

A revised version of this paper will appear in *Deflating Mental Representation* (the 2021 Jean Nicod lectures), to be published by MIT Press

The Structure of Perceptual Experience: A New Look at Adverbialism (draft)

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Abstract: In the philosophy of perception, representationalism is the view that all phenomenological differences among mental states are representational differences, in other words, differences in content. In this paper I defend an alternative view which I call *external sortalism*, inspired by traditional adverbialism, and according to which experiences are not essentially representational. The central idea is that the external world serves as a model for sorting, conceptualizing, and reasoning surrogatively about perceptual experience. On external sortalism, contents are construed as a kind of gloss on experiences themselves. We can retain what is attractive about representationalism, namely, that perceptual experiences can be evaluated for accuracy, without problematic commitment to the idea that they bear a substantive, representational relation to external objects and properties and that this relation determines the phenomenal character of experience.

Imagine that you are looking at a red tomato. Your visual experience presents you with an object of determinate size, shape, and color. Of course, there may be nothing there – you may be hallucinating a tomato – or you may be looking at a green tomato in bad light. It is natural, at least for philosophers, to say that your visual experience *represents* a red tomato in front of you, and that the experience represents accurately only if there is such an object there; otherwise it *misrepresents*. This is what the leading philosophical account of perceptual experience – *representationalism*¹ – would say. I don't think there is anything wrong with speaking this way; indeed I think it is basically correct, but I don't think that representationalism provides the most illuminating account of perceptual experience. In this paper I defend an alternative proposal, inspired by traditional adverbialism about perceptual experience. The view, which I call *external sortalism*, allows us to retain what is unobjectionable about representationalism – that perceptual experiences have accuracy conditions – without its problematic commitments.

¹ The view is sometimes called *intentionalism*. Proponents include Harmon, Tye, Lycan, Dretske, Byrne, and many others.

1. Orthodox representationalism about perceptual experience

Representationalism holds not only that experiences have content, but also that the content they have fully determines their *phenomenal character*, that is, what it is like for the subject to undergo the experience. So, for example, what it is like for you as you visually experience a ripe, red tomato is fully determined by the experience's content, viz., what the experience 'says' about the way things are in front of you now.² The experience has this content whether or not things are in fact that way, in other words, whether the experience is veridical or illusory. On this view, experiences are said to have their contents *essentially* – if a particular experience had a different content it would be a different type of experience.

Representationalism comes in various strengths. *Intermodal* theorists hold that phenomenal differences among sensory modalities – the difference, say, between seeing a plane flying overhead and hearing it overhead – are determined by a difference in content. *Intramodal* representationalists deny this, holding that phenomenal differences among experiences of different modalities are to be explained functionally rather than solely in terms of content. *Unrestricted* representationalism extends the thesis to bodily sensations such as pains and orgasm, and *utterly unrestricted* representationalism holds that *any* mental state with phenomenal character, including emotions and moods, has content that fully determines its phenomenal character.³

² The content of the experience will only be imperfectly captured by a description used to attribute the experience.

³ The terminology in this paragraph is from Byrne 2001, though Byrne calls the view 'intentionalism'.

Representationalists typically hold unrestricted versions of the thesis.⁴ Byrne argues that restricted versions of representationalism are hard to defend:

If there were an argument for intentionalism about visual experiences, why couldn't it be adapted to the case of itches? Conversely, if a convincing counterexample to supervenience [of character on content] were produced that would raise the suspicion that counterexamples concerning other experiences with propositional contents (visual experiences, as it may be) are waiting in the wings. (2001, 205-206)

Lycan 2015 points out that restricting the thesis to perceptual experiences would be *ad hoc*. If the representational content of a perceptual experience really explains its phenomenal character, as representationalists hold, then why should content not explain the phenomenal character of any mental state that has phenomenology? A restricted version of the thesis leaves the phenomenal character of the excluded states unexplained.

In what follows I hope to undermine even the weakest version of representationalism.⁵ I will focus first on experiences that are not *patently* intentional. I will argue that the ascription of representational content to bodily sensations and moods is best construed as playing a merely heuristic role. If this is right, and if restricting representationalism to perceptual experiences is indeed *ad hoc* and poorly motivated, as Byrne and Lycan argue, then the argument about bodily sensations and moods will serve as 'the thin edge of the wedge', lending some credence to the idea that content plays a similar, non-essential role for all experiences. But the main burden of

⁴ Byrne (2001, fn.15) cites Tye (1995, 2000) as an utterly unrestricted representationalist, and says that "... Dretske, Harman, Lycan, and Shoemaker at least come close."

⁵ A view that claims simply that (all, some) experiences have content but does not claim that content determines phenomenal character is obviously weaker still, and is not generally considered a version of representationalism. This view is compatible with the position defended in this paper.

argument will be indirect: I will go on in the bulk of the paper to sketch an alternative account of perceptual experience according to which content explicitly plays a complex heuristic role.

Representationalists have proposed that the pain produced by spraining my ankle means, variously, *there is tissue damage in the ankle*, or the less specific *there is a disorder in the ankle* (Dretske 2003, Tye 2006, Lycan 1996), or *don't put weight on the foot* (Klein 2015's 'imperativist' proposal). These are distinct contents with different satisfaction conditions. One might wonder how this issue is to be settled. What non-contentful facts ground the correct content attribution? Perhaps a future well-confirmed neuroscientific account of conscious mental states would support one of these content attributions over the others.⁶ But the issue here concerns the *introspectible* content of these states, presumably something we can access simply by being in these states, and so it is not clear how the attribution of content to sub-personal states in cognitive science bears on the content of conscious experience.

There is something to be said for each of the competing content proposals. Pain attributions do not contain intentional verbs and are not completed by complement clauses (e.g. *that* clauses); nonetheless, pains certainly seem to be telling us something – *something is wrong with the relevant body part, there is tissue damage there, be careful not to stress it further*, and so on. But just because a pain (in the typical case) provides the subject with information about the state of her body and, moreover, tends to elicit protective behavior, it doesn't follow that the state literally has satisfaction conditions. The idea I propose is that characterizing pains and other bodily sensations in contentful terms is simply a useful and natural way of talking about various properties of these states. For example, to say that a burning sensation in the finger represents tissue damage there is to emphasize the cause of the pain; to say that a sharp pain in the ankle has

⁶ Though see Egan 2014, 2018 for argument that content attribution in cognitive science is motivated in part by pragmatic considerations and so is best described as a kind of *gloss*.

the imperative content *don't put weight on the foot* is to highlight the effects of the proscribed behavior (that putting weight on the foot will cause further pain and bodily injury).

In other words, to the extent that attributing content to pains and other bodily sensations is appropriate it is because the attribution plays the role of a *gloss* on the complex functional role (or a salient aspect of that role) of these states. Similarly, for moods: perhaps euphoria can be said to represent general *wonderfulness* (Mendelovici 2014), anxiety to represent *a departure from functional equilibrium* (Tye 1995). One may find these content attributions to moods to be a stretch, but, again, to the extent that they are appropriate it is because they serve a variety of useful purposes – as with pains, to specify typical causes, but also to suggest associated attitudes and emotions, perhaps to predict how the subject will respond to various stimuli, and so on. In general, I propose that we think of content attributions to pains and moods as playing a heuristic role, rather than construing them as attributing determinate satisfaction conditions to these states. Accordingly, the various representationalist proposals would be better construed as attempts to justify a particular type of contentful gloss.

Let's return to perceptual experience, the best case for representationalism. Despite its intuitive plausibility, it is far from inevitable. In the next section I sketch an alternative proposal.

2. *External sortalism*: An adverbialist-inspired account of perceptual experience

So-called *adverbial* theories of perception, proposed originally by Ducasse (1942) as an antidote to sense data theories, rejected the idea that perceptual experiences are to be analyzed as relations between an experiencing subject and an entity of some sort. Sense data theories claim that a perceptual experience consists in a primitive relation – *sensing* – between a subject and a special sort of mental object – a *sense datum*. Naive realism holds that a veridical perceptual experience

is essentially a relation between the subject and the perceived physical object.⁷

Representationalism holds that a perceptual experience is essentially a relation between a subject and the experience's intentional object. Adverbial theories reject relationalist, or act/object, analyses altogether. According to adverbialism, perceptual experiences should be understood as *episodes of sensing in particular ways*. The idea has traditionally been expressed as follows: *A subject S has a perceptual experience as of a property F if and only if S senses F-ly*. For example, S has a perceptual experience as of something red if and only if S senses *redly*. I follow Sellars (1956, 1975) and Tye (1984) in understanding *sensing F-ly*, canonically, as *S senses in an F manner*. For example, S has a perceptual experience as of a red tomato if and only if *S senses in a red tomato manner*. One can sense in an F manner whether or not the property F is in fact instantiated nearby, in other words, whether the experience is veridical or illusory. The name 'adverbial theory' designates a *family* of views, because, as we shall see, 'sensing in an F manner' can itself be understood in different ways.

An initial clarificatory remark is in order. 'Adverbialism' is a rather unfortunate name for this family of views. Adverbial theories do not treat perceptual experiences as, literally, *adverbial*. *Adverb* is a linguistic category; it only applies to ways of *describing* experience. We can use adverbs to describe the ways that subjects experience the world, but the ways themselves are properties or states of experiencing subjects, not descriptions. The adverbial theory of perceptual experience is not a linguistic thesis, though early advocates were not always careful in their formulation of the view.⁸ In any event, the view developed here, which is inspired by a

⁷ Typically, naive realists hold that the experience is *constituted*, in part, by the perceived object. They must then give a different analysis for hallucinatory experiences. The resulting view goes by the name *disjunctivism*.

⁸ See Lycan 2015 for a dissenting view about whether adverbialism is a linguistic thesis.

particular type of adverbialism, is explicitly *not* a linguistic thesis, though it does, of course, have implications for how perceptual experience attributions are to be understood. I call the view *external sortalism* because it stresses the role of the external world framework in fixing the ‘ways’ or ‘manners’ that individuate experiential types. The view shares with traditional adverbialism a rejection of ‘act/object’ analyses – the idea that experiences are relations of a special sort between experiencing subjects and an entity of some kind, whether a perceived external object, a content, a private mental object, or something else.⁹

One way that adverbialism has traditionally been developed is the ‘sortal’ or ‘topic neutral’ view (see Sellars 1956, 1975, Cornman 1971, and Tye 1975, 1984). According to this view, *S senses in a red square manner* is to be understood as follows: S is undergoing the type of experience that normally occurs when one is facing a red square in good light with eyes open, etc. On this view, predicates such as ‘sensing in a red square manner’ and ‘sensing in a green circle manner’ provide a way of sorting experiences into equivalence classes based on their normal external causes – red squares and green circles, respectively. Once they are sorted we can go on to think and talk about our experiences.

The ‘sortal’ idea is developed by Wilfrid Sellars in his classic (1956) paper (sec. 61, 3). Here is Tye 1984 channeling Sellars:

... manners of sensing are conceived of as resembling and differing from one another in ways systematically analogous to the ways in which their ‘corresponding’ physical objects, i.e. their normal causes, resemble and differ from one another. (43)

Here is Sellars himself:

The essential feature of the analogy is that visual impressions stand to one another in a

⁹ External sortalism is similar in important respects to Jacobson and Putnam’s (2014) *attributeism*, and to the view defended in Papineau (2014).

system of ways of resembling and differing that is structurally similar to the ways in which the colors and shapes of visible objects resemble and differ from one another.

(1956, 61 (3))

The basic idea is that we use the external world as a *model* for sorting perceptual experiences into types, so that we can say, for example, that what I am having right now is a black cat type of experience. We can think of the view, schematically, as follows:

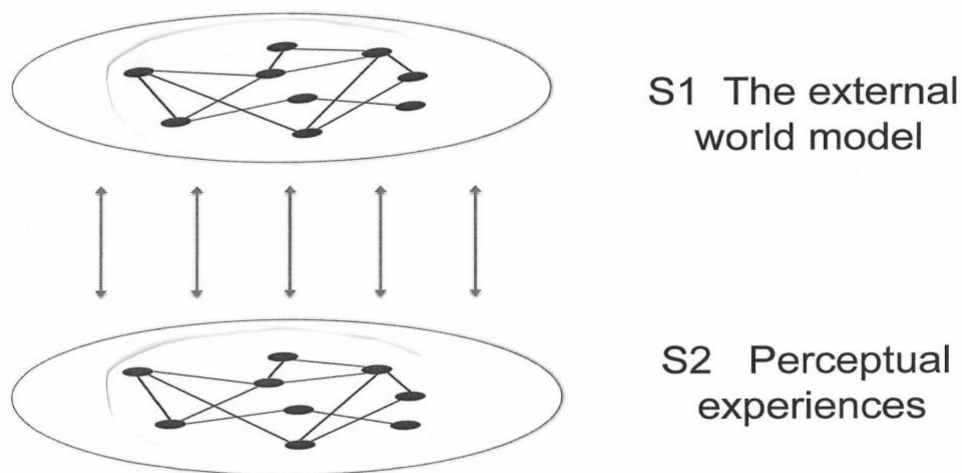


Figure 1

Figure 1 depicts (at the top) the external world that serves as the model for perceptual experience, and (at the bottom) perceptual experience that the external world framework models.

We can think of the matter, formally, as a mapping between relational structures, perhaps a homomorphism. It is in virtue of this shared structure that the external world framework (EW) can serve as a model for conceptualizing, talking about, and reasoning surrogatively¹⁰ about

¹⁰ The terminology and basic idea are from Swoyer 1991. See also Matthews 2007, 134-136. In

perceptual experiences (PE).

It should be noted that when we talk about the ‘external world’ in this context we can’t mean anything but the external world as we perceive it – we have no other access to the external world except via our sensory-motor interactions with it. But what is relevant is the external world as we perceive it over the course of time. The basis for sorting experiences is the external world, abstracting away from particular experiences, regularized and stabilized by repeated perceptual and motor interactions with the environment, under different lighting conditions, from different perspectives, with different interests and concerns in mind, and so on.¹¹

There are, of course, lots of questions about how we come, as individuals, to acquire such a conception of the external world. The distinction between appearance and reality is something that emerges in early childhood. Developmental psychologists tell us that young children come to grasp the distinction between appearance and reality only at around age five, consistently failing appearance-reality (AR) tests at age three but consistently passing them at age six.¹²

surrogative reasoning we use a model to reason indirectly but faithfully about relations in the modeled domain. The most common example is, of course, from physical measurement. We can reason about extensive physical magnitudes such as mass or temperature by reasoning about operations on the real numbers used to index or refer to particular quantities of the magnitude, as in ‘a mass of 5 kg’ and ‘a temperature of 28 degrees C’.

¹¹ Much more could be said about the structure of the external world model, but the project here is not to specify its structure; rather, the point is that, whatever that structure is, the structure gets exploited in our thinking and talking about perceptual experience. There are likely to be aspects of the external world structure that do not get exploited in the application to perceptual experience, in the same way that reasoning surrogatively in the real numbers about physical magnitudes does not exploit all possible relations defined on the reals. (For example, the notion of one object being twice another is not defined for temperature as it is for length.) Representationalists about perceptual experience face questions about how rich the content of experience is; for example, are high-level causal relations represented in visual experience or are only more basic properties such as color, shape, and size represented? On the external sortalism account such questions can be understood as questions about which aspects of the external world framework are exploited in the application to perceptual experience.

¹² In a well-known study, Flavell et al (1986) show that three year olds do not have a conception

Before grasping the distinction, and more importantly, the idea of a relatively stable external reality, children have no (stable) way of categorizing their experiential states.¹³

To think of the perceived external world in these terms is to adopt an allocentric conception of the world, one in which among the various objects in that world will be experiencing subjects, including oneself, standing in relations to other objects. But this framework will also include ego-involving relations of the sort “my location being such that there is a chair in front of a table’ that can be used to sort my perceptual experience as one of the type ‘there is a chair in front of a table’. We can think of the external world framework as made up of possible *situations* or *states of affairs* constituted by objects and their perceptible properties and relations to each other.

Let me elaborate the key idea. Perceptible properties bear lots of relations to each other, for example, *set-theoretic* (determinable/determinate) *relations* – a scarlet car is a species of red car; *similarity relations* – a man’s black shirt is more similar, along the color dimension, to a toddler’s navy blue shirt than to a man’s pink shirt, though more similar to the latter along the size dimension, and so on. Analogously, visual experiences of cars and visual experiences of

of objects with stable color properties; at age six they do. Children are shown a red car and asked what color it is. They respond “red.” A filter is then lowered over the car, making it look black. The children are again asked what color the car is. Three year olds say “black”; by six they consistently say “red”, indicating that at this age they know that objects have stable colors.

¹³ Flavell (1986) reports:

It is noted that, while children of 6–7 years manage simple appearance–reality tasks with ease, they have great difficulty reflecting on and talking about such appearance–reality notions as “looks like,” “really and truly,” and especially, “looks different from the way it really and truly is.” Children of 11–12 years, and to an even greater degree college students [!], however, give evidence of possessing a substantial body of rich, readily available, and explicit knowledge in this area. (418)

This strongly suggests that while 6-7 year olds have acquired the stable physical object framework, at this age they have not yet fully acquired an understanding of perceptual experience (the “looks” framework). The latter is acquired only *after* the former, as required by external sortalism.

shirts stand in roughly the same set-theoretic and similarity relations respectively: a scarlet car experience is a species of red car experience, a man's black shirt experience is more similar along one dimension to a child's navy blue shirt experience than to a man's pink shirt experience and more different from it along another. Our grasp of the similarity and difference relations that hold among experiences is parasitic on, and derivative from, our grasp of the similarity and difference relations that hold among objects in the world, as perceived by us.

We can be non-committal about the entities modeled by the EW framework – perceptual experiences (S2 in figure 1) – beyond noting that they are perceptual experience *types*. They may be conceived as properties or occurrent states of subjects, or, alternatively, as events, processes, or activities of subjects.¹⁴ And while the similarities and differences that hold among perceptual experiences are similarities and differences in phenomenal character, we will be non-committal about the properties (intrinsic or relational) of experiences that account for phenomenal character.¹⁵

Following early proponents of 'topic neutral' adverbialism, external sortalism analyses *S* senses in a red square manner as follows: S is undergoing the type of experience that would (*ceteris paribus*) occur when a normal subject is facing a red square in good light with eyes open, etc. But the thesis requires an important qualification. As Jacobson and Putnam (2014) point out, it cannot be assumed that all subjects – even all *normal* subjects – looking at a red square in good light will undergo experiences with exactly the same type of phenomenal character. We know, for example, that judgments about *unique colors* differ across subjects. So the expression “the type of experience” in the canonical formulation of ES should be understood as designating a

¹⁴ There may, of course, be independent reasons for preferring one or other of these views.

¹⁵ Ultimately, this is something for perceptual *science* to tell us about.

range of experiences with similar phenomenal characters. The view does not require that my experience of a given red square has exactly the same phenomenal character as yours; it requires only that our experiences be phenomenally similar.¹⁶ It also requires that our experiences occupy roughly the same location in the relational structure.¹⁷

Let me say more about how the external world framework is recruited for use in thinking and talking about perceptual experience. The sortals made available by the external world are applied to experiences by making use of descriptions that advert to what I call their *external analogues*. We say (or think to ourselves) “I see a red tomato” or “I hear thunder.” Normally, the point of such talk is to say something about the world, about tomatoes and thunder, but occasionally, especially if there is reason to think that things may not be as they seem, the focus is one’s own experience.¹⁸ An obvious but significant point is that the same form of words can do double duty, characterizing not only an external state of affairs but also a private mental state. In its latter usage, the description functions to pick out the experience by applying a predicate that specifies a particular location in a relational experience space (S2 in figure 1), a space that shares the same abstract structure as the relational space of the external world model (S1 in figure 1). We understand and can apply the scheme to experiences only because we are already familiar with external objects and their perceptible properties.¹⁹

¹⁶ See the discussion of inverted spectra in the next section for further relevant discussion of this point.

¹⁷ One may wonder how we know that our experiences occupy the same location in the relational structure. Overall similarity in our physical constitution makes it highly likely that they do, and the smooth communication facilitated by our shared language is evidence that they do.

¹⁸ As Sellars 1957 noted, ‘looks’ talk is often a way of hedging our descriptions of the external world.

¹⁹ The central idea of external sortalism is supported by the oft-noted *transparency* of perceptual experience, the idea that in perceptual experience we are aware of the external world and not

I have focused on visual experience but auditory and haptic experiences can also be characterized by their locations in a relational space structurally similar to auditory and tactile properties respectively. Auditory experiences are similar to and different from each other along dimensions corresponding to the pitch, volume, and timbre of the sounds that typically cause them. Haptic experiences are typically sorted along dimensions structurally similar to the texture, shape, size, and temperature of felt objects and substances. Gustatory and olfactory experiences, by contrast, are typically sorted in terms of objects that typically cause them – *it smells like a skunk, it tastes like cilantro*. We can articulate structure among tastes along at least four dimensions – sweet, sour, bitter, salty – abstracting away from the substances that instantiate these properties, but this ability likely develops quite late in children, after the experiences have been anchored to the external objects that cause them.²⁰

The description made available by the experience's external analogue tells us quite a bit about what the experience is like. Once again, the key idea is that a visual experience as of a red tomato (that is, an experience of the sort that normally occurs when one is facing a red tomato in good light with eyes open) is like a visual experience as of a red fire engine (an experience of the sort that normally occurs when facing a red fire engine...) in a particular way and unlike it in others. Our facility with the external world framework allows us to use it to reason surrogatively about our inner mental states, enabling us to predict and imagine what it would be like to have other experiences. Even though I have never seen a pink elephant, I can predict (or imagine)

properties of the experience itself. See Harman 1990. As Jacobson and Putnam 2014 note, Reichenbach 1938 makes this point, though he does not use the term 'transparency.'

²⁰ For discussion of taste and smell see Smith 2015 and McGee 2020.

what the experience of seeing one would be like.²¹

The sortings made available by the external world model are probably not univocal. Most times a round coin on a table seen from an oblique angle looks like a round coin on a table; at other times, perhaps when we are looking at the coin in reduced light, without knowing it is a coin, it may appear ovoid. It may appear ovoid in circumstances where situational features – the subject’s location with respect to the perceived object – are particularly salient. And we may be able to think ourselves into a situation where the coin appears ovoid by thinking about the 2-D projection of the coin on a plane at an oblique angle. This ability is cognitively quite sophisticated and likely develops only quite late.²²

External sortalism takes no stand on whether the similarities and differences among perceptual experiences, in particular, the similarities and differences among their phenomenal characters, hold in virtue of some intrinsic property of experiences. It is simply silent about this. The view does not claim that the phenomenal character of a red square experience is constituted by the conjunction of a tokening of a phenomenal property – call it *e-red*²³ -- and a tokening of a phenomenal property *e-square*. There is no commitment to phenomenal properties or *qualia*. There is certainly no presumption that a visual experience of a red square is itself similar to the external object to which it is mapped, what I am calling its *external analogue*, in this case a red

²¹ This doesn’t work as well for smells and tastes, but then our ability to think imaginatively about smells and tastes is more limited. See David Lewis’s (1988) discussion of vegemite and ‘what it’s like.’

²² For recent discussion of perspectival perception see Green and Schellenberg (2017) and Lande (2018).

²³ For *experiential* red, a property of experiences, to distinguish it from *red*, a property of squares and other external things.

square. Indeed it is hard to even make sense of such an idea.²⁴ So the view does not purport to explain the phenomenal character of experience, that is, its distinctive phenomenology. The sorting provided by the external object framework gives us similarities and differences among phenomenal characters; it says nothing about the nature of phenomenal character itself.²⁵ This may seem to be a failing, but if it is, it is not distinctive of the external sortalism view. No *philosophical* theory of perceptual experience – not representationalism, sense data theory, the ‘qualia’ version of adverbialism (see next section), nor naive realism – explains phenomenal character. None of these theories explain why looking at a red tomato produces an experience with its distinctive phenomenal character rather than, say, one with the phenomenal character characteristic of a visual experience of green grass; rather they, like external sortalism, simply take these facts for granted. In other words, none of these theories close the famous ‘explanatory gap.’

To sharpen the point it is useful to focus on sense-data theory for a moment. Proponents (e.g. Broad 1923, Robinson 1994) claim to have an explanation of the distinctive phenomenal character of experience in virtue of the theory satisfying what Howard Robinson calls the *Phenomenal Principle*, which holds:

If there sensibly appears to a subject to be something which possesses a particular sensible quality then there is something of which the subject is aware which does possess that quality. (Robinson 1994, 32)

The idea is that a visual experience as of a red tomato has its distinctive phenomenal character in

²⁴ Berkeley made this point forcefully in his *Essay Toward a New Theory of Vision*.

²⁵ Howard Robinson (personal communication) has raised this point as an objection to the sortal version of adverbialism. Fish (2010, p.45) seems to concur, claiming that the qualia version is better placed to explain phenomenal character. But it can hardly be an objection specific to sortal adverbialism – see subsequent discussion in the main text.

virtue of the subject bearing a sensing relation to something – a sense datum – that is *itself* red and tomato-shaped. Moreover, the correspondence is claimed to *explain* the experience’s distinctive phenomenal character.

There are several problems with the proposal. In the first place, external physical objects and private mental objects are unlikely to have *the very same properties* (i.e. colors, shapes, sizes). Secondly, and more generally, it is not at all clear how positing an inner object with just the properties sensed in the experience provides an *explanation* of the experience’s phenomenology. To do so is akin to appealing to a *dormitive virtue* to ‘explain’ the sleep-inducing properties of a drug. A similar point applies to the explanatory potential of invoking *qualia* – which just *are* the phenomenally salient properties of experiences – to explain phenomenal character. Looking at a red tomato typically produces in a subject a perceptual experience with a particular quale – *e-red* – but appealing to the quale is merely a way of specifying the experience’s phenomenal character and distinguishing it from experiences with *e-green* qualia. It is not an explanation of *how* or *why* the experience of looking at a tomato has that particular phenomenal character. Qualia theories, in respect of their potential to explain phenomenal character, are on a par with external sortalism. The appeal to qualia is a wheel turning nothing; it simply attaches a label to what we would like explained.

There are several advantages to thinking about perceptual experiences in the way suggested by external sortalism. In the first place, the view involves no specific metaphysical commitments about the mental – it posits no distinctively mental objects and, as I have noted, says nothing about the intrinsic properties of experience – and is therefore compatible with either

a materialist or a dualist metaphysics.²⁶ As noted above, it is also non-committal about whether experiences are best construed as properties, states, or activities of subjects.

Secondly, and more importantly, the view gives us a plausible explanation of how children learn to think and talk about experiences, which are, after all, episodes *private* to the experiencing subject. (I am not here assuming that experiences are private in the sense that the subject has authoritative or privileged access to them, as these notions are generally understood.) External objects and their properties are publicly accessible, and although the details are complex, there is no inherent mystery about how we learn to talk to each other about them. Our ways of thinking and talking about our experiences are parasitic on public object thought and talk. As Sellars (1956) pointed out, reports of mental states have a dual character: (1) they are reports of episodes that are private; and (2) they are part of public discourse and hence intelligible to others. External sortalism makes this duality less puzzling.²⁷

External sortalism differs from traditional adverbialism in several important respects. (1) As noted above, it is not primarily a linguistic thesis about the logical form of perceptual experience attributions. Hence the name *adverbialism* is misleading. However, in analyzing perceptual experience attributions as follows: “S is having a perceptual experience as of a red square if and only if S is experiencing in a red square manner” and this, canonically, as “S is undergoing the type of experience that would (*ceteris paribus*) occur when a normal subject is facing a red square in good light, with eyes open, etc.” the terms (“red, “square” etc.) that specify

²⁶ Proponents of early versions of adverbialism made a similar point about their view, and claimed it as an advantage over sense data theory, with the latter’s commitment to metaphysically problematic private objects. See Smart’s (1959) account of his ‘topic neutral’ analyses.

²⁷ There is much to be said about the role of language in regularizing experience, but this is beyond the scope of the present paper.

the ‘manners’ have their ordinary meaning. Compositionality of experiential attributions is therefore preserved. The ‘manners’ so specified can be arbitrarily complex.

Moreover, external sortalism, unlike some versions of adverbialism, has no trouble accounting for the validity of inferences such as “S is having a red square experience, therefore S is having a red experience”, since the set of experiences that would occur when one is facing a red square (with eyes open, etc.) is a proper subset of the set of experiences that would occur when one is facing something red (with eyes open, etc.). We get these inferences from set-theoretic relations. And the set-theoretic relations that hold among perceptual experiences are grounded in the set-theoretic relations that hold among their external analogues: the set of red square things is a proper subset of the set of red things. So the determinable/determinate relations that hold among perceptual experiences are not *brute*.

(2) External sortalism does not construe the modifier in perceptual experience attributions (the *manners*) as modifying (i.e. attributing some property to) experiences in the way that traditional adverbialism does (e.g. redly, squarely...). As I have stressed, what is attributed to the experience is a location in a relational structure, not any intrinsic properties that would explain why these similarities and differences hold. As we shall see in the next section, this point will be significant for external sortalism’s potential to avoid a notorious problem faced by traditional versions of adverbialism.

3. Objections and replies

(1) The *many properties* problem

Objection: Adverbial theories of perceptual experience suffer from what Jackson (1975) called the *many properties problem*. Imagine that you are looking at a red square and a green circle.

According to adverbialism, you are sensing *redly, squarely, greenly, and circularly*. But an experience of a red circle and a green square is also an instance of sensing *redly, squarely, greenly, and circularly*. In rejecting the idea that perceptual experience is a relation between a subject and objects of perception, adverbialism appears to lack the resources to distinguish different ways that sensed properties can be bound together in distinct experiences.

Reply: According to ES, to sense in a red square and a green circle manner is to undergo the type of experience that would (*ceteris paribus*) occur when facing a red square and a green circle, in good light with eyes open, etc. To sense in a red circle and a green square manner is to undergo the type of experience that would (*ceteris paribus*) occur when facing a *red circle* and a *green square*. The external situations or states of affairs that normally cause the two experiences and that provide the basis for sorting the experiences into types are distinct. These situations occupy distinct locations in the relational structure (the EW framework) that serves as a model for conceptualizing perceptual experiences. The fact that both experiences can be described as a sensing *redly, squarely, greenly, and circularly* is irrelevant; this is not the canonical characterization of the experiences given by ES. ES does not face a binding problem because, unlike the qualia version of adverbialism, ES does not treat perceptual experiences as constituted by conjunctions of phenomenal properties or qualia – in this case *e-red, e-square, e-green, e-circular* – that correspond to the perceptible properties of perceived objects and that must be bound together in the right way.²⁸ The external states of affairs that provide the basis for sorting

²⁸ The *qualia* version of adverbialism construes the properties sensed in perceptual experience to be properties of experience itself, i.e. qualia. Crane and French (2015) argue as follows:

The adverbial theory is committed to the view that experiencing something red, for example, involves one's experience being modified in a certain way: experiencing redly. The most natural way to understand this is that the experience is an event, and the modification of it is a property of that event. Since this property is both intrinsic (as opposed to relational or representational) and phenomenal (that is, consciously available)

experiences are constituted by observable objects that come with their perceptible properties bound together ‘for free’, as it were. The *world* binds them together in one way rather than another.²⁹

(2) The *many relations* problem

Objection: A recently noted variant on the *many properties* problem (see Dinges 2015) is thought to be particularly challenging for adverbial accounts. Imagine that you are looking at a red object that is brighter than a green one and to the right of a blue one. The challenge for the adverbialist is to characterize this experience, as opposed to an experience of a red object that is brighter than a green one, but where it is the green object that is to the right of the blue one. It isn’t clear that adverbialism has the resources to distinguish experiences where the relations are distributed differently among the objects.

Reply: External sortalism handles multiple relations in the same way as multiple properties. In the imagined case, I am undergoing the type of experience that normally occurs when I am facing a red object that is brighter than a green one and to the right of a blue one (with my eyes open, etc.). This is a distinct experience from the type of experience I have when facing a red object that is brighter than a green one where it is the green object that is to the right of the blue one. The two states of affairs occupy distinct locations in the external world framework (EW);

then this way of understanding the adverbial theory is committed to the existence of qualia. (sec.3.2)

Whether or not qualia-adverbialism is the most natural construal of the original thesis, it is distinct from sortal-adverbialism. Fish 2010 suggests that the qualia version has an explanatory advantage over sortal versions because it is better placed to explain phenomenal character. I argued in section 2 that the alleged explanatory advantage of appeal to qualia is an illusion.

²⁹ Kriegel (2008) appeals to determinate/determinable relations among modes of sensing – qualia – to solve the ‘many properties’ problem, but unless these relations are parasitic on external object and property relations they are problematically *brute*. See Grzankowski (2017) for criticism of Kriegel (2008).

analogously the two experiences occupy distinct locations in the experiential space modelled by the external framework. Once again, the external world does the work of grounding the differences between distinct types of perceptual experiences.

(3) External sortalism is problematically circular

Objection: The external world framework (EW) is acquired from perceptual experience. External sortalism claims that we then go on to conceptualize perceptual experience in terms of the EW framework. But this looks to be *circular* – we are sorting perceptual experience in terms of itself.

Reply: Infants discriminate, via perception, red things from green things, squares from circles, and so on. Later, they go on to conceptualize the similarities and differences among physical objects in terms of stable properties such as color, size, and shape. This process involves abstraction and generalization from what is learned from particular experiences, but the external world framework is acquired without the child making use of mentalistic notions such as ‘experience’ or ‘the way things look’.³⁰ Finally, children go on to apply the EW framework to their mental states. There is no circularity here. As the above discussion of the appearance/reality distinction strongly suggests, the perceptual experience framework (S2 in Figure 1) is not acquired until after the child has mastered the EW framework (S1) to which it is structurally similar. Thus external sortalism provides an explanation of the oft-noted *transparency* of perceptual experience, the fact that when we focus on what a perceptual experience is like we typically don’t discover properties of the experience itself but rather properties of the perceived external world.

³⁰ See fn. 14.

(4) External sortalism doesn't account for the possibility of *inverted spectra*

Objection: In characterizing perceptual experience in terms of its normal external causes ES doesn't leave room for the possibility that two subjects may be spectrally inverted with respect to each other. ES treats two subjects undergoing a perceptual experience caused by looking at something red as undergoing the same *type* of experience even though one subject may in fact be having an experience phenomenally indistinguishable from the experience that the other has when looking at something green. The view seems to give the wrong verdict about inverted spectra cases.

Reply: ES analyses *S senses redly, or S senses in a red manner* as follows: S is undergoing the type of experience that would (*ceteris paribus*) occur when a normal subject is facing something red in good light with eyes open, etc. If S is an inverted subject then she has that type of experience when she (S) is facing something *green*. But that just *is* the type of experience that *normal subjects* undergo when facing something red.³¹ So ES gets inverted spectra cases right.

ES characterizes perceptual experience by tacking it down to the types of experiences had by subjects like us when in causal contact with publicly observable objects and properties. This apparatus allows us, as subjects of perceptual experience, but also as philosophical theorists of perceptual experience, to refer to a class of phenomenally similar perceptual experiences, while saying nothing about what gives perceptual experiences their phenomenal character. This same apparatus allows the formulation of the inverted spectra scenario: inverted subjects differ from normal subjects only in very specific and systematic ways, and those ways are characterized by reference to publicly observable objects and properties (e.g. looking at *something green*). And so

³¹ Recall the above qualification that the expression "the type of experience" in the canonical formulation of ES should be understood as designating a *range* of experiences with similar phenomenal characters.

ES handles inverted cases smoothly.

ES has nothing to say about subjects whose perceptual experiences are radically different from our own. There is no reason to think that different species or alien life forms will satisfy the left hand side of the EW schema, that they will share our *ways* or *manners* of sensing. There is no reason to think that they will sense in a red square manner, that is, that they will have the sort of experience that we have when looking at a red square. It is appropriate that the theory is silent about such subjects; we have no idea what it would be like to undergo their experiences. But whatever their perceptual experiences are like, it is highly likely that they can be sorted in terms of the objects and properties that are observable for them, whatever these objects and properties are, thus enabling them to talk and reason surrogatively about their experiences, as we can about ours. In other words, the general picture and underlying motivation for ES, in particular, the idea that the external world framework (S1 in figure 1) can serve as a model for perceptual experience (S2) in virtue of the shared structure of the two domains, will apply to alien experience as well.

4. The role of representational content in external sortalism

So far nothing has been said about experiences having *representational content*. In understanding perceptual experiences as episodes of sensing in particular ways, traditional adverbialism does not construe perceptual experiences as representational, i.e. as having content.³² To have content is to be assessable for accuracy.³³ We talk about Macbeth

³² Fish 2010 characterizes the two general types of adverbial theories (*sortal* and *qualia* theories) as explicitly rejecting the idea that perceptual experiences are representational. Though Siegel (2016, sec.2.1) observes that "...so long as the core thesis of adverbialism is that experiences are modifications or properties of the subject, adverbialism leaves open whether experiences are assessable for accuracy or not. For all that core thesis says, being appeared-to F-ly could be a way of representing that something is F." In other words, adverbialism leaves open whether experiences have representational content.

hallucinating a dagger, a stick immersed in water looking bent, Muller-Lyer lines looking, incorrectly, to be different lengths, and so on. An adequate philosophical account of perceptual experience should account for the fact that we sometimes classify perceptual experiences as accurate or inaccurate. External sortalism can account for this feature of our ordinary practice, though it denies (i) the representationalist claim that content determines the phenomenal character of experience, and (ii) the idea that having accuracy conditions (i.e. content) is a *deep, metaphysical* fact about experiences, in other words, that it plays a fundamental role in type-individuating experiences.³⁴

Moreover, orthodox representationalism requires an account of *how* perceptual experiences get their content. External sortalism already has such an account. Recall the above point that sortals are applied to experiences by making use of descriptions that advert to their external analogues, descriptions such as “I see a red tomato.” One could take the description to specify a *content* – an accuracy condition – that is satisfied just in case there is a red tomato in front of one causing the experience. To make this move is to treat perceptual experiences as *representing* (and occasionally *misrepresenting*) the objects and properties in the external world model that provide the basis for classifying them. This is to take a description whose primary function is to characterize the experience in terms of its location in a relational space to, in addition, specify an accuracy condition. Suppose that I am currently undergoing the type of experience that normally occurs when facing a red tomato in good light with eyes open, etc. I can

³³ As Crane puts it, “... to say that a state has content is just to say that it represents the world as being a certain way. It thus has... a ‘correctness condition’ – the condition under which it represents the world accurately.” (1992, 139)

³⁴ So the view comports very naturally with the deflationary account of representational content I have developed in Egan (2014, 2018).

consider whether on *this* occasion there actually is such an object in front of me causing the experience. If there is, then the experience is veridical; if not, it is illusory.

Perception, of course, is our principal way of cognitively accessing the world, and is the basis for many of our beliefs about the world. Construing perceptual experiences as having content outfits them to serve our epistemological purposes. We can consider whether my red tomato visual experience – the experience characterized by reference to its external analogue (a red tomato with a particular size, shape, etc.) – justifies my current belief that there is a red tomato in front of me.

The way of thinking about content suggested by ES is well-motivated. It is highly likely that it is the overall relational structure of experience that makes a representational construal possible. There is no basis for positing a *resemblance* relation between experiences and their external analogues, a relation which, were it to hold, might serve to underwrite a claim that a given experience, considered in isolation from other experiences to which it bears various similarity and difference relations, represents its external analogue. It is the structural similarity between external objects and their perceptible properties on the one hand and perceptual experiences on the other that underpins our representational capacities – that makes us, *qua* perceivers, generally reliable about the world.³⁵ It is only against this background structure that we can assess individual locations in the relational space of experiences for accuracy. Without a *system* of shape and color experiences, no single shape or color experience has content or is accessible for accuracy; without a system of shape and color experiences, an experience would not count as a shape or color experience at all. The relational structure of experience grounds its representational status, as external sortalism makes explicit.

³⁵ See Morrison 2020 for defence of this idea.

5. Summary and conclusion

To recap: (1) The predicates made available by the external object framework enable us to conceptualize, talk, and reason surrogatively about our perceptual experience. They give us a *handle* on something that is private – the phenomenal character of experience – by situating the experience in a relational space of similarities and differences made available to us by the external world model (S1 in figure 1). My experience is private in the sense that it is *mine*, but not that it cannot be had by others. We have all had the perceptual experience produced by having a red tomato in front of us.

(2) The predicates can be treated as *content attributions*, in other words, as specifying accuracy conditions, allowing me to evaluate whether, for example, on this occasion my sensing in a red tomato manner is actually caused by a red tomato – the experience’s *external analogue* – and so warrants the belief that there is a red tomato in front of me. This is an option that has an extrinsic motivation, viz. serving our various epistemological purposes.

(3) But on the view I am defending content neither determines phenomenal character, as representationalists claim, nor explains it. The content attribution simply *characterizes* it, indirectly, by picking out the experience’s location in a relational space structurally similar to that occupied by external objects, as presented in perceptual experience. And this job can be done *without* construing perceptual experience as representational or contentful, simply by deploying external sortals (i.e. what I am calling ‘external analogues’).

I have identified a further respect in which external sortalism differs from traditional adverbialism: there is a sense in which experiences bear a relation to their external analogues – to their *intentional objects*, as representationalists might put it – but there is nothing

‘metaphysically weighty’ or substantive about this relation. We can call it a *representation relation* if we like, but this is to be understood in a very thin sense.

In conclusion, attribution of content to perceptual experience, like the attribution of content to pains and moods, is best construed as a kind of *gloss*, a way of adverting to the experience’s external analogue that plays an essential role in characterizing the experience. Content plays a complex heuristic role in our various expository and epistemic practices but should not be construed as specifying an essential or metaphysically deep property of experience.

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