

The Scrambler: An Argument Against Representationalism

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I Introduction¹

Brentano (1874) famously claimed that two features demarcate the mental: consciousness and intentionality. Although he claimed that these features are intimately related, subsequent generations of philosophers rarely treated them together. Recently, however, the tide has turned. Many philosophers now accept that consciousness is intentional, where to be intentional is to have representational content, is to represent 'things as being thus and so — where, for all that, things need not be that way' (Travis, 2004, 58). In fact, weak representationalism, which holds that perceptual experiences have representational content, is 'now fairly uncontroversial' (Lycan, 2004).²

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2 While some are clearer than others, those who endorse weak representational-

More specifically, weak representationalism holds that:

- (R) For any perceptual experience *E*, it is necessary that any experience with the same qualitative character as *E* has representational content.³

This paper challenges this fairly uncontroversial thesis. The challenge stems from a thought-experiment that may be called the ‘Scrambler.’ The Scrambler describes an experience that occurs in an extraordinary context but has the same qualitative character as a perceptual experience. This ‘special’ experience, it is argued, lacks representational content. Since the special experience lacks representational content despite having the same qualitative character as a perceptual experience, it provides a counterexample to (R).

Although this suggests that (R) is false, one can think of the challenge in another way. A representationalist who finds the challenge compelling can think of it as inviting representationalists to enrich their account of perceptual experience. An appropriately enriched account would reveal, without begging questions, why the special experience has representational content.

II The Scrambler

The Scrambler has two stages. The first describes a population that may be called the ‘scrambleds.’ The second focuses on a peculiar scrambled experience. Objections to the thought-experiment will be considered (in §IV and §VI) after the main argument (in §III).

ism plausibly include, among others, Byrne (2001), Carruthers (2000), Chalmers (2004), Crane (2003), Dretske (1995), Egan (2007), Harman (1990), Horgan and Tienson (2002), Kriegel (2003), Levine (2003), Loar (2003), Lycan (1996, 1998), McGinn (1997), McDowell (1994), Rey (1998), Rosenthal (1997), Searle (1990), Siewart (1998), and Tye (1995, 2000, 2002). Travis (2004) is the only current philosopher who rejects weak representationalism in print, although Peacocke (1983), Block (2003), and Alston (2005) seem ambivalent.

- 3 Throughout this paper, ‘perceptual experience’ indicates visual, auditory, olfactory, gustatory, or tactile phenomenal experience, where phenomenal experiences are those mental states that are like something for their bearer (cf. Nagel 1974; Block 2002), ‘necessary’ indicates nomological necessity, and ‘qualitative character’ indicates what an experience is like. Similar statements of weak representationalism appear in Lycan (2004) and Chalmers (2004).

The Scrambler: Stage 1

Normal people have visual systems that consist of three key components: eyes, processors, and an organizer.⁴ After light impinges on the retinas, the eyes react, gathering information that they output to processors in the brain. These processors enrich the information before sending it to the organizer, which organizes the enriched information. This organized, enriched information is then used in creating visual experience. Accordingly, when ordinary people have a visual experience, they are experiencing the result of the organizer's work.

Gus, however, is different. Due to a genetic mutation, his visual system has an additional component, which neurologists dub the 'scrambler.' The scrambler takes the output from the organizer and disorganizes it before visual experiences are produced. The outputs from the scrambler then help to produce scrambled experiences. So, where normal people have ordinary visual experience, Gus experiences a big mess.

To help picture the situation, we can think of a visual experience's qualitative character as akin to a computer screen's image. At a given moment a screen displays an image. This image consists of pixels that are assigned values for hue, intensity, and saturation. Likewise, a visual experience's qualitative character results in part from assigning values for hue, intensity, and saturation to pixels in an array. The qualitative character of your current visual experience, for example, results in part from your organizer assigning specific values for hue, intensity, and saturation to specific pixels in your array. If Gus were in the same situation, his organizer would assign the same values, but the scrambler would reassign the values randomly. Accordingly, the values that are assigned to any given pixel would differ randomly. So, where you have an organized, informative visual experience, Gus would experience splashes of disorganized colors.⁵

4 Nothing turns on this model describing us accurately: various models would allow the thought-experiment and the thought-experiment only requires that the model is possible.

5 If the brain cannot have a randomizer, we can suppose that each input affects the scrambler such that, given the same input again, it will react significantly differently. For present purposes, this process is relevantly like a random process. Also, to undercut certain objections, we can suppose that each scrambler assigns values constantly, even when it receives no input from an organizer. Accordingly, if a scrambled shifts from having a visual experience to not having a visual experience, the shift is unrelated to stimulation.

Fortunately for Gus, his mutation also causes him to secrete a novel, extraordinary pheromone that produces two effects. First, it attracts a microscopic alien. The alien lodges herself in Gus' brain and provides Gus with much of the information that others acquire through visual experiences by directly affecting his later brain states. Gus uses this information to navigate, much as others, presumably, use information acquired from their visual experiences. Call the alien species 'informers.'⁶ Second, the pheromone acts like the mythical Spanish fly, making Gus irresistible to the opposite sex. Thanks to this pheromone, after a few hundred years, all humans descend from Gus. Accordingly, all have visual scramblers and informers.

As evolution proceeds, further mutations produce scramblers for audition, taste, touch, and smell. These mutations cause their bearers to secrete more powerful pheromones, which attract new (sense-appropriate) informers and more strongly attract the opposite sex. After a few generations, then, all people have scramblers affecting all of their would-be-perceptual experiences. They also have multiple informers. Call these people, Gus' distant descendents, 'scrambleds.'

What is it like to be a scrambled? Ashley, a scrambled, walks successfully along a tree-lined path that bisects a bustling brook and busy road. Her visual phenomenology does not resemble phenomenology that we associate with paths, trees, brooks, or roads. It resembles, instead, phenomenology that we would associate with a flipbook of Jackson Pollock's most abstract paintings.⁷ Her auditory phenomenology, likewise, resembles phenomenology that we associate with white noise more closely than it resembles phenomenology that we associate with footsteps, rustling leaves, flowing water, or passing cars.

Ashley's non-perceptual phenomenology, nevertheless, may resemble ours. Ashley navigates the path effectively because informers provide her with relevant information — the sidewalk turns ahead, there is a bump in a few paces, her foot contacts the ground now, and so on. Acquiring this information may lead Ashley to have occurrent beliefs about her environment and these beliefs may have a qualitative character (cf. Goldman 1993; Horgan and Tienson 2002; Pitt 2004). This

6 The split between Gus' experiences and actions resembles a split posited by Milner and Goodale (1995). Milner and Goodale (1995) think that our visual system includes a dorsal stream leading to online behavior and a ventral stream leading to visual experience. Those who dislike the appeal to aliens can suppose that a mutation gives Gus a dorsal stream, if he did not already have one.

7 Scrambled experiences may be like those had during episodes of migraine aura, during which people experience 'a dance of brilliant stars, sparks, flashes or simple geometric forms' that 'may have brilliant spectral colours' (Sacks 1970, 75).

qualitative character may resemble that which we would have if we had those beliefs — particularly, if we acquired the beliefs in the right circumstances. Accordingly, certain aspects of Ashley's phenomenology of belief may resemble ours.

Ashley's phenomenology of justification also may resemble ours. Presumably, for Ashley, as for us, diverse cognitive processes produce beliefs. Some of these processes produce beliefs that come with a strong feeling of justification; others do not. For us, beliefs that result from visual phenomenology typically come with a stronger feeling of justification than beliefs that result from testimony. For Ashley, perhaps, beliefs that result from informers come with a particularly strong feeling of justification.

Ashley's phenomenology of agency also may resemble ours. Ashley believes that a large stone blocks the path ahead. She believes that she must walk around the stone, and thus, must step in either the brook or the road. She decides that she prefers the brook. As she steps in the brook, she comes to believe that she is doing so. Accordingly, she feels a sense of agency.

Several aspects of scramblers' phenomenology, then, may resemble ours. The qualitative character of their would-be-perceptual experiences, nevertheless, typically differs radically from ours.

The Scrambler: Stage 2

One possible (albeit unlikely) scrambling of Ashley's visual organizer's output recreates that output, thereby allowing production of the very qualitative character that would have occurred if not for her visual scrambler. Another possible (also unlikely) scrambling creates the output that occurs in an ordinary human, Bill, as he looks at the Mona Lisa. Call the perceptual experience that Bill has while looking at the Mona Lisa 'Bill's ordinary experience.'

Suppose that, as Ashley walks, her visual scrambler produces the same output that Bill's organizer produced during his ordinary experience. Suppose, moreover, that this output leads Ashley to have an experience with the same qualitative character as Bill's ordinary experience. Call this experience 'Ashley's special experience.'

The thought-experiment ends here, with Ashley's special experience having the same qualitative character as Bill's ordinary experience, although the former occurs in a scrambled and the latter in a human.

III Against Thesis (R)

We can use this thought-experiment to mount an argument against thesis (R):

- (1) Bill's ordinary experience is perceptual.
 - (2) Ashley's special experience has the same qualitative character as Bill's ordinary experience.
 - (3) Ashley's special experience lacks representational content.
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- (4) It is not the case that for any perceptual experience E, it is necessary that any experience with the same qualitative character as E has representational content.

Call this the 'Scrambler Argument.' Its conclusion is the denial of (R).⁸

Although (1) is uncontroversial, (2) and (3) require defense. §IV addresses objections to (2). §V motivates (3). §VI considers an important objection to (3). At certain points one might think that these motivations and defenses beg questions against weak representationalism. §VI addresses this important concern.

IV Objections to (2)

Objections to (2) can take two forms. First, one might object that Ashley cannot have her special experience at all. Second, one might insist that Ashley's special experience and Bill's ordinary experience have different qualitative characters. Objections of the first and second sort are considered separately below.

Functionalist Objections

Functionalism about experience (henceforth 'functionalism') grounds an objection to the claim that Ashley can have her special experience: 'Functionalism requires that qualitative characters supervene on functional roles (or their occupants). The Scrambler describes the scam-

8 Siewert (1998) rejects an objection to (R) that shares some features of the Scrambler Argument. That objection relies on 'a kind of visual atomism put together with a holism regarding visual intentionality' (1998, 223). The Scrambler Argument, however, does not imply visual atomism and neither implies nor negates holism about visual intentionality.

bleds' would-be-perceptual experiences as having qualitative characters that do not supervene on functional roles (or their occupants). So, the scrambleds are not possible creatures; since (2) describes a scrambled, it is false.⁹

An intuitive consideration casts doubt on any objection denying the possibility of the scrambleds. Suppose that kaleidoscopes fascinate Cathy. She looks through them for hours on end, experiencing seemingly random and disconnected splashes of shapes and color. Plausibly, each kaleidoscopic experience plays roughly the same quite limited functional role. For, among other reasons, these experiences inform Cathy, at most, that she is looking through a kaleidoscope in a well-lit room and she does not navigate by them.

The scrambleds' would-be-perceptual experiences can play a relevantly similar role. Perhaps young scrambleds' are inclined to escape depression through suicide but they combat this inclination by focusing on their scrambled qualitative characters. Accordingly, these qualitative characters play a role in allowing reproduction, and thus, a significant functional role. Every scrambled experience, nevertheless, plays roughly the same functional role. (It can be stipulated, moreover, that the scrambleds have similar navigational dispositions to Cathy, even though their dispositions remain forever dormant.)

So, the scrambleds' scrambled experiences, like Cathy's kaleidoscopic experiences, have qualitative characters that differ radically from one experience to the next, even though each experience plays roughly the same functional role. Given this similarity between the scrambleds and Cathy, if functionalism implies that the scrambleds cannot have scrambled experiences, it implies that Cathy cannot have kaleidoscopic experiences. Clearly, however, Cathy can have kaleidoscopic experiences. (Look through a kaleidoscope for several minutes — or even hours — and notice that your visual experience does not suddenly disappear.) By analogy, then, the scrambleds can have scrambled experiences. Accordingly, either functionalism is false or it is consistent with the Scrambler.

One who is not persuaded by this response should note that many representationalists reject functionalism (e.g. Chalmers 1996, 2002; Horgan 1984, 1987; Loar 1997; McGinn 1991), and thus, cannot raise this objection. She should note also that there are strong, independent reasons to reject functionalist representationalism.¹⁰

9 SV concludes by addressing a related objection, which appeals to externalism about phenomenal content.

10 For reasons to give up functionalism, see Block (1978, 1995), Chalmers (1996, 2002),

Phenomenological Objections

Appeals to the phenomenology of perceptual experience ground two objections to (2), the claim that Ashley's special experience has the same qualitative character as Bill's ordinary experience.

First: 'Phenomenology reveals that each experience's qualitative character depends on neighboring experiences such that, for any experience E, a difference in experiences that are proximal to E requires a difference in E. Bill's ordinary experience occurs amidst other ordinary experiences. Ashley's special experience, however, occurs amidst scrambled experiences. So, contrary to (2), Ashley's special experience and Bill's ordinary experience have different qualitative characters.'¹¹

Experiences can be proximal either in that they occur concurrently but in different sensory modalities, or in that one occurs immediately before the other. Accordingly, the objector can appeal to two sorts of dependence among experiences: *intra*-experience and *inter*-experience dependence.

To counter the version of the objection that appeals to *intra*-experience dependence, suppose that Chris and counterpart Chris* are gazing at the Mona Lisa, and that Chris' Walkman plays Beethoven's 6th Symphony but Chris*'s plays Beethoven's 9th. It is implausible and *ad hoc* to insist that the qualitative characters of their visual experiences must differ. To counter the version of the objection that appeals to *inter*-experience dependence, suppose that Jenny and counterpart Jenny* are looking at a book of famous paintings, and that Jenny flips from *Starry Night* to the Mona Lisa but Jenny* flips from a white page to the Mona Lisa. Again, it is implausible and *ad hoc* to insist that the qualitative characters of their visual experiences of the Mona Lisa must differ.

An alternative response to this objection alters the thought-experiment to ensure that the experiences that are proximal to Ashley's special experience resemble experiences that are proximal to Bill's special experience. The response then argues that reasons to think that Ashley's special experience lacks representational content apply to this embedded experience as well. We will turn to those reasons shortly.¹²

and Rosenberg (2004). Many non-reductive representationalists, moreover, reject reductive representationalism and functionalism for reasons that are similar in spirit (e.g. Chalmers 1996, 2002; Horgan 1984, 1987; Graham and Horgan 2000; McGinn 1988, 1991).

11 Siewert (1998) inspires this objection.

12 Reasons to think that Ashley's special experience lacks representational content may be defeated if that experience were embedded in a lengthy stream of experiences that were identical to Bill's. Clearly, however, there is not such a strict dependence among experiences.

This second phenomenological objection holds that: ‘The final stage of the Scrambler gives the impression that Ashley’s special experience has the same qualitative character as Bill’s ordinary experience *because* her visual scrambler produces the right output. The Scrambler also suggests that this output is akin to values in a pixel-array. The Scrambler suggests, then, that perceptual experiences’ qualitative characters are little more than values in a pixel-array. Phenomenology reveals, however, that they are far richer than this, that merely assigning appropriate values to a pixel-array would not produce a qualitative character just like that of an ordinary perceptual experience. So, the Scrambler provides no reason to think that Ashley’s special experience has the same qualitative character as Bill’s ordinary experience — and thus, provides no reason to accept (2).’

The Scrambler does not require that assigning values to a pixel array suffices to produce a qualitative character. It only requires that, whatever is required beyond assigning such values, will not imbue Ashley’s special experience with representational content.

This invites a new objection: ‘Once we describe Ashley’s special experience adequately — that is, once we add enough to values in a pixel-array to ensure that Ashley’s special experience has the same qualitative character as Bill’s ordinary experience — it will be clear that her special experience has representational content.’

This objection, although important, is not an objection to (2). For, it does not hold that Ashley’s special and Bill’s ordinary experiences do not have the same qualitative character. It holds, instead, that Ashley’s special experience has representational content, which is a denial of (3). Let us turn to that claim now. After §V motivates (3), §VI considers this objection.

V Does Ashley’s Experience have Representational Content?

If Ashley’s special experience has representational content, it meets a (non-trivial) sufficient condition for having representational content. Quite plausibly, however, Ashley’s special experience does not meet any such condition. Ashley’s special experience, then, lacks representational content.

What follows defends this argument’s key premise that Ashley’s special experience does not meet any sufficient condition for having representational content. The defense considers conditions that have been offered, argues that Ashley’s special experience does not meet any of these, and suggests that it will fail to meet any relevantly similar condition that is likely to be offered.

Seeming as Sufficient

McGinn (1997) and Kriegel (2003) offer perhaps the clearest sufficient condition for an experience's having representational content. They claim that perceptual experiences have representational content because the world *seems* (to the person having the experience) to be a certain way in virtue of them.¹³ If, for example, in virtue of his ordinary experience it seems to Bill as if the Mona Lisa hangs before him — or, at least, as if the world includes further splashes of colors or shapes — then that experience has representational content.

Two aspects of such seemings merit emphasis. First, they are not final judgments. Bill may believe that a hologram produces his ordinary experience even as it seems to him as if the Mona Lisa hangs before him. Second, such seemings are part of experience. Accordingly, if seemings imbue experiences with representational content, then experiences have representational content in virtue of their intrinsic properties.

According to this account, Ashley's special experience has representational content if the world seems to her to be a certain way in virtue of that experience. What follows offers considerations suggesting that the world does not seem to Ashley to be a certain way in virtue of her typical scrambled experiences. It then argues that the same considerations suggest that the world does not seem to Ashley to be a certain way in virtue of her special experience, which, after all, is just another scrambled experience.

Let us first consider Ashley's phenomenological history. The qualitative characters of Ashley's would-be-perceptual experiences have never borne any recognizable relation to the scrambled's world, nor to one another. Plausibly, then, neither these experiences nor their qualitative characters need *seem to her* to connect to the world.¹⁴ That is, given that these experiences have never borne a recognizable relation to the scrambled's world, it is possible that, to Ashley, they would not seem to connect to the world. Quite plausibly, if one's experiences of a certain sort have never seemed to her to connect to the world, then those experiences need not have seemed to her to present the world. It would be quite odd, perhaps even conceptual confusion, to claim that perceptual

13 They support this condition with two premises: perceptual experiences necessarily 'involve a reference to the subject undergoing the experience' and necessarily 'present the world in a certain way' (McGinn 1997, 298). The following assessment attacks the second premise.

14 Although, for ease of presentation, this argument henceforth addresses only experiences, its conclusions apply equally to the qualitative characters of those experiences.

experiences seem to Ashley to present the world but do not seem to her to connect to the world. Quite plausibly, moreover, if one's experiences of a certain sort have never seemed to her to present the world, then the world need never have seemed to her to be a certain way in virtue of them. Again, it would be quite odd, perhaps even conceptual confusion, to claim that the world seems to Ashley to be a certain way in virtue of her perceptual experiences but these experiences do not seem to her to present the world.

These claims yield an argument. Ashley's would-be-perceptual experiences have never seemed to her to connect to the world. If one's experiences of a certain sort have never seemed to her to connect to the world, then those experiences need not have seemed to her to present the world. If one's experiences of a certain sort have never seemed to her to present the world, then the world need never have seemed to her to be a certain way in virtue of them. So, the world need never have seemed to Ashley to be a certain way in virtue of her would-be-perceptual experiences. Accordingly, we can suppose that, prior to her special experience, it has not.¹⁵

In this argument claims about how things seem to Ashley are *not* claims about what she believes. The claim that Ashley's experiences do not seem to her to connect to the world, for example, is a claim about the way things seem to Ashley, about her phenomenology, not a claim about what she believes; the relevant claim is that, *regardless of what Ashley believes*, her experiences do not seem to her to connect to the world. Of course, we typically form beliefs based on visual seemings. But one need not. The lines of the Muller Lyer can seem to us to be different lengths even as we believe that they are the same length. Perhaps some animals never form beliefs based on visual seemings because they lack beliefs altogether, even though the world seems to them to be one way or another in virtue of their experiences. Similarly, even though Ashley does not form beliefs based on her scrambled experiences, the world could seem to her to be a certain way in virtue of them; her experiences could seem to her to present the world, they could seem to her to connect to the world. The present argument claims, nonetheless, that the world does not seem to Ashley to be a certain way in virtue of her scrambled experiences, that these experiences do not seem to her to present or even to connect to the world. Accordingly, one might object

15 A similar argument holds that: since Ashley's would-be-perceptual experiences have never borne a recognizable relation to the world around the scrambles, they have never seemed to her to provide information about the world, and thus, have never seemed to her to stand for something else, and thus, the world need never have seemed to her to be a certain way in virtue of them.

to the present argument by insisting that Ashley's scrambled experiences will seem to her to connect to the world, to present the world, and consequently, the world will seem to her to be a certain way in virtue of them. Given Ashley's history, this claim strikes me as rather implausible. That said, short of creating scrambleds, there is no way to argue directly against it. The first premise of the argument, then, may be a point of departure for some.

The more controversial premise of this argument moves from how experiences seem to one to how the world seems to one in virtue of those experiences.¹⁶ A representationalist may object to this move: 'Suppose that the world seems to Alice to be a certain way in virtue of her perceptual experiences. Alice recognizes, nevertheless, that the Cheshire Cat designs those experiences to deceive her. Accordingly, she believes, with great frustration, that those experiences do not present the world to her. Those experiences, then, do not seem to her to present the world, even though the world seems to her to be a certain way in virtue of them.'

This objection assumes that Alice's beliefs about her experiences go hand in hand with how those experiences seem to her. Alice, however, may believe that her experiences do not present the world to her even though they *seem* to her to present the world, just as one may believe that infinities have different cardinalities even as it seems to him that they cannot (cf. Bealer 1998). In fact, Alice's experiences would not frustrate her if not for the dissonance of their seeming to present the world while she believes that they do not. One's beliefs about her experiences, then, do not go hand in hand with how those experiences seem to her. Plausibly, then, the move from how experiences seem to one to how the world seems to one in virtue of those experiences is legitimate.

With these considerations in mind, let us consider Ashley's special experience. As with her previous would-be-perceptual experiences, a scrambling helps to produce the qualitative character of her special experience. Accordingly, this qualitative character does not bear any recognizable relation to Ashley's world. The Mona Lisa may have been destroyed long ago and Ashley may not be near a wall or painting when her special experience arises. Her special experience, then, would not teach her more about her world than any other scrambled experience. Attempts to navigate by it, moreover, would fail as miserably as attempts to navigate by her previous scrambled experiences would have.

16 One also might dispute the first premise — i.e. that Ashley's would-be-perceptual experiences have never seemed to her to connect to the world. The rationale for this premise emerges in the coming discussion and in §VI.

Given these (and other) similarities between Ashley's scrambled and special experiences, there is good reason to think that her special experience would not seem to her to differ relevantly from her previous scrambled experiences. So, since those previous experiences did not seem to her to connect to the world, her special experience need not seem to her to connect to the world. Accordingly, the same reasoning that applied to Ashley's previous scrambled experiences suggests that the world need not seem to her to be a certain way in virtue of her special experience. We can suppose, then, that it does not.

Ashley's special experience, therefore, does not meet McGinn and Kriegel's condition for having representational content. To reiterate, they claim that perceptual experiences have representational content because the world seems (to the person having the experience) to be a certain way in virtue of those experiences. The world, however, does not seem to Ashley to be a certain way in virtue of her special experience.

One might object that Ashley, being so unusual, cannot detect the true nature of her experience, and thus, the fact that the world does not seem to Ashley to be a certain way in virtue of her special experience tells us little about how the world seems *objectively* in virtue of that experience. This objection relies on a subjective/objective (i.e. appearance/reality) distinction for qualitative characters. This distinction may not apply to qualitative characters; qualitative characters, perhaps, just are how they seem to their bearers. At any rate, this objection is not available to an advocate of the McGinn/Kriegel view, which holds that perceptual experiences have representational content because the world seems (to the person having the experience) to be a certain way in virtue of them. This objection, then, presupposes an alternative sufficient condition for having representational content. What follows considers such conditions.

Content without Seeming?

One alternative sufficient condition holds that experiences have representational content in virtue of their qualitative characters *themselves*, regardless of how those characters seem to their subjects. Siewert (1998) comes closest to endorsing this condition. He argues that perceptual experiences have representational content in virtue of being assessable for accuracy, perpetual experiences are assessable for accuracy in virtue of their phenomenal characters, and, therefore, perceptual experiences have representational content in virtue of their phenomenal characters.¹⁷

17 Chalmers (2004) explicitly endorses Siewert's motivation.

In principle, Siewert could have developed this argument without appealing to how things seem to subjects. Accordingly, he could have offered a condition that differs relevantly from McGinn and Kriegel's. In fact, however, Siewert defends the premise that perceptual experiences' phenomenal characters are assessable for accuracy by appealing to how things seem to subjects. Specifically, he claims that phenomenal characters are assessable for accuracy because things seem to be certain ways to their subjects in virtue of them (1998, p. 221) and because subjects necessarily interpret them (1998, p. 222). Accordingly, the same problems that arise for McGinn and Kriegel's accounts arise for Siewert's.

Suppose, however, one thinks both that perceptual experiences' qualitative characters are assessable for accuracy themselves, regardless of how things seem to their subjects, and that being assessable for accuracy suffices for having representational content. These characters, then, have representational content in and of themselves, however things seem to their subjects.

The following sketch of an argument suggests that any such position is implausible. A more thorough argument against the claim that qualitative characters themselves imbue experiences with representational content awaits that position's development.

Quite plausibly, if un-interpreted sentences necessarily have representational content, then everything necessarily has representational content. If everything necessarily has representational content, then weak representationalism is uninteresting; for, it merely points out an instance of the universal truth, 'Everything necessarily has representational content.' So, if weak representationalism is interesting, un-interpreted sentences need not have representational content — or, at least, they and perceptual experiences have different sorts of representational content. Weak representationalism implies, then, both that un-interpreted sentences need not have representational content and that perceptual experiences necessarily have representational content in virtue of their qualitative characters. So, weak representationalism requires that qualitative characters differ relevantly from un-interpreted sentences.

An obvious relevant difference would be that suggested by McGinn, Kriegel, and Siewert: the world necessarily seems to one to be a certain way in virtue of her perceptual experiences qualitative characters, but not so for un-interpreted sentences. The view under consideration, however, insists that qualitative characters have representational content regardless of how things seem to their subjects. Advocates of this view, then, must explain how un-interpreted sentences differ relevantly from qualitative characters without appealing to how qualitative characters seem to subjects.

One might suggest that sentences differ from qualitative characters in that sentences have only derived content but qualitative characters have un-derived content. She then must distinguish derived content from un-derived content without appealing to a relation between un-derived contents and how things seem to subjects. Perhaps one could appeal to a relation between qualitative characters and some non-phenomenal aspect of subjects. Although this move would not suit McGinn, Kriegel, and Siewert's reasons for tying intentionality to consciousness, it could be made. Assessment of such an approach awaits its development. In the absence of such an approach, we can conclude that perceptual experiences do not have representational content in virtue of their qualitative characters themselves.

This conclusion joins with the main conclusion about McGinn and Kriegel's proposed condition — that Ashley's special experience does not meet that condition — to ground a broader argument. Quite plausibly, qualitative characters and seemings are the only intrinsic properties of perceptual experiences that could imbue them with representational content. Minimally, they are the only intrinsic properties that are even intimated in the literature. Accordingly, the sufficient conditions considered above exhaust those appealing to perceptual experiences' intrinsic properties. Since neither of these conditions ensures that Ashley's special experience has representational content, Ashley's special experience does not have representational content in virtue of its intrinsic properties.

The Extrinsic

Externalist accounts of representation offer another type of sufficient condition for having representational content. Although these accounts differ significantly from one another, each holds that a mental item has representational content in virtue of its bearing an interesting, robust relation to the environment. Dretske (1988), for example, holds that a mental item (such as a perceptual experience) represents such-and-such if that item functions primarily to indicate the presence in the environment of such-and-such. Fodor (1987, 1990) and Millikan (1989) offer relevantly similar accounts.

Contrary to such accounts, Ashley's special experience does not bear any interesting, robust relation to her environment. Contrary to Fodor's asymmetric dependence account, Ashley's special experience does not depend in any interesting way on her environment. Contrary to Dretske's functionalist account, her experience does not function to indicate the presence of anything in her environment. Contrary to Millikan's functionalist account, Ashley's experience need not have been designed to be used in order to indicate anything about her environ-

ment. (Note that one could adjust the thought-experiment to describe creatures that are relevantly like the scrambleds throughout their evolutionary history.)

Ashley's special experience, then, does not meet externalist conditions because it does not occur in the environmental/cognitive/historical context that one normally associates with such experiences. For similar reasons, her special experience will not meet any plausible condition that appeal to experiences' extrinsic properties. Accordingly, Ashley's special experience does not have representational content in virtue of its extrinsic properties.

This claim, of course, presupposes that Ashley's special experience is possible and thereby presupposes that the scrambleds are possible. An externalist might reject this possibility: 'The qualitative characters of perceptual experiences supervene, in part, on appropriate relations between subject and environment. The scrambleds do not bear such relations to their environment. So, the scrambleds cannot have relevant qualitative characters. By definition, the scrambleds have such qualitative characters. So, the scrambleds are impossible.'

This objection resembles the functionalist objection to (2), which also held that the scrambleds are impossible. Like the response to that objection, the response to the present objection invokes Cathy, who gazes through kaleidoscopes for hours on end (see §IV). Clearly Cathy can have her kaleidoscopic experiences despite their bearing no robust relation to her environment. Accordingly, either externalism is false or externalism does not preclude the possibility of the scrambleds. Either way, the objector's argument is unsound.

This objection, moreover, is unavailable to many advocates of (R). The objection insists that relevant qualitative characters supervene on the environment. Although this sort of strong phenomenal externalism has advocates (e.g. Noe 2004; Fisher 2007), many advocates of (R) are not among them (e.g. Chalmers in Clark and Chalmers 1998, 12; Horgan and Kriegel 2008), and thus, cannot raise this objection.¹⁸

Summary

Since Ashley's special experience does not meet any condition that appeals to the intrinsic or extrinsic properties or experiences, it does not meet any sufficient condition for having representational content.

18 An externalist should note, moreover, that she can appeal to the Scrambler when arguing against non-externalist representationalism. Quite roughly, she could argue as follows: (R) is true; only externalists have the resources to defend (R) from the Scrambler; so, externalism is true.

These considerations motivate (3), the claim that Ashley's special experience lacks representational content. Minimally, the present discussion suggests a burden for advocates of (R): identify a sufficient condition for having representational content that Ashley's special experience meets.

VI Objection to (3)

Let us return to the objection (raised at the end of §IV) that Ashley's special experience has been misdescribed, that her experience, in fact, has representational content. Three claims capture this objection: (i) each perceptual experience E instantiates some property *p*; (ii) having the same qualitative character as E requires instantiating *p*; (iii) instantiating *p* suffices for E's having representational content. Call any *p* that makes (i)-(iii) true a 'representationalist property.'

The Scrambler does not suggest a general response to this objection. Plausibly, moreover, any response that appeals to the Scrambler would beg questions against weak representationalism. Existing arguments for representationalist properties, however, beg questions against the Scrambler Argument. So, ultimately, the Scrambler may lead to an impasse, a clash of reasonable interpretations of Ashley's special experience.

As an example of this impasse, let us consider the following appeal to a representationalist property: 'Perceptual experiences have the property *being world-directed* [an example of (i)]. They have this property in virtue of their qualitative characters. So, any experience with the same qualitative character as a perceptual experience has the property *being world-directed* [an example of (ii)]. Whatever instantiates this property has representational content [an example of (iii)]. So, any experience with the same qualitative character as a perceptual experience has representational content. Thus, (3) is false.'¹⁹

The Scrambler suggests a response to this objection. At best, our perceptual experiences have the property *being world-directed* because their qualitative characters play a world-presenting role for us; because they act as natural signs. Since Ashley's special experience does not play that role for her, perceptual experiences, at best, play a world-presenting

19 Similarly, appealing to conceptualism about perceptual experience, one can argue that Ashley's special experience has the same qualitative character as Bill's only if she applies the right concepts to it, and that applying these concepts to an experience imbues it with representational content.

role contingently. Accordingly, perceptual experiences instantiate the property *being world-directed* contingently, if at all.

This response, of course, begs the question; for, it appeals to an assessment of Ashley's special experience that the objection itself attempts to reject. The objector's insistence that perceptual experiences *necessarily* have the property *being world-directed*, however, begs the question against (3). For, it does not suggest in a plausible, pre-theoretical way that our original interpretation of Ashley's special experience is misguided; that is, it does not clearly defeat reasons favoring that original interpretation. So, we reach an impasse.

We may (or may not) reach a similar impasse for any proposed representationalist property. We have reviewed proposed sufficient conditions for having representational content. One can think of these proposals as holding that a certain property — e.g. the property *functioning to indicate the presence of x* — is a representationalist property. Accordingly, the conclusion that Ashley's special experience does not meet any proposed condition suggests that no one has identified a representationalist property that would break the impasse.

Given this impasse, one can think of the Scrambler thought-experiment as challenging advocates of (R) to identify a representationalist property that does not beg questions against the Scrambler Argument and to offer an account of that property that clearly defeats reasons favoring the interpretation of Ashley's special experience that have been offered. Until such a property has been identified, we need not accept (R).

VII Conclusion

The Scrambler thought-experiment describes Ashley, a scrambled who has an experience with the same qualitative character as an ordinary perceptual experience. Evaluation of the thought-experiment suggests that this special experience lacks representational content. This contradicts (R), the thesis that, for any perceptual experience E, an experience with the same qualitative character as E has representational content.

One who wholeheartedly accepts the argument can adopt Separatism, the thesis that consciousness and intentionality can be treated separately. One who finds the argument compelling but finds (R) inescapable might attempt to identify an appropriate representationalist property.

Perhaps the most intriguing reaction attempts to accommodate both the Scrambler Argument and intuitions favoring weak representationalism.²⁰ One could agree with McGinn and Kriegel that experiences

20 For intuitions favoring (R), see Horgan and Tienson (2002).

have representational content if the world seems to their bearer to be a certain way in virtue of them. She could agree also that, for many experiences, the world seems to their bearer to be a certain way in virtue of them. Accordingly, she would agree that many experiences have representational content. She could deny, nevertheless, that an experience's qualitative character determines whether the world seems to one to be a certain way in virtue of it. Accordingly, she could deny that the relation between qualitative character and representational content is necessary.

The nature of this position becomes clearer if we briefly relate the Scrambler Argument to Block's work on representationalism. Block clearly thinks that the experience of orgasm does not have representational content. He claims that it is not even a *vehicle* of representation. Accordingly, he calls the so-called 'qualia' of experiences of orgasm 'mental oil,' which indicates that they represent as little as does the oil in oil-based paint.

He notes, however, that '[he does not] know whether there are any such properties in the case of a normal experience of a red tomato' (2003, p. 174). For, at least some of the qualia of visual experiences are (or consist of) what he calls 'mental paint' in that these properties are vehicles of representation, just like the paint in paintings. What Block does not know is whether this mental paint consists of mental oil. Accordingly, he remains ambivalent about weak representationalism.

Using Block's terms, one can think of the position suggested above as consisting of two claims. First, whether perceptual experiences' qualitative characters are akin to mental paint or mental oil depends on the role that they play.²¹ Second, their role is contingent. Accordingly, the same qualitative characters that are vehicles of representation for us — and thus are akin to mental paint for us — may not be vehicles of representation for the scrambleds — and thus are akin to mental oils for them. Given the impasse suggested by the Scrambler Argument, future work should pursue this position.

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21 This sentence uses the phrase 'are akin to' rather than 'are' in order to avoid commitment to the qualia to which Block appeals.

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