green (just imagine that \( A \) is a normal human subject). But this entails (given the facts about \( B \)'s experience) that a pair of experiences can be alike in phenomenal character and differ arbitrarily with respect to which color property they represent as instantiated. And this just is property variance.

*That property variance entails phenomenal variance:*

Imagine (as property variance tells us is possible) that \( A \) is having an experience with phenomenal character \textit{RED} which represents the color property redness as instantiated, \( B \) is having an experience with phenomenal character \textit{RED} which represents greenness as instantiated. Now let \( A \) go on to have an experience with phenomenal character \textit{GREEN}; presumably it is possible that this represent the property greenness. (Just imagine that \( A \) is a
normal human subject.) Then B’s experience and A’s second experience both represent the color property green as instantiated, despite differing widely in their phenomenal character. And this just is phenomenal variance.

So the phenomenist should be a super-phenomenist, the super-phenomenist must endorse phenomenal variance, and phenomenal variance is equivalent to property variance. So the phenomenist is committed to property variance.

But property variance entails the possibility of Scenario B. The argument here is much like the argument from phenomenal variance to the possibility of Scenario A. The proponent of property variance who wants to deny that Scenario B is possible, on the grounds that consecutive experiences of a single subject can’t be alike in phenomenal character while differing arbitrarily in which color properties they represent as instantiated, must either say that this is possible for distinct subjects but not for experiences of a single subject, or that this is possible for experiences of a single subject separated by a sufficient interval of time \( t \) but not for experiences of a single subject separated by less than \( t \), or that this is possible for experiences of a single subject not connected by a certain memory relation but impossible for experiences which do stand in that memory relation. That is, he must accept the reverse interpersonal constraint, the reverse time constraint, or the reverse memory constraint:

<table>
<thead>
<tr>
<th>Reverse Interpersonal Constraint</th>
<th>Two subjects can have experiences which represent arbitrarily different color properties as instantiated, but which have the same phenomenal character; but this is not possible for two experiences of a single subject at different times.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverse Time Constraint</td>
<td>A single subject can, at different times, have experiences which represent arbitrarily different color properties as instantiated, but which have the same phenomenal character; but this is not possible for two experiences of a single subject which are separated by an interval of time less than some minimal interval ( t ).</td>
</tr>
<tr>
<td>Reverse Memory Constraint</td>
<td>A single subject can have experiences which represent arbitrarily different color properties as instantiated, but which have the same phenomenal character, so long as those two experiences are not related by a certain memory relation ( M ); but this is not possible for two experiences of a single subject which are connected by ( M ).</td>
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So, to show that phenomenism entails the possibility of Scenario B, it suffices to argue against the reverse interpersonal constraint, the reverse time constraint, and the reverse memory constraint. But the arguments against these three theses are exactly parallel to the arguments given against the interpersonal constraint, the time constraint, and the memory constraint above.
We can sum up our two-pronged argument against phenomenism — and hence in favor of a local intermodal intentionalism about visual experience — as follows:

![Diagram]

1. **Phenomenism**
2. **Super-phenomenism**
   - **Property variance**
     - ¬Reverse interpersonal constraint
     - ¬Reverse time constraint
     - ¬Reverse memory constraint
     - ◊ Scenario B
   - **Phenomenal variance**
     - ¬Interpersonal constraint
     - ¬Time constraint
     - ¬Memory constraint
     - ◊ Scenario A
5. EXTENDING THE ARGUMENT TO OTHER PHENOMENAL STATES

Consider these cases:

<table>
<thead>
<tr>
<th>Hearing</th>
<th>Touch</th>
<th>Pain</th>
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<tbody>
<tr>
<td>A subject is listening to the radio. Over the course of a few seconds, the phenomenal character of his experience changes rapidly from the phenomenal character characteristic of your experience of listening to a motorcycle starting, to that characteristic of your experience of listening to a high-pitched whistle, to that of a quiet hum. But throughout, his auditory experience represents the presence of a constant sound with the pitch, timbre, and loudness of a typical experience of white noise.</td>
<td>A subject is running his hand over the surface in front of him. Over the course of a few seconds, the phenomenal character of his experience changes rapidly from the phenomenal character characteristic of your experience of running your hand over silk, to that characteristic of your experience of running your hand over sandpaper, to that characteristic of your experience of running your hand over a furry stuffed animal. But, throughout, his tactile experience represents the surface as perfectly smooth.</td>
<td>A subject is laying bed and, over the course of a few seconds, the phenomenal character of his experience changes rapidly from the phenomenal character characteristic of your experiences of a throbbing toothache, to that characteristic of your experiences of a stubbed toe, so that characteristic of your experiences of a headache. But, throughout, his pain experiences represent him as having a cramp in his thigh.</td>
</tr>
</tbody>
</table>

As plainly impossible as A and B? If so, the form of argument generalizes.

Does it generalize to every state type which has an associated phenomenology? If so, gives us global intentionalism.