

Toppan Best-set Premedia Limited	
Journal Code: PAPQ	Proofreader: Mony
Article No: PAPQ1439	Delivery date: 11 Sep 2012
Page Extent: 25	

EXPLORING SUBJECTIVE REPRESENTATIONALISM

BY

NEIL MEHTA

Abstract: Representationalism is, roughly, the view that experiencing is to be analyzed wholly in terms of representing. But what sorts of properties are represented in experience? According to a prominent form of representationalism, *objective representationalism*, experiences represent only objective (i.e. suitably mind-independent) properties. I explore *subjective representationalism*, the view that experiences represent at least some subjective (i.e. suitably mind-dependent) properties. Subjective representationalists, but not objective representationalists, can accommodate cases of illusion-free phenomenal inversion. Moreover, subjective representationalism captures the so-called *transparency of experience*, as it is standardly articulated, just as well as objective representationalism.

The core idea of *representationalism* is that experiencing is to be analyzed wholly in terms of representing. More precisely, representationalism is the view that a mental state is an experience in virtue of being an appropriate type of representational state, perhaps in conjunction with playing a certain functional role; experiences are phenomenally similar or different wholly in virtue of having similar or different representational contents.¹

A pressing question for representationalism, then, is just what goes into these *phenomenal contents* that determine the phenomenal similarities and differences among experiences. Contrast two sorts of properties. *Objective properties* are robustly mind-independent in this sense: whether or not something instantiates an objective property does not depend essentially on whether or not that thing is appropriately related to the minds of subjects. Meanwhile, *subjective properties* are mind-dependent in a related sense: whether or not something instantiates a subjective property does depend essentially on whether or not that thing is appropriately related to the minds of subjects. The subject in question might exist at some time other than when the subjective property is instantiated.² An obvious ques-

Pacific Philosophical Quarterly 93 (2012) 570–594 DOI: 10.1111/j.1468-0114.2012.01439.x

© 2012 The Author

Pacific Philosophical Quarterly © 2012 University of Southern California and Blackwell Publishing Ltd.

tion is whether the contents of experience concern only objective properties, or whether they concern at least some subjective properties.

To sharpen this question, let me introduce a bit of terminology. I stipulate that *phenomenal properties* are the properties (a) that we are apparently directly aware of via introspection, and (b) which generate, in the appropriate way, certain well-known philosophical puzzles about experience, such as the explanatory gap puzzle, the inverted spectrum puzzle, the zombie puzzle, and the puzzle concerning what Mary didn't know.³ I will often speak of more or less specific phenomenal properties (more specific: *phenomenal redness*; less specific: *phenomenal color*).

Objective representationalism is the view that all phenomenal properties are objective properties. As objective representationalism is usually developed, phenomenal colors are simply colors, and these in turn are something like dispositions to reflect light, or perhaps the categorical grounds of such dispositions. Objective representationalists say that phenomenal sounds, phenomenal tastes, phenomenal smells, etc. are also all objective properties of some sort.

An alternative view is *subjective representationalism*, which denies objective representationalism while affirming representationalism *simpliciter*. The core subjective representationalist idea is that at least *some* phenomenal properties (like phenomenal colors, phenomenal sounds, phenomenal tastes, etc.) are subjective properties.⁴ Subjective representationalism is not the much stronger view that *all* phenomenal properties are subjective properties, though it is compatible with this view.

Many prominent representationalists appear to be objective representationalists. It's difficult to tell for sure, since few explicitly consider the question. Still, when representationalists give examples of the sorts of properties represented in experience, they typically list exclusively objective properties. For instance, according to Michael Tye:

The most fundamental level of representation in visual experience, then, consists in what is represented in the array prior to any grouping. . . . for example, distance away, orientation, determinate color, texture, whether a discontinuity in depth is present there, and so on (Tye, 1996, pp. 122–123).

These are all objective properties, at least as Tye construes them. Texture is manifestly an objective property, and Tye holds that colors are also objective properties.⁵ Properties like distance away, orientation, and having such-and-such discontinuity in depth are also objective, though relational. For whether or not something is such-and-such distance from me, or oriented a certain way with respect to me, or whatever, does not essentially depend on whether that thing bears a certain relation to *my mind*. Rather, it depends on whether or not it bears a certain relation to *me*.⁶

1 Tye also discusses phenomenal properties associated with non-visual
2 experiences. He conjectures that the contents of such experiences may
3 concern properties like ‘pitch, tone, loudness, pungency, muskiness, sweet-
4 ness, saltiness, [and] sourness.’⁷ He makes much of the fact that such
5 experienced properties as sounds and smells are ‘publically accessible,’⁸
6 and makes a similar point about taste: ‘We taste things by tasting their
7 tastes. One and the same taste can be tasted by different people.’⁹ It is
8 possible for a subjective property to be publically accessible, but given
9 Tye’s objectivism about colors, it would be natural for him to embrace a
10 similar view about pitch, tone, loudness, etc. So these comments suggest,
11 though they don’t demonstrate, that Tye thinks of these phenomenal
12 properties as objective.

13 Alex Byrne pins down a thesis which he calls (CV) – roughly, the thesis
14 that experiences have representational content. He then says:

15
16 . . . if (CV) is supported by an inference to the best explanation of illusions, then one might
17 expect perceptual content to be relatively thin. Visual illusions, as the object of study in the
18 visual sciences, concern properties like shape, motion, colour, shading, orientation and the
19 like (Byrne, 2009, p. 449).

20
21 Byrne later endorses this approach, saying, ‘We may provisionally con-
22 clude that perceptual content is relatively thin.’¹⁰ (By saying that percep-
23 tual content is ‘relatively thin,’ Byrne means to exclude kind properties –
24 like the property of *being a pine tree* or *being a lemon* – from perceptual
25 content.) Byrne never revises this provisional conclusion in that paper.¹¹
26 Byrne holds that color is an objective property,¹² and all of the other
27 properties he lists are manifestly objective.

28 Similarly, leading representationalist Fred Dretske says this:

29
30 . . . *what* (properties) one is [aware] *of* in having the [experience of seeing a pumpkin] are
31 color, shape, texture, distance, and movement . . . (Dretske, 1999, p. 112).

32
33 So far as I know, Dretske has not published a view about whether colors
34 are objective, but the other properties he lists certainly are.

35 And consider Christopher Hill, who analyzes experiencing in terms of
36 the representation of what he calls ‘A-properties’ – he uses this term more
37 or less as I have been using the term ‘phenomenal properties.’ Hill suggests
38 that the A-properties associated with visual experiences of size and shape
39 ‘are the values that are obtained when certain computable functions are
40 applied to angular properties (together with various other quantities).’ Hill
41 elaborates:

42
43 (i) the functions are in effect constancy transformations, (ii) they each take a number of
44 arguments in addition to angular sizes and angular shapes, all of which are relevant to

1 computing constancies, (iii) their values fall short of being genuine constancies, and (iv) their
2 values are A-sizes and A-shapes (Hill, 2009, p. 165).

3
4 Hill states that angular sizes are ‘defined with reference to the nodal point
5 of the lens of the observer’s eye’ and that angular shapes ‘can for present
6 purposes be identified with the set of all visual angles that are subtended
7 by pairs of points on the boundary of the object’s facing surface.’¹³ He
8 proceeds to generalize this account to all A-properties – that is, to all
9 phenomenal properties – not just to those phenomenal properties asso-
10 ciated with visual experiences of size and shape. All A-properties are
11 produced by constancy transformations, but fall short of being genuine
12 constancies.¹⁴

13 Hill’s proposal is a form of objective representationalism.¹⁵ For angular
14 sizes and shapes are objective properties in our sense: while they are
15 sensitive to the location of the observer, they are wholly mind-independent.
16 (Similarly, while the property *being within a mile of a coffee table* is sensitive
17 to the location of coffee tables, it is a wholly mind-independent property.)
18 And any property that is a computable function of only mind-independent
19 properties will itself be a mind-independent property.

20 Indeed, Hill even considers the suggestion ‘that A-properties should be
21 seen as involving or depending constitutively on internal factors’ and
22 rejects this proposal as ‘largely unmotivated.’¹⁶ This remark rules out
23 neural properties and the like from serving as input to the computable
24 functions which constitute A-properties. Hill shows no sympathy for sub-
25 jective representationalism here.

26 So, among many representationalists, objective representationalism
27 seems to be orthodoxy. I underscore once more that none of the remarks
28 quoted above provide conclusive evidence that Tye, Byrne, Dretske, or
29 Hill are objective representationalists. The point is only that objective
30 representationalism is the most natural extension of their views.

31 My aim in this article is to provide reasons for preferring subjective
32 representationalism to objective representationalism. I’ll show that objec-
33 tive representationalism cannot accommodate the possibility of illusion-
34 free phenomenal inversion, while subjective representationalism can.
35 Moreover, the intuition that illusion-free phenomenal inversion is possible
36 is robust.

37 Additionally, a dominant motivation for objective representationalism
38 is its ability to accommodate the *transparency phenomenon*, which I’ll
39 describe below. But I will develop a particular version of subjective rep-
40 resentationalism that holds that at least some phenomenal properties have
41 the form *appropriately causing mental state M in me*. I will show that, not
42 only can this version of subjective representationalism accommodate the
43 transparency phenomenon, but that it can do so just as well as objective
44 representationalism.

1 Here is a map of the terrain ahead. §1 describes one brand of subjective
2 representationalism and argues that it handles phenomenal color inversion
3 intuitions better than objective representationalism. §2 generalizes the
4 argument to other phenomenal properties. §3 shows that the transparency
5 motivation for objective representationalism equally motivates subjective
6 representationalism, and §4 rebuts a recent objection. Closing remarks
7 appear in §5.

8
9 **1. Capturing spectrum inversion intuitions**

10 My main goal in this section is to demonstrate one substantial advantage
11 of subjective representationalism over objective representationalism. We
12 have a robust intuition that there are possible cases of *phenomenal inver-*
13 *sion without illusion*. Objective representationalism plainly cannot accom-
14 modate such intuitions. Subjective representationalism can.

15 Here is a familiar phenomenal inversion case. Consider two subjects,
16 Jack and Jill, who are both looking at a ripe (red) bell pepper. What it's
17 like for Jack to see tomatoes, cherries, and ripe bell peppers is (in a salient
18 respect) the same as what it's like for Jill to see limes, frogs, and unripe bell
19 peppers; these experiences share a common phenomenal character. Simi-
20 larly, what it's like for Jack to see unripe bell peppers is the same as what
21 it's like for Jill to see ripe bell peppers; those experiences, too, share a
22 common phenomenal character. Call this the *Color Inversion Case*. This
23 case seems perfectly conceivable.

24 It also seems perfectly conceivable that Jack's experience and Jill's expe-
25 rience could be wholly veridical – that neither of them are misperceiving
26 this ripe red bell pepper. We can imagine that their experiences are normal
27 for them: for example, Jack's experiences of things we call 'red' have
28 always been like Jill's experiences of things we call 'green,' and vice versa.
29 Both use color terms standardly (they both call ripe bell peppers 'red' and
30 unripe ones 'green'). Their sorting behavior is identical – they agree com-
31 pletely on which items go in which piles when asked to sort things by color.
32 Each of them even belongs to a species for which such experiences are
33 typical. Given these stipulations about the case, it seems arbitrary to say
34 that one of their experiences of the ripe red bell pepper is veridical and the
35 other falsidical (and perhaps even more counterintuitive to say that both
36 of their experiences *must* be falsidical).

37 While there is an extensive literature attempting to show that Jack's
38 experience and Jill's experience cannot both be veridical, it is safe to say
39 that none of these arguments have been found widely compelling; our
40 intuition that cases like the Color Inversion Case need not involve any
41 illusion is robust.¹⁷ The relevant intuition is not merely that Jack and Jill
42 both have correct *beliefs*, but also that their *experiences* are not falsidical.
43

1 Objective representationalism, as it is ordinarily developed, is incom-
2 patible with the possibility of illusion-free spectrum inversion. Objective
3 representationalists analyze what it's like to have color experiences in
4 terms of the properties that those experiences represent. Typically, objec-
5 tive representationalists say that the represented properties are simply
6 colors, and that these in turn are either (roughly) dispositions to reflect
7 light or the categorical grounds of such dispositions.¹⁸ So when Jack and
8 Jill have different experiences while looking at a ripe bell pepper, Jack
9 represents the bell pepper as having the color property *phenomenal F-ness*,
10 and Jill represents it as having the color property *phenomenal G-ness*.

11 But perhaps the bell pepper can instantiate both color properties, so that
12 Jack's experience and Jill's experience are both veridical? Unfortunately
13 not. For it's very plausible (and objective representationalists normally
14 accept) that the phenomenal property associated with Jack's experience of
15 ripe bell peppers (phenomenal F-ness) is incompatible with the phenom-
16 enal property associated with his experience of unripe bell peppers (phe-
17 nomenal G-ness). These properties are incompatible in this sense: nothing
18 can wholly instantiate both phenomenal F-ness and phenomenal G-ness at
19 a given time. So if the bell pepper wholly instantiates any phenomenal
20 color property, then it can instantiate at most one of the two incompatible
21 properties attributed to it by Jack's and Jill's experiences.

22 The problem is generated by the following commitments of the objective
23 representationalist concerning the Color Inversion Case¹⁹:

- 24 (1) No object can wholly instantiate phenomenal F-ness and phenom-
25 enal G-ness at a given time.
- 26 (2) Jack's experience of the ripe bell pepper represents something as
27 wholly instantiating phenomenal F-ness, and Jill's experience of
28 the ripe bell pepper represents something as wholly instantiating
29 phenomenal G-ness.
- 30 (3) Jack's experience and Jill's experience attribute these respective
31 properties to the same thing at the same time.

32 (1) is common ground to almost all theories of experience. The phenom-
33 enal property paradigmatically associated with my experiences of red
34 things seems deeply incompatible with the phenomenal property parag-
35 digmatically associated with my experiences of green things. It seems unin-
36 telligible that they could be co-instantiated.²⁰

37 As for (2), we stipulated that Jack and Jill have different experiences in
38 the Color Inversion Case. Since objective representationalists analyze dif-
39 ferences in experience via differences in objective properties represented,
40 they must accept something like (2).

41 Usually, objective representationalism is motivated partly via the trans-
42 parency consideration (more on this in §2). For now, we can simply note
43
44

1 that the usual form of objective representationalism says that phenomenal
2 color properties are represented as being instantiated in ordinary environ-
3 mental objects (like bell peppers). So objective representationalists nor-
4 mally accept (3).

5 It follows from (2) and (3) that Jack's experience represents an object as
6 wholly phenomenally F, and Jill's experience represents the same object as
7 wholly phenomenally G. But (1) says that no object can be both wholly
8 phenomenally F and wholly phenomenally G. So Jack's experience and
9 Jill's experience cannot both be veridical. Since the (canonical) objective
10 representationalist is committed to (1)–(3), she must deny that Jack's
11 experience and Jill's experience are both veridical in the Inversion Case.
12 The point readily generalizes: objective representationalism cannot coun-
13 tenance illusion-free color inversion.

14 Can subjective representationalism do better? At first glance, it appears
15 not. Everyone, subjective representationalists included, should accept (1).
16 And any representationalist, objective or not, must accept something like
17 (2). For Jack and Jill have phenomenally different experiences, and rep-
18 resentationalists are committed to understanding such differences in terms
19 of representational differences. Finally, subjective representationalists
20 (just like objective representationalists) can deny (3) by denying the trans-
21 parency consideration. But this is a compelling datum, and I'd like to see
22 whether we can keep it.

23 Egan (2006) provides a neat solution to the problem. The solution is
24 motivated in part by the point that, to understand the contents of certain
25 propositional attitudes, we need more fine-grained objects than possible
26 worlds.²¹ The following example illustrates why possible-worlds content
27 isn't fine-grained enough. Suppose that from noon to midnight I am
28 sitting on the bus to Chicago, with my eyes closed the entire time. Some-
29 time in the middle of the trip, I wonder what time it is *now*. No matter
30 how much information I acquire about which possible world is actual,
31 this alone will not tell me what time it is now. To learn this, I must learn
32 something about – to put things intuitively – *where I am located* in the
33 world.

34 A natural thought is to introduce *centered possible worlds*. There are
35 many ways of understanding what these are, but I'll take a centered
36 possible world to be a world with a 'marked' individual and time. So here
37 is a centered possible world: <the actual world, Barack Obama, December
38 1 2010>. Propositional attitudes may be assigned centered possible world
39 contents. Since centered possible world contents are strictly more fine-
40 grained than possible world contents, we don't lose any modeling capa-
41 bilities when we switch to them. But we do gain some powerful new
42 modeling capabilities. For example, we can now say what I'm wondering
43 when I wonder what time it is now. I'm not wondering which world is
44 actual, but rather which temporal location I'm in now.

1 Possible worlds contents determine functions from possible worlds to
2 truth values. By contrast, centered possible worlds contents determine
3 functions from *centered* possible worlds to truth values. If we are modeling
4 contents with ordinary possible worlds, then any two actual individuals
5 who represent incompatibly can't both be correct. If I believe that *p* and
6 you believe that not *p*, we can't both be right. But introducing centered
7 possible worlds permits for cases in which two actual individuals represent
8 incompatibly, and both are correct.

9 To see this, suppose that at time *t* Sammy is in Chicago and Sally is in
10 New York. And, at time *t*, it's raining in Chicago but not in New York.
11 Sammy thinks the thought he would express by saying, 'It's raining
12 here,' and Sally thinks the thought she would express by saying, 'It's not
13 raining here'; these thoughts have quite different truth conditions. The
14 truth of Sammy's thought requires that it be raining in some salient
15 location in *Chicago*, while the truth of Sally's thought requires that it be
16 raining in some salient location in *New York*. Still, both think something
17 true.

18 Still, there is an important intuitive sense in which Sammy's thought and
19 Sally's thought represent incompatibly, even though both of them think
20 true thoughts. The centered worlds theorist can capture this sense of
21 representational incompatibility by saying that Sammy's thought and
22 Sally's thought have incompatible centered contents: one has the content
23 that it is raining in some salient location near the marked center, and the
24 other has the content that it is not raining in some salient location near the
25 marked center. Assessed at the actual world centered on Sammy at *t*, only
26 the former content is true. Assessed at the actual world centered on Sally
27 at *t*, only the latter content is true.

28 Let's define an *ordinary function* as a function from possible worlds to
29 extensions. Standardly, it is thought that any property (like *being a dog* or
30 *being red*) determines an ordinary function. The property *being a dog*, for
31 example, determines the function that takes as input any possible world
32 and delivers as output every dog in that world. The possible worlds theo-
33 rist will likely model predicates (like 'is a dog') in terms of ordinary
34 functions.

35 But now consider *centered functions*, which are functions from centered
36 possible worlds to extensions. The centered possible worlds theorist can
37 model predicates (like 'is a dog' or 'is now red' or 'is near me') in terms of
38 centered functions instead of ordinary functions.

39 There is a centered function corresponding to every ordinary function,
40 since, for every function from possible worlds to extensions, there is a
41 corresponding function from centered possible worlds to extensions.
42 (Intuitively, these are functions from centered possible worlds to exten-
43 sions that ignore the marked center.) So any theoretical work done by
44 ordinary functions can also be done by centered functions.

1 But there are also centered functions corresponding to no ordinary
2 functions. (Intuitively, these are functions from centered possible worlds
3 to extensions that do not ignore the marked center.) So there may be
4 theoretical work that centered functions can do and ordinary functions
5 cannot do.

6 As I said, properties are normally thought of as determining ordinary
7 functions. But, from here on out, I'll instead talk as though properties
8 determine centered functions. (This use of the term 'property' is non-
9 standard, but it is a natural extension of the standard use.) This lets us
10 distinguish between *ordinary properties* and *centered properties*. An ordi-
11 nary property is a property that determines a centered function corre-
12 sponding to an ordinary function, while a centered property is a property
13 that determines a centered function corresponding to no ordinary func-
14 tion. (Thus every property is either ordinary or centered, and no property
15 is both.)

16 Some examples will help. The property of *being a dog* is ordinary; it
17 determines a centered function from any centered possible world to the
18 dogs in that world. (The function ignores any information about the
19 marked centers of these worlds, so it corresponds to an ordinary function.)
20 Meanwhile, the property *being me* is centered; it determines a centered
21 function from any centered possible world to the individual marked at the
22 center of that world. There is no ordinary function corresponding to this
23 centered function, since the centered function puts to use information
24 about the marked centers of these worlds.

25 Notice that centered properties are not instantiated (or uninstantiated)
26 *simpliciter* in the actual world, or in any other possible world; they are
27 instantiated (or uninstantiated) only relative to a center in the actual
28 world, or relative to a centered possible world. (Analogy: we cannot
29 evaluate the thought that New York is here *simpliciter*, but only given a
30 context.)

31 The pivotal suggestion of Egan (2006) is that the subjective representa-
32 tionalist can exploit centered properties to explain what's going on in the
33 Inversion Case. The thought is that Jack's experience and Jill's experience
34 represent things as being the same way – they have the same centered
35 worlds content, ascribing the same properties – even though the veridical-
36 ity conditions of their experiences differ given their different locations in
37 the world. Here ends my recapitulation of Egan (2006); I'll spell out my
38 preferred version of the view below.

39 I should mention that, while some have used the label 'subjective' to
40 describe content modeled in terms of centered possible worlds, that is not
41 how I'm using the term in this article. I'll speak of '*de se* content' to
42 describe content modeled in terms of centered possible worlds.

43 Pressing forward: what property do both Jack and Jill ascribe to the ripe
44 bell pepper? Let's start with a simple subjective representationalist pro-

1 posal according to which phenomenal color properties are centered prop-
2 erties of the form *causing mental state M in me* (where 'me' picks out the
3 marked individual of the centered world).

4 What kind of mental state is M? Shoemaker (2003 and elsewhere) sug-
5 gests that M is the very experience whose content is in question.²² Given
6 our simple proposal about phenomenal color properties, this amounts to
7 the claim that the content of a color experience E involves the centered
8 property *causing E in me*. As an anonymous referee has noted (and as
9 Shoemaker himself recognizes), such proposals make it impossible to indi-
10 viduate a color experience wholly in terms of its content. For this content
11 would refer to the experience to be individuated, and would thus be
12 circular. So representationalists should construe M as some mental state
13 other than the experience whose content is in question.²³

14 Aside from this requirement, subjective representationalists can reason-
15 ably disagree about what kind of state M is. I prefer the view that M is the
16 mental state that, in the causal chain of mental states leading up to the
17 experience, is immediately prior to the experience. (This will likely be some
18 subpersonal perceptual state.) But the central arguments of this article do
19 not turn on this specific proposal.

20 Back to the view that phenomenal color properties are centered prop-
21 erties of the form *causing mental state M in me*. On this view, phenomenal
22 redness is the centered property of causing some specific type of mental
23 state – call it M_{red} – in the marked individual at some centered world. There
24 is something it's like for me to experience phenomenal redness, and what
25 it's like is to be explained wholly in terms of the fact that my experience of
26 phenomenal redness represents something as causing a mental state of
27 type M_{red} in me.

28 An immediate objection to this view is that, when I introspect on my
29 experiences involving phenomenal redness, I don't seem to be aware of a
30 complex property, at least not of the sort *causing mental state M_{red} in me*.
31 I can't introspectively separate a causal element when I consider my expe-
32 rience of phenomenal redness.²⁴

33 The objection is defused by noting that our experiences need not repre-
34 sent this complex property – *causing mental state M in me* – as a complex
35 property. Experience may represent the property while *misrepresenting* it
36 as simple.²⁵ Alternatively, experience may represent the property while
37 remaining silent on whether it is simple or complex. Introspection alone
38 doesn't refute the view that phenomenal properties have such hidden
39 complexity. Moreover, even though phenomenal content is introspectively
40 accessible, not all facts about phenomenal content need be introspectively
41 accessible.²⁶

42 In any case, the most dialectically relevant point is that the same prob-
43 lems afflict objective representationalism. Objective representationalists
44 typically say that phenomenal colors are enormously complicated dispo-

1 sitional properties, but phenomenal colors certainly don't seem to be
2 enormously complicated dispositional properties when I introspect them.
3 So worries of this kind give objective representationalism no edge over
4 subjective representationalism.

5 Here is a better objection. Consider the state of affairs obtaining at the
6 moment of the Big Bang, which presumably caused everything after-
7 wards.²⁷ Specifically, that state of affairs has caused every mental state I've
8 ever undergone. So the Big Bang instantiates every phenomenal color
9 property that I've ever experienced (relative to me now).²⁸

10 This is counterintuitive on two counts. First, it's just implausible that
11 the Big Bang really does instantiate all of those phenomenal colors relative
12 to me now. Second, and more seriously, the instantiation of certain phe-
13 nomenal colors excludes the instantiation of other phenomenal colors. For
14 instance, nothing can be both phenomenally red and phenomenally green
15 (at the same time and place, relative to the same center). But, on the view
16 we're considering, the Big Bang instantiates these and many more incom-
17 compatible phenomenal colors relative to me now.

18 To deal with such problems, we can try restricting the causal relation in
19 question. To be phenomenally red, we might say, a thing must do more
20 than simply cause an M_{red} -state in me in any way at all. A thing must
21 further stand in the kind of causal relation to my M_{red} -state that is typical
22 of cases of veridical perception. The idea is that, when I successfully
23 perceive a red mango, the mango causes an M_{red} -state in me in a particular
24 way. I'll abbreviate this by saying that the thing must *appropriately* cause
25 the M_{red} -state. The new proposal – and the one I will explore in the rest of
26 this article – is that phenomenal colors are centered properties of the form
27 *appropriately causing mental state M in me*.

28 Appropriate causation is incompatible with all kinds of 'deviant' causal
29 chains. It is also incompatible with causal chains that are, to phrase the
30 idea intuitively, 'too long' or 'too short.' When I successfully perceive the
31 mango, both the Big Bang and a certain state of my retina are causally
32 implicated in the production of the M_{red} -state. But neither causes the
33 M_{red} -state in the appropriate way, so, on the present proposal, neither is
34 phenomenally red.

35 We now have the resources to handle the Inversion Case without imput-
36 ing misrepresentation. When Jack looks at a ripe bell pepper and Jill looks
37 at an unripe bell pepper, their experiences both ascribe the following
38 property to the entire surface of the respective bell peppers: *appropriately*
39 *causing mental state M_1 in me*. What it's like to have an experience quite
40 generally is determined by the content of that experience – in this case, by
41 what properties it ascribes.²⁹ Since Jack's experience and Jill's experience
42 ascribe the same property, their experiences are phenomenally the same (at
43 least with respect to phenomenal color). Moreover, the ripe bell pepper
44 does appropriately cause M_1 in Jack, and the unripe bell pepper also

1 appropriately causes M_1 in Jill. So both of their experiences are veridical in
2 this respect.

3 In what sense, then, is phenomenal redness incompatible with phenom-
4 enal greenness? I remarked above that objects instantiate ordinary prop-
5 erties *simpliciter*, but objects do not instantiate centered properties
6 *simpliciter*. Rather, objects instantiate centered properties *relative to a*
7 *marked center* (a marked individual and time). So the idea is that no object
8 can wholly instantiate phenomenal redness relative to a subject at a time
9 *and* wholly instantiate phenomenal greenness relative to the same subject
10 and time. But an object can wholly instantiate phenomenal redness relative
11 to a given subject at a given time and wholly instantiate phenomenal
12 greenness relative to *another* subject at that time (or relative to the same
13 subject at *another* time). That is the sense in which phenomenal redness
14 and phenomenal greenness are incompatible properties.

15 One might worry that talk of properties being instantiated 'relative to a
16 marked center' is incoherent, or at least that it is bad metaphysical
17 manners to speak this way. I offer three responses to this worry. First, we
18 can easily pick out centered properties using perfectly acceptable notions:
19 a centered property determines a function from any possible world with a
20 marked individual and time to a set of objects. This way of talking doesn't
21 lead to any obvious technical problems. So we have a way of translating
22 centered-property talk into perfectly respectable talk. Second, as I empha-
23 sized earlier, we seem to need centered properties to deal with lots of
24 propositional-attitude contents.

25 Finally, and most relevantly for present purposes, centered properties
26 permit us to capture two deep but apparently incompatible intuitions.
27 Consider again the case where Jack and Jill are both looking at the same
28 ripe bell pepper and having experiences that differ with respect to phe-
29 nomenal color. Intuitively, both of their experiences are veridical with
30 respect to phenomenal color. But, intuitively, the properties that they
31 ascribe to the bell pepper seem to be incompatible in some important
32 sense.

33 Surprisingly, our current proposal reconciles these intuitions. Jack cor-
34 rectly ascribes to the bell pepper the property *appropriately causing mental*
35 *state M_1 in me*, and Jill correctly ascribes to the bell pepper the property
36 *appropriately causing mental state M_2 in me*. So both of their experiences
37 are veridical with respect to phenomenal colors.

38 At the same time, Jack could not correctly ascribe to the bell pepper
39 both the property *appropriately causing mental state M_1 in me* and the
40 property *appropriately causing mental state M_2 in me*. For, plausibly, no
41 patch of the bell pepper's surface could appropriately cause both mental
42 state M_1 and mental state M_2 in a given subject at a given time. So these
43 two phenomenal colors are incompatible in an important sense: they
44 cannot both be wholly instantiated in anything at a given time, relative to

1 a given subject. So subjective representationalism can accommodate the
2 whole raft of intuitions about the Color Inversion Case.³⁰

3 It is instructive to see how this subjective representationalist account
4 applies to the following case, raised by an anonymous referee. Suppose
5 that a creature, Deviant, mutates from a normal perceiver to an inverted
6 perceiver. Deviant is just as well adapted to its environment as its normal
7 conspecifics – indeed, it may be behaviorally indistinguishable from them.
8 The subjective representationalist account I’ve been selling says that
9 Deviant misrepresents, for its experiences are not *appropriately* caused by
10 environmental objects. But suppose that Deviant leaves lots of inverted
11 offspring who are behaviorally indistinguishable from Deviant in the rel-
12 evant ways. After enough generations pass, it seems that there will be
13 inverted offspring whose experiences are appropriately caused by environ-
14 mental objects and thus count as veridically representing. Isn’t this
15 arbitrary?

16 I think not. For it is a spectacular accident that Deviant has the relevant
17 adaptive behavioral dispositions – Deviant was very lucky to have gotten
18 the precise mutations that made it behave like a normal perceiver of its
19 kind. By contrast, it is no accident that Deviant’s offspring many genera-
20 tions later have these adaptive behavioral dispositions. Had their ances-
21 tors lacked such adaptive behavioral dispositions, those ancestors would
22 have been much less likely to reproduce and pass on the mutation resulting
23 in inverted perceptual states. So there is a principled explanation for why
24 Deviant’s offspring have veridical experiences, while Deviant does not.

25 One might wonder whether objective representationalism can also
26 accommodate our intuitions about the Color Inversion Case by appealing
27 to centered properties instead of ordinary properties. For just as there are
28 both objective and subjective ordinary properties, there are both objective
29 and subjective centered properties. The centered property ‘being far away’
30 is an example of an objective centered property. The sun instantiates this
31 property relative to the earth now, and its instantiation of this property
32 does not depend essentially on its relation to the minds of any subjects.

33 But even if objective representationalists make use of centered proper-
34 ties, they cannot accommodate our intuitions about illusion-free color
35 inversion. We have the robust intuition that when Jack and Jill both look
36 at the same ripe bell pepper and have different experiences with respect
37 to phenomenal color, both experiences may be veridical. The intuition
38 remains even if the bell pepper has all the same objective centered prop-
39 erties (or near enough) ‘for Jack’ and ‘for Jill.’ Jack and Jill might be
40 standing right next to each other at the same time; though their eyes can’t
41 literally be in the same place, there need not be any relevant difference
42 between their positions.

43 So the objective centered properties of the bell pepper are the same
44 whether we take *Jack at noon* or *Jill at noon* as the marked center. The only

1 properties of the bell pepper that differ ‘relative to Jack at noon’ and
2 ‘relative to Jill at noon’ are mental: Jack and Jill are in different mental
3 states. So the introduction of centered properties does not help the objec-
4 tive representationalist here.

5 This subjective representationalist proposal characterizes only phenom-
6 enal colors, not colors *simpliciter*. One may further hold either that colors
7 *simpliciter* are phenomenal colors, or that they are not. The subjective
8 representationalist who takes the latter approach may hold that colors
9 themselves are either objective or subjective properties.

10 As Billy Dunaway pointed out to me, the introduction of *indexical*
11 content is what does the heavy lifting in this account. But there are lots of
12 ways of analyzing indexical contents: via *de se* content (as I do), via
13 Kaplanian characters (see Kaplan, 1989a and 1989b), via Fregean senses,
14 etc. So why do I discuss only the *de se* analysis?

15 For two reasons. First, as Brogaard (2010) emphasizes, there are several
16 other potential further uses of *de se* content in understanding experience.
17 Second, and more importantly, it seems to me that this is the only
18 approach compatible with the determinacy of experience. I return to this
19 issue in a footnote in §4.

20 In sum, subjective representationalism that invokes *de se* contents with
21 centered properties of the form *appropriately causing mental state M in me*
22 can accommodate a set of robust but apparently incompatible intuitions
23 about phenomenal color inversions. Objective representationalism can’t
24 do this, with or without centered properties. This is a substantial advan-
25 tage of subjective representationalism over objective representationalism,
26 at least in explaining color experiences. In the next section, I examine
27 whether the argument extends to phenomenal properties besides phenom-
28 enal colors.

2. *Extending the argument*

31 The argument extends to any phenomenal determinable of type Q with
32 determinates $Q_1 \dots Q_n$, such that we can coherently conceive of an
33 illusion-free inversion case meeting these conditions:

- 34 (1*) Nothing can wholly instantiate Q_1 and Q_2 at a given time.
35 (2*) Jack’s experience represents Q_1 , and Jill’s experience represents Q_2 .
36 (3*) Jack’s experience and Jill’s experience attribute these respective
37 properties to the same thing at the same time.
38
39
40

41 In this section, I’ll attempt to generalize the argument. It’s plausible that
42 there are cases of illusion-free sound inversion, taste inversion, touch
43 inversion, smell inversion, bodily sensation inversion, etc., that meet these

1 conditions. If there are such cases, then the argument generalizes to phe-
2 nomenal sounds, tastes, touches, smells, bodily sensations, etc.

3 Here is a situation much like the Color Inversion Case, but involving
4 phenomenal sounds; call it the *Sound Inversion Case*. Suppose Jack and Jill
5 both hear a loud sound but have different experiences. For, in general, the
6 experiences Jack has when he hears loud sounds are just like the experi-
7 ences Jill has when she hears quiet sounds, and vice versa. These experi-
8 ences are typical for them, and Jack and Jill are behaviorally alike. For
9 example, they call the same sounds 'loud' and 'quiet,' and respond alike
10 when asked to sort sounds by how loud they are.³¹

11 According to the representationalist, Jack's experience of a particular
12 loud sound and Jill's experience of the corresponding quiet sound have the
13 same phenomenal character because they both represent the same phe-
14 nomenal property – call it *phenomenal loudness*. Similarly, Jack's experi-
15 ence of a particular quiet sound and Jill's experience of the corresponding
16 loud sound have the same phenomenal character because they both rep-
17 resent another phenomenal property – call it *phenomenal quietness*. It
18 seems perfectly conceivable that both of their experiences are wholly
19 veridical.

20 The Sound Inversion Case meets conditions (1*), (2*), and (3*), but
21 there are some nuances in seeing how. For (1*) to be satisfied, there must
22 be two phenomenal properties Q_1 and Q_2 such that nothing can wholly
23 instantiate Q_1 and Q_2 at a given time. The natural proposal is that Q_1 and
24 Q_2 are phenomenal loudness and phenomenal quietness, respectively. But
25 one might worry that something can instantiate both of these properties at
26 a given time. For suppose I hear a sound created by a loud guitar and a
27 quiet piano. Plausibly, something (perhaps my experience, or a body of
28 air, or whatever) then instantiates both phenomenal loudness and phe-
29 nomenal quietness in such a case.

30 This isn't problematic. While it might be that a single thing instantiates
31 both phenomenal loudness and phenomenal quietness in the Sound
32 Inversion Case, nothing *wholly* instantiates both of these properties. Part
33 of the object – here I'm using the term 'object' very permissively – instan-
34 tiates phenomenal loudness, and part of it instantiates phenomenal qui-
35 etness. I can readily swap my attention between these parts and the whole
36 object. But I cannot attend to anything that wholly instantiates both
37 properties.

38 The representationalist must also accept this version of (2*): Jack's
39 experience represents phenomenal loudness, and Jill's experience repre-
40 sents phenomenal quietness. Representationalists analyze similarities and
41 difference in what-it's-like to have any experiences in terms of similarities
42 and differences in the representational contents of those experiences. So
43 they must analyze the differences in Jack's and Jill's experiences via a
44 difference in the representational contents of their experiences, and talk of

1 'phenomenal loudness' and 'phenomenal quietness' is merely a convenient
2 way of labeling the relevant phenomenal properties figuring in these dif-
3 ferent contents.

4 Finally, representationalists sympathetic to transparency considera-
5 tions, to be discussed in the next section, must accept (3*): Jack's experi-
6 ence and Jill's experience attribute these respective properties to the same
7 thing at the same time. Transparency theorists, as we shall see, think that
8 phenomenal sounds are features of objects outside the subject. And we
9 may build into the Sound Inversion Case that Jack and Jill are appropri-
10 ately related to the same environmental objects, or at least environmental
11 objects of the same type. (Again, 'object' is being used loosely, so that
12 bodies of air count as objects).

13 Since we have an illusion-free inversion case that satisfies (1*), (2*), and
14 (3*), the arguments of §1 apply directly. As before, I propose that we
15 analyze properties like *being phenomenally loud* as properties of the form
16 *appropriately causing mental state M in me*.

17 The argument extends readily to phenomenal properties associated with
18 all perceptual experiences. For example, it applies to phenomenal tastes
19 (like phenomenal sourness and phenomenal sweetness), phenomenal
20 touches (like phenomenal softness and phenomenal hardness), and phe-
21 nomenal smells (like phenomenal vanilla-scentedness and phenomenal
22 cinnamon-scentedness). It also applies to hedonic experiences (like phe-
23 nomenal burning-pains and phenomenal freezing-pains) and bodily sen-
24 sation experiences (like phenomenal stillness and phenomenal dizziness).
25 Running through the above considerations in each case would be tedious
26 and unnecessary. It is clear how the arguments would go.

27 As in the previous section, this argument characterizes only certain
28 *phenomenal* properties. It is silent about the nature of sweetness *simpliciter*,
29 softness *simpliciter*, vanilla-scentedness *simpliciter*, etc.

30 Are there any phenomenal properties that escape the net of this argu-
31 ment? Perhaps phenomenal properties associated with experiences of
32 space do, like the phenomenal property associated with my seeing some-
33 thing as circular or far away. Thompson (2010) provides extensive argu-
34 ments that illusion-free inversion of even these properties is possible. If
35 Thompson's arguments succeed, then my argument extends to them, too.

36 Another candidate for phenomenal properties that elude this style of
37 argument are those phenomenal properties, if there are any, associated
38 with the 'phenomenology of intentionality.'³² It is very contentious
39 whether there are such phenomenal properties. Indeed, the arguments here
40 may bear on the question of whether there is a distinctive phenomenology
41 of intentionality. If all uncontroversial examples of phenomenal properties
42 are susceptible to illusion-free inversion, then that provides at least some
43 reason for thinking that a property which resists such inversion is not
44 really a phenomenal property. I won't explore this line of reasoning

1 further. It's fine by me if there are some objective phenomenal properties,
2 since subjective representationalism says merely that *some* phenomenal
3 properties are subjective.

4 5 **3. Transparency and representationalism**

6
7 Perhaps the most commonly cited consideration in favor of objective
8 representationalism is the *transparency* consideration. Objective represen-
9 tationalists don't agree on exactly how to formulate this consideration, but
10 their formulations do have much in common. I will argue that subjective
11 representationalism can account for the transparency phenomenon at least
12 as well as objective representationalism does, however that phenomenon is
13 best articulated.

14 I will focus on Gilbert Harman's and Michael Tye's articulations of
15 transparency. I select Harman, 1990 because it is the most cited recent
16 discussion of transparency; I select Tye, 2002 because it is an especially
17 thorough elaboration of how the transparency intuition supports objective
18 representationalism.

19 Here is the pivotal passage from Harman's seminal discussion:

20
21 Look at a tree and try to turn your attention to intrinsic properties of your visual expe-
22 rience. I predict that you will find that the only properties there to turn your attention to
23 will be properties of the tree, including relational properties of the tree 'from here' (1990,
24 p. 39).

25
26 It's worth highlighting that Harman does not hesitate to talk about the
27 'relational properties of the tree.' The transparency consideration, what-
28 ever it is, is not a consideration about whether experience presents us
29 with relational or non-relational features.

30 To follow Harman's instruction to try to turn one's attention to intrinsic
31 properties of one's visual experience, I assume that we employ introspec-
32 tion. Harman makes both (i) the negative claim that introspection turns up
33 no intrinsic properties of *visual experience*, and (ii) the positive claim that
34 introspection turns up properties of *the tree*.

35 But what is the general type of object whose properties we can intro-
36 spectively attend to? Is it the class of *external objects*, *environmental*
37 *objects*, *non-mental objects*, or what? Harman's discussion is none too clear
38 on this point.

39 Now consider Tye's remarks. Here are some representative passages:

40
41 Whatever the nature of the qualities of which we are directly aware when we focus upon how
42 the surfaces before us *look*, these qualities are not experienced as qualities of our experiences
43 but rather as qualities of the surfaces (Tye, 2002, p. 138).

1 When you introspect your visual experience, the only particulars of which you are aware are
2 the external ones making up the scene before your eyes. You are not aware of those objects
3 and a further inner object or episode (ibid., p. 139).

4
5 Like Harman, Tye makes both a negative claim and a positive one. Tye's
6 negative claim is that attending to how things look via introspection does
7 not seem to turn up anything inner – it reveals no experiences, inner
8 objects, or inner episodes. Tye's positive claim is that it does turn up
9 (apparent) qualities of external things, like surfaces.

10 The common phenomenological point that we can extract from Harman
11 and Tye is this: introspection seems to reveal *only* properties of certain
12 kinds of *outer stuff* – perhaps external or environmental or intentional
13 objects. It does *not* seem to reveal properties of *inner stuff*, like the expe-
14 rience itself. I'm using the term 'stuff' because of its pliability. Expanses of
15 sky, experiential events or processes, and ordinary objects all count as *stuff*
16 in my sense.

17 It is clear how this motivates objective representationalism. Unless
18 introspection is massively unreliable – which we may reasonably think
19 it's not – these introspected phenomenal properties (like phenomenal
20 colors) *are* properties of outer stuff, not inner stuff. This is just what
21 objective representationalism says. According to a common version of
22 objective representationalism, phenomenal colors are something like dis-
23 positions to reflect light, or the categorical grounds of those dispositions.
24 Outer stuff – like apples, expanses of sky, pitchers of beer, and so on –
25 instantiates such properties. (Inner stuff does too, but presumably we're
26 not normally aware of *those* properties.) The objective representational-
27 ist may hold that other phenomenal properties are also objective prop-
28 erties of outer stuff.

29 Many kinds of experiences are allegedly problematic for the transpar-
30 ency argument, including (to select only a few examples) experiences associ-
31 ated with blurry vision or double vision, experiences involving size and
32 shape constancy, and experiences associated with bodily sensations.³³ I set
33 aside such objections for four reasons.

34 First, I am tentatively sympathetic to the idea that such examples do not
35 really pose problems for the transparency thesis. Second, this article is
36 largely aimed at those sympathetic to objective representationalism. Since
37 many such sympathizers accept a suitable transparency thesis, my argu-
38 ment will be dialectically effective for them.

39 Third, in Mehta, ms. A, I have defended a separate argument (based on
40 the spatial character of experience) that arrives at the same conclusion as
41 the transparency argument – the conclusion that, if experience is veridical,
42 phenomenal properties are properties of outer stuff. But this argument, I
43 claim, is not vulnerable to the kinds of objections that have been raised for
44 transparency theses like those defended by Harman and Tye.

1 My fourth comment is for those unsympathetic to the conclusion of the
2 transparency argument. One can easily develop a version of subjective
3 representationalism according to which many or all phenomenal proper-
4 ties represented by experience are properties of inner stuff. So even if
5 transparency enthusiasts are getting the phenomenology wrong, subjective
6 representationalism more broadly wouldn't be in trouble, though the spe-
7 cific subjective representationalist proposal I've sketched here would then
8 lose an important source of support.

9 Setting aside worries about whether experience is transparent, then, here
10 is the payoff. At best, transparency considerations support only a conclu-
11 sion about *where the stuff that instantiates (e.g.) phenomenal colors is*
12 *located*: it's located *outside* the subject. (That is, as long as the experience
13 is veridical and the subject isn't experiencing her insides.) These transpar-
14 ency considerations do not support any conclusion about exactly which
15 properties of outer stuff are relevant.

16 To be sure, this does cut against lots of views about experience. But it
17 does not cut against the form of subjective representationalism sketched
18 above, according to which some phenomenal properties have the form
19 *appropriately causing mental state M in me*. These properties may be
20 instantiated outside the subject. Indeed, the subjective representationalist
21 who wishes to capture strong transparency theses of the sort articulated by
22 Harman and Tye may say that all phenomenal properties that we experi-
23 ence are instantiated in outer stuff, not inner stuff.

24 Still, one might worry that representationalist views that invoke *de se*
25 content – content that invokes centered possible worlds – face special
26 worries. In the next section, I consider one such worry.

27 28 **4. Determinacy and centered content**

29
30 Color experience seems to present objects as *being a certain specific way*.
31 When I see a red strawberry and experience phenomenal redness, my
32 experience presents the strawberry as being a highly determinate way –
33 phenomenally red. Call this the *determinacy phenomenon*. (The determi-
34 nacy phenomenon might or might not be related to the transparency
35 phenomenon.)

36 Thompson (2007, fn. 28) worries that *de se* involving cannot concern
37 any specific way things are, and thus can't accommodate the determinacy
38 phenomenon. In this section, I'll try to develop the worry (since Thomp-
39 son mentions it only in a footnote) and then relieve it.

40 Before elaborating on the worry, I should separate it from a different
41 worry. One might worry that paradigmatic phenomenal properties seem to
42 be intrinsic rather than (as subjective representationalism has it) relational.
43 This worry applies to any form of subjective representationalism, whether

1 or not the view posits *de se* contents. I'm not dealing with this worry here,
2 for others have replied to it persuasively.³⁴ The worry I'm engaging applies
3 specifically to views that individuate experiences via something like *de se*
4 content.

5 An example might help bring out the worry. If I believe that Chicago is
6 west of New York, there is a specific way I take things to be: I take things
7 to be such that Chicago is west of New York. But if I believe that Chicago
8 is west of *here*, it seems that there is not a specific way I take things to be,
9 for I needn't have any view about where I am. In the latter case, one might
10 think, my belief places some constraints on how I take things to be, but it
11 doesn't concern a specific way that I take things to be. The worry, stated
12 more generally, is that *de se* content cannot specify how things are; it can
13 only place constraints on specifications of how things are.

14 To show that this worry is misguided, let's look more carefully at
15 propositional attitudes whose contents do not essentially involve centered
16 properties – say, my belief that Chicago is west of New York. This belief
17 plainly concerns how Chicago is specifically. Why is that? What does this
18 specificity amount to?

19 Well, on one approach, the content of my belief that Chicago is west of
20 New York corresponds to a set of possible worlds. If my belief is correct,
21 then I can't be in certain possible worlds: I can't be in those possible worlds
22 in which Chicago isn't west of New York. It would be natural for advoc-
23 ates of this approach to say that my belief concerns how Chicago is
24 specifically because it rules out specific possibilities concerning Chicago.

25 On another approach, the content of my belief that Chicago is west of
26 New York involves a structured Russellian proposition containing
27 Chicago itself and the ordinary property *being west of New York*.³⁵ Advoc-
28 ates of this view also have a natural account of why my belief concerns
29 specifically how Chicago is: it attributes the specific ordinary property
30 *being west of New York* to Chicago.

31 But *de se* content is deeply analogous to ordinary content. Consider
32 again my belief that Chicago is west of *here*. We can model the *de se*
33 content of my belief with a set of centered possible worlds – possible
34 worlds with a marked individual and time. If my belief is correct, then I
35 can't be in certain marked locations within possible worlds: I can't be in
36 any location in a possible world in which Chicago isn't west of that
37 location in that world. In other words, when I believe that Chicago is west
38 of here, I *do* take things to be a specific way. I take myself to be in a certain
39 type of location within a possible world: one in which Chicago is to the
40 west of *me now*.

41 Alternatively, we can model the *de se* content of this belief with a
42 structured Russellian proposition containing Chicago itself and the cen-
43 tered property *being west of here*. While this centered property doesn't
44 determine an extension given a possible world alone, it does determine an

1 extension given a centered possible world. So, as before, it's natural to say
2 that my belief concerns specifically how Chicago is. For my belief
3 attributes the specific centered property *being west of here* to Chicago.

4 Now for the payoff: the same point applies to *de se* contents that involve
5 properties like *appropriately causing* M_{red} *in me*. Suppose my experience of
6 phenomenal redness involves such a *de se* content. This content cannot be
7 understood just in terms of which worlds it rules out; nor can it be
8 understood just in terms of which properties it attributes. Nevertheless, it
9 can be understood just in terms of which centered worlds it rules out;
10 alternatively, it can be understood just in terms of which centered prop-
11 erties it attributes.

12 Understood either way, the content of such an experience does concern
13 how things are specifically. In our example, my experience presents some-
14 thing as *appropriately causing* M_{red} *in me*. This centered content concerns
15 a specific feature of the object represented in a way tightly analogous to
16 the way that the content featuring the property *appropriately causing* M_{red} *in S*
17 *at time t* concerns a specific feature. Thus, there is no special worry here for
18 subjective representationalism.

19 Put generally, my point is this. Consider a belief about an object, where
20 this belief has ordinary content featuring only ordinary properties. It
21 should be uncontroversial that such a belief can concern how, specifically,
22 that object is. But *de se* content is theoretically very much like ordinary
23 content; in this section and in §1, I've meticulously documented the deep
24 parallels between these two approaches to modeling content. Any reasons
25 for thinking that ordinary content can concern the specific features of
26 objects are equally reasons for thinking that *de se* content can concern the
27 specific features of objects.³⁶

28 29 5. Conclusion

30
31 I've sketched a version of subjective representationalism that has a sub-
32 stantial advantage over objective representationalism: it can accommo-
33 date our deeply held intuitions about the possibility of illusion-free
34 phenomenal inversions. Moreover, I've argued that the transparency phe-
35 nomenon, arguably the single most powerful motivation for objective
36 representationalism, is just as powerful a motivation for this version of
37 subjective representationalism. Finally, I rebutted an objection based on
38 the determinacy of experience.

39 Still, my comparison of objective and subjective representationalism has
40 been sharply limited. There is much to explain about experience besides
41 our intuitions about phenomenal inversion cases, the transparency phe-
42 nomenon, and the determinacy phenomenon. Perhaps, at the end of the
43 day, objective representationalism will prove the superior theory. My hope

1 is only that the arguments here provoke greater scrutiny of what strikes me
2 as a promising alternative to objective representationalism.³⁷

3
4 Philosophy Department
5 University of Michigan, Ann Arbor

6
7 NOTES

8 ¹ This view is sometimes called ‘strong representationalism,’ as there are related but
9 substantially weaker views that go under the label ‘representationalism.’ For example, Byrne
10 (2001) argues that phenomenal character *supervenes on* representational properties, without
11 making the stronger claim that mental states have their phenomenal character *in virtue of*
12 having certain representational properties. As I will not be concerned with these weaker views
13 in this article, I’ll stick with the terminology in the text. Advocates of representationalism, as
14 I use the term, include Carruthers (2000) and (2005); Dretske (1995) and (2003); Harman
15 (1990); Hill (2009); Lycan (1996); Pautz (2010); and Tye (1995, 2000 and 2002). Tye (2009)
16 endorses a view very close to representationalism.

17 ² I admit that I’m not sure that this is quite the right way of drawing the objective/
18 subjective distinction. That said, it’s pretty clear that there is some important distinction of
19 this sort to be drawn, and no one knows quite how to draw it. The distinction I propose in
20 the text provides a good enough approximation for present purposes.

21 ³ Influential presentations of these puzzles are offered, respectively, by Levine, 1983;
22 Shoemaker, 1982; Chalmers, 1996, pp. 93–171; and Jackson, 1982.

23 ⁴ Sydney Shoemaker has explored many views in the vicinity of subjective representation-
24 alism (1994a, 1994b, 2000, 2001, 2003, 2006). However, Shoemaker disavows reductivist
25 ambitions, so strictly speaking he does not qualify as a representationalist, as I’m using the
26 term.

27 ⁵ For example, see Tye, 2000, Chapter 7.

28 ⁶ I thank Brad Thompson for helpful discussion on this point.

29 ⁷ Tye, 2000, p. 50.

30 ⁸ *Ibid.*, p. 49.

31 ⁹ *Ibid.*

32 ¹⁰ *Ibid.*, p. 450.

33 ¹¹ Strictly speaking, Byrne does not endorse representationalism (as I’ve defined it) in this
34 article, but only a weaker thesis – see Note 1. Still, his view is compatible with representa-
35 tionalism, and it’s notable that the contents he attributes to experiences involve exclusively
36 objective properties.

37 ¹² Byrne and Hilbert, 2003.

38 ¹³ *Ibid.*, p. 162.

39 ¹⁴ *Ibid.*, pp. 165–168.

40 ¹⁵ Hill says several times that A-properties are not ‘objective,’ but it’s clear from context
41 that his use of the term differs from ours. Roughly, Hill uses the term to refer to something
42 like *observer*-independence, not *mind*-independence.

43 ¹⁶ *Ibid.*, p. 167.

44 ¹⁷ For further defense of this point, see Chalmers, 2006; Shoemaker, 1982, 1994a, 1994b,
45 2000 and 2003; and Thompson, 2009.

46 ¹⁸ See, for example, Byrne, 2001 and 2006; Byrne and Hilbert, 2003; and Tye, 1995 and
47 2000.

¹⁹ Roughly this problem is also noted in Chalmers, 2006; Egan, 2006; and Thompson, 2007.

²⁰ But cf. Harman, 2001 for a contrary opinion.

²¹ For compelling arguments that we need something more fine-grained than possible worlds to understand content, see Perry, 1979 and Lewis, 1979. But note that Perry does not endorse a centered-contents approach to explaining the relevant phenomena.

²² Though on his account involves a more complex property than *causing M in me*.

²³ Recall that Shoemaker is not a representationalist in my strong sense of this term – see Note 1.

²⁴ An anonymous referee pointed out this related objection: if the present proposal is correct, introspection can immediately reveal that there is mind-body causation. But surely introspection cannot do that. The upcoming reply handles this objection, as well.

²⁵ It is a cost of this view that it ascribes misrepresentation to experience; it's not clear to me how large this cost is.

²⁶ This is a plausible point about content in general. Though water-thoughts in fact refer to something complex – namely, H₂O – this need not be introspectively accessible to the chemically ignorant, who might well believe that water is a simple substance. Still, even such a chemically ignorant individual may have good introspective access to the contents of her water-thoughts, since she knows that those thoughts concern *water*.

²⁷ If one doesn't think that states of affairs are the relata of causal relations, no matter. The point can easily be rephrased in terms of *events*, or *properties*, or whatever one thinks the relata of causal relations are.

²⁸ I owe this example to Eric Lormand.

²⁹ Does the object to which this property is ascribed – in this case, the bell pepper – also figure in the content of the experience? I argue against this in Mehta, ms. B. Even if one disagrees, this shouldn't matter, as Jack and Jill are seeing the same object in the Color Inversion Case.

³⁰ I also think that this kind of subjective representationalist account can easily handle examples like Ned Block's Inverted Earth case (1990) and Brad Thompson's cases involving spatial inversions (2010), though I don't have space to discuss such cases here. Such cases seem deeply problematic for objective representationalism.

³¹ Those who have trouble coherently conceiving of such a case may instead substitute a 'shifted experience' case where Jack's experience of a sound of *n* decibels is, in general, just like Jill's experience of a sound of 0.8*n* decibels.

³² The literature on this has grown explosively, but a good starting point is Horgan and Tienson, 2002.

³³ Among anti-transparency theorists, Boghossian and Velleman (1989) and Smith (2008) focus on blurry-vision and double-vision cases; Peacocke (1983) and Siewert (2004) emphasize size- and shape-constancy phenomena; and Block (1996) discusses bodily sensations.

³⁴ See Shoemaker, 1994a, p. 28.

³⁵ Actually, a more natural thing to say is that the proposition contains Chicago itself, New York itself, and the relation *being to the west of*. But I am not primarily concerned with the right way of thinking about belief contents. I develop the view in the text only to draw certain analogies with the content of experience. That's also why I don't talk about Fregean views of content here. Since I'm not proposing a Fregean account of the content of experience, the parallels between a Fregean account of ordinary content and a Fregean account of centered content aren't relevant here.

³⁶ Following up on my remarks at the end of §1: other ways of analyzing indexicality (e.g. Kaplanian or Fregean ways) cannot, I think, capture the determinacy of experience, but the

de se analysis can. This point deserves further discussion, which I hope to provide on another occasion.

³⁷ I would like to thank Andy Egan, Brad Thompson, Eric Lormand, Todd Ganson, Billy Dunaway, and an anonymous referee for very helpful comments on this article.

REFERENCES

- Block, N. (1990). 'Inverted Earth,' *Philosophical Perspectives* 4, pp. 53–79.
- Block, N. (1996). 'Mental Paint and Mental Latex,' *Philosophical Issues* 7, pp. 19–49.
- Boghossian, P. and Velleman, D. (1989). 'Colour as a Secondary Quality,' *Mind* 98, pp. 81–103.
- Brogaard, B. (2010). 'Strong Representationalism and Centered Content,' *Philosophical Studies* 151, pp. 373–392.
- Byrne, A. (2001). 'Intentionalism Defended,' *Philosophical Review* 110(2), pp. 199–240.
- Byrne, A. (2006). 'Color and the Mind-Body Problem,' *dialectica* 60(3), pp. 223–244.
- Byrne, A. (2009). 'Experience and Content,' *Philosophical Quarterly* 59(236), pp. 429–451.
- Byrne, A. and Hilbert, D. (2003). 'Color Realism and Color Science,' *Behavioral and Brain Sciences* 26, pp. 3–64.
- Carruthers, P. (2000). *Phenomenal Consciousness: A Naturalistic Theory*. New York: Cambridge University Press.
- Carruthers, P. (2005). *Consciousness: Essays From a Higher-Order Perspective*. Oxford: Oxford University Press.
- Chalmers, D. (1996). *The Conscious Mind*. New York: Oxford University Press.
- Chalmers, D. (2006). 'Perception and the Fall from Eden,' in T. Gendler and J. Hawthorne (eds) *Perceptual Experience*. Oxford: Oxford University Press.
- Dretske, F. (1995). *Naturalizing the Mind*. Cambridge, MA: MIT Press.
- Dretske, F. (1999). 'The Mind's Awareness of Itself,' *Philosophical Studies* 95, pp. 103–124.
- Dretske, F. (2003). 'Experience as Representation,' *Philosophical Issues* 13, pp. 67–82.
- Egan, A. (2006). 'Appearance Properties?' *Noûs* 40(3), pp. 495–521.
- Harman, G. (1990). 'The Intrinsic Quality of Experience,' *Philosophical Perspectives* 4, pp. 31–52.
- Harman, G. (2001). 'General Foundations versus Rational Insight,' *Philosophy and Phenomenological Research* 63, pp. 657–663.
- Hill, C. (2009). *Consciousness*. New York: Cambridge University Press.
- Horgan, T. and Tienson, J. (2002). 'The Intentionality of Phenomenology and the Phenomenology of Intentionality,' in D. Chalmers (ed.) *Philosophy of Mind: Classical and Contemporary Readings*. Oxford: Oxford University Press.
- Jackson, F. (1982). 'Epiphenomenal Qualia,' *Philosophical Quarterly* 32, pp. 127–136.
- Kaplan, D. (1989a). 'Demonstratives,' in J. Almog, J. Perry, and H. Wettstein (eds) *Themes from Kaplan*. Oxford: Oxford University Press.
- Kaplan, D. (1989b). 'Afterthoughts,' in J. Almog, J. Perry, and H. Wettstein (eds) *Themes from Kaplan*. Oxford: Oxford University Press.
- Levine, J. (1983). 'Materialism and Qualia: The Explanatory Gap,' *Pacific Philosophical Quarterly* 64, pp. 354–361.
- Lewis, D. (1979). 'Attitudes *De Dicto* and *De Se*,' *Philosophical Review* 88, pp. 513–543.
- Lycan, W. (1996). *Consciousness and Experience*. Cambridge, MA: MIT Press.
- Mehta, N. (unpublished ms. A). 'Beyond Transparency: The Spatial Argument for Experiential Externalism.'
- Mehta, N. (unpublished ms. B). 'The Generality of Experience (and the Particularity of Perception).'

- 1 Pautz, A. (2010). 'A Simple View Of Consciousness,' in R. Bealer and G. Koons (eds) *The*
2 *Waning of Materialism*. Oxford: Oxford University Press.
- 3 Peacocke, C. (1983). *Sense and Content*. Oxford: Oxford University Press.
- 4 Perry, J. (1979). 'The Problem of the Essential Indexical,' *Noûs* 13, pp. 3–21.
- 5 Shoemaker, S. (1982). 'The Inverted Spectrum,' *Journal of Philosophy* 79, pp. 357–381.
- 6 Shoemaker, S. (1994a). 'Phenomenal Character,' *Noûs*, Vol. 28, pp. 21–38.
- 7 Shoemaker, S. (1994b). 'Self-knowledge and Inner Sense, Lecture III: The Phenomenal
- 8 Character of Experience,' *Philosophy and Phenomenological Research* 54(2), pp. 291–314.
- 9 Shoemaker, S. (2000). 'Phenomenal Character Revisited,' *Philosophy and Phenomenological*
10 *Research* 60(2), pp. 465–467.
- 11 Shoemaker, S. (2001). 'Introspection and Phenomenal Character,' *Philosophical Topics* 28(2),
12 pp. 247–273.
- 13 Shoemaker, S. (2003). 'Content, Character, and Color,' *Philosophical Issues* 13, pp. 253–278.
- 14 Shoemaker, S. (2006). 'On the Way Things Appear,' in T. Gendler and J. Hawthorne (eds)
15 *Perceptual Experience*. Oxford: Oxford University Press.
- 16 Siewert, C. (2004). 'Is Experience Transparent?' *Philosophical Studies* 117, pp. 15–41.
- 17 Smith, A. D. (2008). 'Translucent Experiences,' *Philosophical Studies* 140, pp. 197–212.
- 18 Thompson, B. (2007). 'Shoemaker on Phenomenal Content,' *Philosophical Studies* 135,
19 pp. 307–334.
- 20 Thompson, B. (2009). 'Senses for Senses,' *Australasian Journal of Philosophy* 87, pp. 99–117.
- 21 Thompson, B. (2010). 'The Spatial Content of Experience,' *Philosophy and Phenomenological*
22 *Research* 81, pp. 146–184.
- 23 Tye, M. (1995). *Ten Problems of Consciousness: a Representational Theory of the Phenomenal*
24 *Mind*. Cambridge, MA: MIT Press.
- 25 Tye, M. (1996). 'Perceptual Experience is a Many-Layered Thing,' *Philosophical Issues* 7,
26 pp. 117–126.
- 27 Tye, M. (2000). *Consciousness, Color, and Content*. Cambridge, MA: MIT Press.
- 28 Tye, M. (2002). 'Representationalism and the Transparency of Experience,' *Noûs* 36, pp.
29 137–151.
- 30 Tye, M. (2009). *Consciousness Revisited*. Cambridge, MA: MIT Press.