Representationalism and the Scene-Immediacy of Visual Experience:
A Journey to the Fringe and Back.

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Abstract: Both visual experience and conscious thought represent external objects, but in visual experience these objects seem present before the mind and available for direct access in a way that they don’t in conscious thought. In this paper, I introduce a couple of challenges that this “Scene-Immediacy” of visual experience raises for traditional versions of Representationalism. I then identify a resource to which Representationalists can appeal in addressing these challenges: the low-detail fringe of visual experience. I argue that low-detail contents within visual experience provide the mind with a rich access to additional high-detail information, an access that is not found in conscious thought. This access, in turn, speaks to the challenges raised by the Scene-Immediacy of visual experience.

1. Introduction

Representationalist accounts of perceptual consciousness identify the phenomenal character of a perceptual experience with the representational content carried by that experience.[[1]](#endnote-1) One general concern facing such accounts is that conscious thoughts carry representational content while not having the phenomenal character of perceptual experiences. As a result, Representationalists inherit the burden of explaining why some representational contents (those carried by experience) are phenomenal while others (those carried by conscious thought) are not.[[2]](#endnote-2) Although it’s controversial, I am going to assume that thoughts have an introspectible character—to borrow Nagel’s (1974) phrase, I assume that “there is something that it’s like” to have conscious thoughts.[[3]](#endnote-3) Given this assumption, the general challenge facing Representationalists is to explain the *enormous difference* between the introspectible characters of conscious thought and perceptual experience.

Following popular custom, I will focus on a particular kind of perceptual experience: visual experience. One important aspect of the difference between visual experience and conscious thought is that visual experience seems to present the objects/features that it represents before the mind (and give us access to them) in a way that conscious thought does not. In this paper, I focus on this “Scene-Immediacy” of visual experience. After a preliminary discussion of Scene-Immediacy (section 2), I explain how the phenomenon presents a basic problem for all versions of Representationalism and then zero in on two specific challenges that it presents to the traditional version of Representationalism that I favor (section 3). I then sketch how an appeal to the fringe of visual experience can help my preferred version of Representationalism respond to these challenges (section 4). This sketch is subsequently filled out and defended in sections 5-7: section 5 describes the fringe of visual experience in more detail. Section 6 uses this description of the fringe to fill out my responses to the challenges presented by Scene-Immediacy. Section 7 considers two objections to my account of Scene-Immediacy.

2. The Scene-Immediacy of Visual Experience

There are several ways in which a visual experience of an object introspectively differs from a conscious thought about that object. The way that I want to focus on is the topic of the following passage from John Searle.

If, for example, I see a yellow station wagon in front of me, the experience I have is directly of the object. It doesn't just ‘represent’ the object, it provides direct access to it. The experience has a kind of directness, immediacy and involuntariness which is not shared by a belief I might have about the object in its absence…The visual experience I will say does not just represent the state of affairs perceived; rather, when satisfied, it gives direct access to it, and in that sense it is a presentation of that state of affairs. (1983, p. 46)

Don’t let Searle’s use of the words “directness” and “immediacy” mislead you. The difference that he is describing is *not* about whether the visual experience or the thought makes us indirectly aware of the yellow station wagon in virtue of making us directly aware of something else.[[4]](#endnote-4) Both of these conscious states provide us with a “direct” awareness of the wagon in that sense of the word.

So what difference is Searle describing? Although both the visual experience and the conscious thought make you aware of the station wagon in an unmediated manner, in the former the station wagon *seems present before the mind* in a way that it doesn’t in the latter. As Martin (2002, p. 388) puts it, “sensory states involve a certain immediacy or apparent presence of an object which is simply not required in cases of pure thought.”

 Others have pointed to the same aspect of the phenomenal character of visual experience. In discussing this phenomenon, which he calls “presence”, J.J. Valberg (1992) states:

Presence (in experience) connotes a kind of direct or immediate availability. An object which is present is right *there*, available to us. (p. 19, his emphasis)

Similarly, in his description the phenomenal character of visual experience, Scott Sturgeon (2000) says:

Its phenomenology will be as if a scene is made manifest to you. This is the most striking aspect of visual experience…Visual phenomenology makes it for a subject as if a scene is simply presented. Veridical perception, illusion and hallucination seem to place objects and their features directly before the mind. (p. 9)

I will follow the lead of Sturgeon (2000) and refer to this aspect of visual phenomenal character as “Scene-Immediacy”.

3. Scene-Immediacy and Representationalism

Scene-Immediacy presents a general challenge to all versions of Representationalism. Before introducing this challenge, however, a brief discussion of Representationalism is in order.

As a thesis about perceptual experience, Representationalism has evolved quite a bit over the last several decades. Following Chalmers (2004), we can unite all versions of Representationalism in virtue of their identification of a phenomenal property *with the property of having a particular representational content in a certain manner*. Early versions of Representationalism—which I’ll call “Good Old Fashioned Representationalism” (or “GOFR”, for short)—were *reductive* in that they analyzed the notion of having a particular representational content in a certain manner entirely in physical/functional terms.[[5]](#endnote-5) Michael Tye’s (1995, 2000) PANIC theory, for example, identifies a phenomenal feature with the property of having a representational content that is *poised*, *abstract*, and *non-conceptual*, where all these notions are analyzed in way that does not appeal to any phenomenal notions.[[6]](#endnote-6) In addition to being reductivist, early versions of Representationalism were also united in offering a similar account of what visual experience represents: namely, objects/properties in the surrounding environment (objects/properties that could also be represented in thought). This account of the content of visual experience was meant to accommodate the so-called “transparency” of visual experience; it was meant to accommodate the fact that the phenomenal features of visual experience seem like features of objects in the surrounding environment.[[7]](#endnote-7)

 Today, however, there is more under the Representationalism umbrella than just GOFR. To start with, there has been a movement towards *non-reductive* accounts of Representationalism.[[8]](#endnote-8) Advocates of this movement continue to maintain that a phenomenal property can be identified with the property of having a particular representational content in a certain manner, but they claim that the latter notion cannot be fully analyzed independently of phenomenal notions. They might, for instance, claim that the content of visual experience involves the attribution of *phenomenal properties* to objects and that it is impossible to analyze these properties in terms of physical properties or any other non-phenomenal notion. Or they might claim that perceptual experiences have representational content *in a phenomenal way* and that it is impossible to analyze the notion of having content in a phenomenal way using functional terms, physical terms, or any other non-phenomenal notion.

 Another development within Representationalism involves enriching the representational content of visual experience beyond the classic GOFR conception. Shoemaker (1994), for instance, argues that in addition to representing external objects and their features, color experience represents relations obtaining between objects (or surfaces of objects) in the environment and its own intrinsic properties. Peter Carruthers (2000), in turn, maintains that perceptual experience carries a (partly) reflexive content that makes a representational claim about its own intrinsic features. And Thau (2002) goes so far as to argue that the properties represented by visual experience cannot, in fact, be represented by conscious thought.

With this quick review of Representationalism in place, let’s turn back to the Scene-Immediacy of visual experience. This aspect of visual experience presents a basic problem for all versions of Representationalism in virtue of its role in an argument for a competing theory: Naïve Realism. According to the Naïve Realist, our visual awareness of external objects is not representational; rather, it involves “acquaintance”—a brute cognitive relation that obtains between the mind and external objects and their features. Acquaintance, in effect, makes external objects/features *constituents* of veridical visual experiences, for according to the Naïve Realist one could not have the same visual experience if one was not acquainted with the same external object/features.[[9]](#endnote-9)

Naïve Realists often act as though their theory is uniquely poised to capture the Scene-Immediacy of visual experience. Scott Sturgeon (2000) summarizes the argument thusly:

They say its capacity to explain Scene-Immediacy springs from its metaphysics of veridical phenomenology. According to that story, recall, such phenomenology consists in brute contact between percipient, public object and public feature. Scene-immediacy is said to result. The idea is that brute contact makes it for the subject as if a public object and its features are directly before the mind. (p. 12)

According to these Naïve Realists, Representationalists lack the resources necessary for explaining Scene-Immediacy. Sturgeon articulates the basic idea:

Consider the difference between seeing a loved one and thinking of her. On the present view, both states are intentionally directed upon the beloved. Yet only the former is Scene-Immediate. Only visual experience *as of* the loved one is *as if* she’s Immediately before consciousness. Mere thought, alas, is not like this. Scene-Immediacy looks to be a *special* kind of directedness, somehow more than intentional directedness upon a scene. (p. 27, his emphasis)

As a card-carrying Representationalist, I don’t think that the only possible way to explain Scene-Immediacy is via acquaintance.[[10]](#endnote-10) But saying that it’s possible for a Representationalist to give a plausible account of Scene-Immediacy is one thing; actually providing the account is another.

In a way, the task is relatively straightforward for a *non-reductive* Representationalist: she can claim that visual experiences represent in a phenomenal manner, that the notion of “representing in a phenomenal manner” cannot be further analyzed in non-phenomenal terms, and that this notion involves Scene-Immediacy (which is, itself, a phenomenal notion that cannot be reduced to non-phenomenal notions). When a Representationalist is *prohibited* from appealing to phenomenal notions—when she favors a *reductive* version of Representationalism, as I do—the task of explaining Scene-Immediacy becomes more challenging.

At this point, I want to zero in on a couple of specific challenges that Scene-Immediacy presents to the defender of GOFR, challenges that are inspired by the previous descriptions of Scene-Immediacy. (These are not the only challenges for GOFR that one could generate from the previous descriptions; they are simply the ones I am focusing on in this paper). For expositional purposes, I’ll call these challenges “the Challenges of Scene-Immediacy”.

One recurring idea from the previous descriptions of Scene-Immediacy is that visual experience gives us a kind of “direct access” to objects not found in conscious thought. To revisit Searle’s example, visual experience seems to give us a type of “direct access” to the yellow wagon that conscious thought does not. Under GOFR, however, it seems that a visual experience gives us “access” to the wagon in virtue of *representing* it and gives us “direct” access to the wagon in virtue of *directly representing* it (as opposed to indirectly representing it by, say, directly representing the effects the wagon has upon our visual system). This creates a problem: given the above, natural GOFR interpretation of “direct access”, it follows that a conscious thought can also give us “direct access” to the wagon. The “First Challenge of Scene-Immediacy”, then, is for the defender of GOFR to make sense of the claim that visual experience provides a “direct access” to the wagon not found in conscious thought, given that both representational states are capable of directly representing that wagon.

The “Second Challenge of Scene-Immediacy” is closely connected to the first challenge. To explain this challenge, I need to draw a distinction between the content of the information carried by a representational state (i.e. what the information is about) and, for lack of a better word, the “source” of that information. Information about a yellow station wagon can come a variety of sources; what’s particularly important for the purposes of this paper is the fact that this information can come from the wagon itself (when you perceive that wagon) *or* it can come from one’s memories of the wagon.[[11]](#endnote-11) I take it that there is something about the Scene-Immediacy of the visual experience of the wagon that suggests that the *source* of the wagon-information it carries *is the wagon itself*,and not one’s memories. This, in turn, presents a challenge to the defender of GOFR, for according to this theory the phenomenal character of this experience is determined by its informational content and, as we have seen, *information with the same content can (arguably) come from different sources*.

What can the defender of GOFR say in response to these challenges? To date, GOFR defenders have tended to focus on the difference between perceptual experiences and thoughts more generally; not much GOFR ink has been split on the specific topic of the Scene-Immediacy of visual experience. With regard to the former, more general issue, a number of proposals have been advanced, including: that experience carries a “nonconceptual” content as opposed to the “conceptual” content of belief[[12]](#endnote-12), that experience carries an “analog” content in contrast to the “digital” content carried by belief[[13]](#endnote-13), that the content of experience is “richer” than that of thought[[14]](#endnote-14), and that experience are “poised” to impact the belief/desire system in a unique manner[[15]](#endnote-15).

Some of these ideas could be of service in our attempt to answer the Challenges of Scene-Immediacy. For example, a defender of GOFR could argue that visual experience gives us a kind of “direct access” to the wagon not found in thought in virtue of giving us *far more information* about that wagon than thought; indeed, she could argue that the abundance of information provided by experience is a reason for thinking that the *source* of this information is the wagon itself, as opposed to memory (which might be limited in terms of the amount of information it can hold about wagons). That said, I’m not going to examine the merits of attempting to extend this or any of the other GOFR ideas mentioned above to the Challenges of Scene-Immediacy. My project is to examine and defend another GOFR-friendly resource, a resource that has been largely ignored by defenders GOFR. This resource is the “fringe” of visual consciousness.

4. A Sketch of an Alternative GOFR Approach to Scene-Immediacy

 As a first step in introducing my GOFR responses to the Challenges of Scene-Immediacy, let’s examine a description of the phenomenal character visual recently given by Alva Noë. Noë claims that not only do visual experiences represent various objects and features of the surrounding environment, they also tell us that other objects and features *are accessible* and could be represented in high detail in subsequent visual experiences.

The content of a perceptual experience is not given all at once the way the content of a picture is given in the picture all at once…I have a sense of the visual presence of the detailed scene before me, even though it is not the case that I see all that detail (or that I think I can see it all). As a matter of phenomenology, the detail is present not *as represented*, but *as accessible*. Experience has content as potentiality. In this sense, the detail is present perceptually in my experience *virtually*. (2004, p. 215, his emphasis)

This holds true even in the case of seeing a single object. Consider, for example, a visual experience of a single tomato.

Notice, however, that you do not, as a matter of fact, have the *whole* of the facing side of the tomato in consciousness all at once. The facing side has extent and shape and color, and you can’t embrace all this detail in consciousness all at once… Take a tomato out. Look at it. Yes, you have a sense that the facing side of the tomato is all there, all at once. But if you are careful you will admit that you don’t actually experience every part even of its visible surface all at once. Your eyes scan the surface, and you direct your attention to this or that. (p. 217, his emphasis)

These passages are compelling as descriptions of the phenomenal character of visual experience. But how, exactly, does visual experience present various details “as accessible”? What’s the *mechanism* by which these details become present as accessible within visual experience?Noë’s (2004) own account is that detail is present as accessible within visual experience in virtue of the subject having knowledge of various “sensorimotor contingencies”—relationships of interdependence between movement and sensory stimulation. If, for example, I know that looking right will bring the objects located there into my visual consciousness, those objects will be present as accessible within my visual experience.

I want to develop an alternative (but related) account of how the details of the scene before the eyes can be present as accessible within visual experience. My account centers on what William James would call “the fringe” of visual consciousness—low-detail conscious representations that tend to be in the periphery of our visual consciousness. (To be fair, it’s not clear whether James himself would interpret the fringe of consciousness in representational terms. But given my commitment to GOFR, you should not be surprised that I will.) These representations make additional high-detail information about an object “accessible” to the subject by providing a low-detail preview of various features of that object to which the subject can rapidly allocate high-detail visual representational resources. The main difference between this account and Noë’s is that although we both think that an object’s being present as accessible within visual experience has to do with the subject’s ability to shift high-detail representational resources (like fixation and attention) to it, I maintain that there must be a *conscious representation* that gives us a low-detail preview of that object. Noë, in contrast, thinks that we only need to have “sensorimotor knowledge” of how various changes in visual behavior would result in new sensation of the object (and/or its features). In short, Noë thinks an object can be present as accessible within the content of experience *even if there are no conscious low-detail representations of that object*.

 With this sketch of how the fringe of visual consciousness makes details “present as accessible” in hand, I can outline the responses I want to give to the Challenges of Scene-Immediacy. The First Challenge is that a visual experience of the wagon seems to provide a kind of “direct access” to the wagon not found in conscious thought. I will argue that this access is, at least in part, the result of various details of the wagon being present as accessible within our visual experience.[[16]](#endnote-16) Although conscious thoughts can also have a fringe that provides some access to additional wagon-information (information stored in memory), the access to additional wagon-information provided by the fringe of thought is nowhere as rich as the access to additional wagon-information provided by the fringe of visual experience.

The Second Challenge of Scene-Immediacy is that there is something about the visual experience of the wagon that indicates that the source of the wagon-information it carries *is the wagon itself* (as opposed to memory). In response to this challenge, I will argue that there are aspects of the process of using the fringe of visual experience to acquire additional wagon-information that (fallibly) indicates that one is accessing this information from the wagon itself and not from some other source, such as memory.

 I will now fill in the details of these responses, starting with a description of the fringe of visual experience.

5. The Fringe of Visual Experience

Any discussion of the fringe of consciousness should start with William James, who famously argued that conscious states are experienced as being elements *of a stream*.

Every definite image in the mind is steeped and dyed in the free water that flows around it. With it goes the sense of its relations, near and remote, the dying echo of whence it came to us, the dawning sense of whither it is to lead. (1890, p. 255)

According to James, this stream contains both substantive resting places—high-detail contents that “can be held before the mind for an indefinite time and contemplated without changing” (p. 243)—as well as a fringe. Unlike its substantive parts, the fringe of consciousness tends to be elusive to the act of introspection.

The attempt at introspective analysis in these cases is in fact like seizing a spinning top to catch its motion, or trying to turn up the gas quickly enough to see how the darkness looks. (p. 244)

Extrapolating from these ideas, let’s tentatively define “the fringe” as being constituted by elements of consciousness that are lower detail and difficultto introspect (in that attempts to do so often result in their replacement with higher detail elements). There are elements of visual experience that satisfy this (rough) definition of being fringe elements. These elements are not free riders in the stream of visual consciousness; they play an important role in managing some of the representational limitations of the visual system.

One of these limitations involves the physiology of the human eye. Due to the uneven distribution of cones across the retina, only an area of about 2 degrees (approximately the size of a thumbnail at arm’s length) at the center of the visual field is represented in high detail at any given moment. More specifically, this small area of the retina—the “fovea”—yields the best color perception of the retina.[[17]](#endnote-17) Motion sensitivity, in contrast, improves as you move toward the periphery of the visual field. Due to a higher concentration of rods, the ability to distinguish a dim light from a dark surround also improves as you move towards the periphery of the visual field. To compensate for these disparities, the fovea is aimed at objects within the environment using a sequence of swift movements or “saccades”, each lasting between 5 to 80msec, and respites or “fixations”, each lasting around 250msec.[[18]](#endnote-18)

Another limitation of the visual system involves visual attention. Visual attention is the second stage of a two-stage computational process: in the first stage, the low-level visual features of a scene (color, orientation, etc.) are registered by massively parallel processing. The second stage involves the selective deployment of a limited capacity to process the high-level visual features of that scene (faces, objects, etc.). Stimuli processed by this later, more limited stage of visual processing—i.e. stimuli that are attended—are reacted to more quickly, register at a lower threshold, register more accurately, are represented in higher detail, and are more likely to be remembered than the stimuli that are processed only by the first stage.

Now that we have examined some of the differences between pre-attentive and attentive processing, let’s turn to the so-called “spotlight” of attention. As we have seen, visual attention is selective capacity—it is said to be like a spotlight that illuminates only a portion of the visual field at any particular moment. Empirical examination has revealed that the spotlight of attention is adjustable. As visual attention expands to encompass a larger area of the surrounding space there are fewer computational resources allocated to each signal from that area.[[19]](#endnote-19) As a result, there is a trade-off between the size of the spotlight of attention and the response times to (and the resolution of) the objects illuminated by attention.[[20]](#endnote-20) In essence, visual attention behaves more like the zoom lens of a camera than like a spotlight.

There is also a debate amongst visual psychologists about whether visual attention is “space-based” or “object-based” phenomenon. Is attention directed at regions of spaces (where everything within the region is equally “illuminated” by the spotlight of attention)? Is it directed at objects (in which case the spotlight of attention could “illuminate” one object while not illuminating another despite those two objects residing in the same space)? Are there both forms of attention? In an effort to minimize controversy, I will act as though both forms of attention—space-based and object-based—exist.[[21]](#endnote-21)

 Just as in the case of the fovea, the visual system compensates for its limitations in attention by rapidly shifting/narrowing it from object to object (or region to region) in the environment—a covert shift of attention (a shift of attention that occurs without a shift of fixation) can occur in as quickly as 30 to 50 msec.[[22]](#endnote-22) It is during this process of shifting fixation and shifting/narrowing attention that the low-detail representations generated by that the visual system earn their keep. These representations provide a low-cost preview of various regions of/objects in the surrounding space that helps guide the deployment of our more limited high-level, high-detail visual resources in exploring that space: parafoveal representations provide a preview for the fovea, pre-attentive representations provide a preview for attention, and representations formed on lower detail, wider settings of the zoom lens of attention provide a preview for higher detail, narrower settings of the zoom lens of attention.

 The process of using low-level/low-detail representations to guide the deployment of our more limited, high-level/high-detail representational capacities (i.e. fixation and attention) is subject to both bottom-up, stimulus-driven control and top-down, user-driven control.[[23]](#endnote-23) The latter takes a variety of forms. We can consciously decide where to look. (Given the extreme limitations of the visual system, decisions about where to look can be far more fine-grained than, say, simply deciding to look in front of your face.) In addition, we can consciously decide *how* to look for a sought-after object—e.g. in virtue of its shape, its color, or some other low-level visual feature. We can make a conscious decision about the sampling strategy we’ll adopt—i.e. whether we will allow the fovea/visual attention to scan the environment in a relatively automatic fashion or whether we’ll control this scanning in an effort to make it more systematic.[[24]](#endnote-24)

 Some of the low-detail representations that guide the deployment of our high-detail representational resources are *conscious* states (in the sense that there is “something that it’s like” to have them) and, as such, make a contribution to the phenomenal character of our visual consciousness. In this sense, I agree with Crick and Koch (1990), who ask:

Can a spotlight of attention, moving over the visual field from one ‘salient’ location to the next, explain the perceptual richness of our environment? Would such a mechanism not lead to a sort of ‘tunnel vision’, in which the currently attended location appears in vivid detail with its associated perceptual attributes while everything else is invisible? We suggest, very tentatively, that this richness may be mediated by another form of awareness that is very transient, being associated with iconic memory and having a very large capacity at one time. (p. 288)

Under my account, the transient, large capacity form of awareness of which Crick and Koch speak is the result conscious parafoveal, conscious pre-attentive representations, and/or conscious representations formed on low-resolution settings of attention. This form of awareness is a form of *fringe* consciousness because 1) it represents the surrounding environment in considerably less detail than it would be represented if it were fixated/attended and 2) it is “elusive” in that attempts focus our introspective attention on an object represented by it typically leads to our shifting fixation/attention to that object which, in turn, results in a higher detail representation of that object. As a result of satisfying the second condition in this manner, these fringe elements make various objects and feature *present as accessible* within our visual experiences.

6. Revisiting the Challenges of Scene-Immediacy

In section 4, I outlined my responses to the Challenges of Scene-Immediacy. Now that we’ve taken a closer look at the representational mechanisms that give rise to the fringe of visual experience and that make additional information “present as accessible” within it, I can fill in the details of these responses.

*6.1 The First Challenge of Scene-Immediacy*

The First Challenge is that a visual experience of a yellow station wagon seems to involve a “direct access” to that wagon that is not found in conscious thought. The problem, recall, is that both the experience and the thought can directly represent the wagon. Given this, what sense can the defender of GOFR make of the claim that the experience gives us a “direct access” to the wagon not found in conscious thought?

We’ve seen that, in virtue of its fringe elements, a visual experience represents some features of the wagon in high-detail while representing other features of it *as accessible*. The fact that additional high-detail information about the wagon is “present as accessible” in this sense is not, however, the full story of how visual experience give us a kind of “direct access” to additional wagon-information not found in conscious thought. As we shall see, *conscious thought* can also provide a preview of additional high-detail wagon-information, information that is contained in memory.

To be clear, much of memory retrieval is *not* mediated by a conscious preview. Speaking from my own case, most of the time that I attempt to access information from unconscious memory there is *no* conscious preview of that information prior to my retrieving it. I simply form the intention of remembering the color of my friend’s station wagon and, God willing, I remember that is yellow. This is not to say that there is nothing the subject can do in an effort to improve the process of retrieving information from memory.[[25]](#endnote-25) The point is that the majority of cases of accessing information from memory do not involve conscious previews, via anything answering to our definition of “fringe elements”, of that information.

Bruce Mangan (2001, 2003, 2007) has recently argued, however, that in some cases there are elements in thought—elements that satisfy our rough definition of being “fringe elements”—that provide a preview of the information stored in unconscious memory. (Mangan argues that are other fringe elements in thought as well, elements that do *not* provide a preview of information held in unconscious memory. Since the latter fringe elements are not relevant to the current discussion, I will ignore them.) Mangan argues for the existence of this kind of fringe element by considering a case where it fails to work properly—the experience of having a word on the tip of the tongue.

When the right word doesn’t manifest, we feel what James calls the ‘wraith’ of the word: the sense of the word is as a *potential* sensory content but without the actual sensory content. Our frustration in such cases *presupposes* that normally mental grasping of this sort *will* yield the right word quickly and effortlessly. (2003, p. 748, his emphasis)

Return to the central example of this paper—the example of seeing/thinking about a yellow station wagon. In step with Mangan’s claim, I will grant that in thinking about the yellow station wagon there could be fringe elements that preview addition information about the station wagon (or station wagons in general); if you focused your attention on these fringe elements, this additional information would be quickly retrieved from memory. As a result of this concession, I cannot claim that the relevant difference between the experience and the thought is that the fringe of the visual experience provides a kind of “access” to additional high-detail wagon-information that is completely absent in the conscious thought. Instead, I will argue that visual experience provides *a significantly richer degree* of this kind of access than conscious thought; I will argue that the difference between experience and thought in this regard is one *of degree*, not *of kind*.

Let’s take a closer look at the relevant differences between visual experience and conscious thought. As noted earlier, in many cases of accessing memory there seem to be *no* conscious previews of the information that is stored there. This is in contrast to visual experience where, in virtue of the variety of fringe elements discussed in section 5, conscious previews of easily accessible high-detail information are ubiquitous.

In cases of thought where there *are* conscious previews of additional information held in memory, there is less variety in the mechanisms of access provided by these previews than there is in the case of visual experience. As we saw in section 5, the fringe of visual experience is the result of a variety of conscious low-detail representations, representations which support a variety of mechanisms for acquiring additional high-detail information: parafoveal representations support *shifts of fixation*, pre-attentive representations support *shifts of attention* (recall that these shifts could be either *space-based* and *object-based*), representations generated by lower-resolution settings of attention support *constrictions of the zoom lens of attention*, and so on. In contrast, in the case of conscious thought there seems to be only one mechanism for accessing additional information via a conscious preview—focus one’s attention upon the preview in question.

There are also important differences in the control that the subject can exert over the process of using elements in the fringes of visual experience and conscious thought to access additional high-detail information. In the case of visual experience, the subject can exert a fair amount of control over the process of using fringe elements to acquire additional high-detail information. To return to an earlier example, she can choose to acquire additional high-detail information about all the blue things or everything on the end of the table. She can also make a conscious decision about the sampling strategy she’ll adopt—she can decide whether she will allow the fovea/visual attention to scan the environment in a relatively automatic fashion or whether she’ll control this scanning in an effort to make it more systematic.

 Subjects have considerably less control over the process of using the conscious previews presented in thought to access additional information stored in memory. Part of the difference here stems from the minimal content of the conscious previews present in thought. In the case of vision, fringe elements typically contain information about both the object/feature they represent as well as the location of that object/features. This, in turn, gives the subject some options when using these previews to access additional information: she can use the information these fringe representations carry about objects/features or the information they carry about locations to guide subsequent shifts of fixation and attention.[[26]](#endnote-26) In the case of thought, however, there seems to be hardly anything to the content of the conscious previews of information stored in memory. These previews do not provide access to additional high-detail information stored in memory in virtue of representing the location of the source of that information. (This is not to deny that the information stored in memory might have *spatial content*. The point, rather, is that the conscious preview of this information does not represent the spatial location of the *source* of this information—i.e. the location of where it’s housed in memory.) And in many cases, they don’t even carry a low-detail preview of the actual information itself. In the tip of the tongue experience, for instance, Mangan maintains that the content of the conscious preview of the missing word comes from feelings of *relations* involving the upcoming high-detail content (i.e. its relations to other words that are being consciously entertained), and not from a low-detail preview of the high-detail content itself. Given the paucity of the contents of the conscious previews present in thought, the subject is not in a position to decide to explore her memory in virtue of consciously focusing upon a particular *kind* of fringe element; unlike the case of visual experience, she cannot consciously decide to use fringe elements that carry information about a particular location or a particular color in an effort to acquire the kind of high-detail information she is after.

Let’s pull all of these points together. Fringe elements that provide access to additional high-detail information are ubiquitous in visual experience while being relatively rare in conscious thought. When conscious thought does contain such fringe elements, there is considerably less variety in the mechanisms of access provided by these previews than there is in the case of the fringe elements of visual experience. Finally, the process of using the fringe elements within thought to access additional information is susceptible to less conscious control than the process of using the fringe elements within visual experience to access additional information. Taken together, I submit that these differences are a large part of what make the access to additional information provided by visual experience seem so much “richer” than the access to additional information provided by conscious thought.

*6.2 The Second Challenge of Scene-Immediacy*

The defender of GOFR needs an explanation of what it is about the phenomenal character of our visual experience of the wagon that suggests that the *source* of the wagon-information carried by this experience—i.e. the place that this information is coming from—*is the wagon itself* (as opposed to one’s memory). In answering this challenge, I will again lean upon the idea that the fringe of visual experience provides a relatively unique form of access to additional high-detail information about the wagon. More specifically, I will argue that aspects of the process of using fringe elements of visual experience to access this additional high-detail information suggest that the source that one is accessing this information from *is the wagon itself*.

Fringe elements within our visual experience provide a low-detail preview of various objects/features, a preview that allows us to quickly acquire additional high-detail information about those object/features. This, in turn, generates the impression that high-detail information about these objects/features is present as accessible within the phenomenal character of our visual experience. As we saw in section 5, many of these fringe elements provide access to additional information by representing *the spatial locations* of the objects/features they represent: parafoveal representations guide *spatial* shifts of fixation, pre-attentive representations guide *spatial* shifts of attention, and representations formed on lower-resolution settings of attention guide *spatial* narrowings of the zoom lens of attention.[[27]](#endnote-27) These locations are represented in *egocentric* terms, terms that facilitate the above-described forms of spatial action. The fact that much of our access, via the fringe of visual experience, to additional high-detail information involves forms of *spatial exploration/behavior* has important implications for the Second Challenge of Scene-Immediacy, for it means that the extended experience of using the fringe of visual experience to access additional high-detail information is an experience of accessing high-detail information *from an egocentrically-defined spatial array of sources of information*. Given this, it’s not crazy to conclude that the information sources we are exploring in this manner are *external objects*.

Of course, the fact that your access (via the fringe of visual experience) to additional wagon-information seems to be “spatial” does notguarantee that you are, in fact, accessing that information from an object (the wagon) located in a spatial array of objects. You could, for instance, be a brain in a vat; a neuroscientist could be monitoring the activity in your visual cortex and then giving you the appropriate visual experiences on the basis of the shifts of fixation and attention you think you are performing.[[28]](#endnote-28) That said, the fact that your access (via the fringe of visual experience) to this additional wagon-information seems spatial is a *prima facie* reason for thinking that you are accessing wagon-information from a spatial array of information sources. And this is enough, I submit, to make some progress on answering the Second Challenge of Scene-Immediacy.

 We can make additional progress by revisiting the topic of the control we have over the process of using the fringe of visual experience to access additional high-detail information. We can form a conscious intention to use fringe elements of visual experience to access additional information about certain kinds of things or things at a certain location—we can choose to acquire additional high-detail information about all the blue things or everything on the end of the table. We cannot, however, control the low-detail information that populates the fringe in the first place, nor can we control what additional high-detail information the fringe will yield when we use it shift fixation/attention in various ways. As a result of these facts, the extended experience of using the fringe of visual experience to generate additional high-detail representations of external objects is an experience of accessing high-detail information from (1) *a spatial array of information sources* that (2) *seem to be independent of us*.

Let’s pause to consider a possible complaint. The claim that visual experience carries information about the (egocentrically defined) spatial locations of the objects/features it represents is hardly groundbreaking. And the basic idea that our absence of control over our visual experiences indicates that these experiences are caused by mind-independent objects traces back as far back as Locke and Descartes. Given this, one might wonder if there is really anything new in the response just offered to the Second Challenge of Scene-Immediacy.[[29]](#endnote-29)

What’s new is that these old ideas are being put to work in a (relatively) new context: the context of discussing the active process of using fringe elements of visual experience to access additional high-detail information. Too often, philosophers act as though the generation of a high-detail visual experience is a completely passive process the details of which largely occur outside the light of introspective consciousness.[[30]](#endnote-30) In contrast to this trend, I maintain that the generation of high-detail visual experience is an *active* process that makes use of low-detail *conscious* representations, representations that make a significant (but underexplored) contribution to the overall character of our visual experiences. In virtue of the spatial content of (many of) these low-detail conscious representations and of the control we can exert over the process of using these representation to access additional high-detail information, the extended experience of using the fringe of visual experience to acquire additional high-detail information seems like an extended experience *of accessing additional high-detail information from a spatial array of mind-independent sources*. This is an important fact about our visual experiences that can help the defender of GOFR respond to the Second Challenge of Scene-Immediacy, a fact that is *missed* by the more traditional approaches to perception that act as though the generation of detailed visual experience is a passive process that occurs outside the light of introspective consciousness.

A final question about this account is whether the “spatiality” of visual experience extends to the experiences of the other senses.[[31]](#endnote-31) Although this topic is too large to receive full treatment here, I can make some preliminary comments about it. First, the other senses do generate *some* egocentric spatial content that aids in subsequent sensory exploration and generation of additional higher-detail information about external objects, even though that spatial content may be less substantial/expansive than it is in the visual case. Smell, for example, represents an odor as being *here* *now*.[[32]](#endnote-32) Second, it seems to me that *different* sensory experiences actually exhibit *different* “scene-immediacies”; in visual experience, the wagon is not “before my mind” in exactly the same way that it is when I touch it while my eyes are closed. Part of this difference in “scene-immediacy”, I suspect, is due to differences in the “spatiality” of each of these types of experience; part of the difference is due to the *extent* that each experience has a low-detail “fringe” that represents the spatial locations of potential targets for attention and other high-detail representational resources.

7. Objections

In this section, I further illustrate my GOFR approach to Scene-Immediacy by considering two objections to it.

*7.1 Tunnel vision*

If I look at an object through a long, dark tube that only allows me to see one normal-sized object at a time, I will still have “direct access” that object (in the sense germane to Scene-Immediacy) even though my visual experience does not contain a fringe. This shows that the fringe of visual experience is not necessary for Scene-Immediacy.

As it is stated above, this objection fails. The problem is that the case at the heart of it is *misdescribed*: the visual experience in question *does* have a fringe. It’s just that much of what that fringe represents—the dark inside of the tube—is uninteresting. Even more importantly, there continue to be fringe representations *of the object seen through the tube*. In looking at this object, you have an introspective sense that you can fixate different parts of it, shift attention from one part to another, shift attention from one of its properties (shape) to another (color), or even expand attention and represent the entire object in lower resolution and then narrow it and represent some part of it in higher resolution. These various fringe elements, in turn, continue to give you the kind of “direct access” to the object that is indicative of Scene-Immediacy.

A closer example of a *fringeless* visual experience can be found in what Martha Farah (1990) calls “dorsal simultanagnosia”—a visual deficit where attention appears to be restricted to just one object at a time and all unattended objects are not consciously experienced.[[33]](#endnote-33) As a result of this deficit, dorsal simultanagnosiacs cannot count objects (they cannot keep track of which objects have already been counted); locate objects relative to one another (they cannot keep track of multiple objects at the same time); point to an object (they cannot locate their finger relative to the object); navigate a space without running into objects (they cannot see what they are not attending and nothing draws their attention from one object to another); or recognize complex scenes (they can only see/recognize one object from a scene at a time and they cannot keep track of the objects they have already seen).

Although this case is closer to a fringeless experience than the opening case of looking at an object through a dark tube, there is still a serious question whether the visual experience of a dorsal simultanagnosiac is *completely fringeless* (which is what the objection requires). Although it seems clear that the *pre-attentive* representations of dorsal simultanagnosiacs are not conscious, it’s unclear whether the representations they have that are formed via lower-resolution setting of attention are also unconscious. There are also issues stemming from the possibility of a purely *object-based* form of visual attention—as described by Farah, is the dorsal simultanagnosiac limited to attending to one region of space, one object, or both?

To avoid these distracting questions, let’s consider an *idealized* form of dorsal simultanagnosia that may not actually exist—I’ll call it “super dorsal simultanagnosia”.[[34]](#endnote-34) Let’s stipulate that in this visual disorder, subjects lack *all types of fringe representation*; subjects with this deficit have their attention permanently stuck on its most narrow, high-resolution setting and they can only attend one “object” at a time, even if the object in question is super-imposed on other objects residing in the same space. All visual representations formed by processes *other* than this super constricted form of attention are *not conscious*.

When a super dorsal simultanagnosiac looks at a station wagon, is that object “available for direct access” in the way that it is when you see it? Of course not. In what sense can the station wagon be experienced as available for direct access for the super-dorsal simultanagnosiac if she has *no* introspective sense of there being different regions/parts of the car to which she can shift fixation and/or shift/narrow her attention and get more information? Her representation of this object, although conscious, is completely devoid of any introspective sense of there being more to see. And if it’s devoid of this, it’s no longer clear that her visual experience is affording her a kind of “direct access” not found in her conscious thoughts about that wagon. So once it is properly framed with a genuine example of a fringeless visual experience, the objection from tunnel vision loses its force.

*7.2 Visual imagery*

I can visually imagine a spatial array of objects in low detail. I can then attend to one of these objects and thereby acquiring additional high-detail information about it. But such an experience of extended visual imagination does not present external objects before the mind in the way that normal visual experience does. This shows that a form of fringe consciousness with roughly the same character as the fringe of visual consciousness is not sufficient for Scene-Immediacy.

The problem with this objection is that visual imagery *does* exhibit some of the Scene-Immediacy of visual experience. In visually imagining a station wagon, you selectively attend some aspects of the imagined wagon while ignoring others. The aspects you don’t attend, however, are still *present as accessible* within your imagination—as you focus your attention on its headlights, you are dimly aware of other parts of the imagined wagon that you could quickly attend and represent in higher detail. Like normal visual experience, then, the extended process of visually imagining something is an experience *of accessing high-detail information from a spatial array of information-sources*.

Visual imagery does not, however, exhibit exactly the same Scene-Immediacy of visual experience; there are several introspectible differences between visual experience and visual imagery that make a difference with regard to the Scene-Immediacy exhibited by each. Consider, for example, just some of the differences in *control*: unlike visual experience, in visual imagery you can control what low-detail information populates the fringe and you can also control what high-detail information will result from your shifts of attention; unlike visual experience, there are no stimulus-driven shifts in attention in visual imagery[[35]](#endnote-35); visual imagery also involves an extra layer of effort not present in the case of visual experience—a visual image must be actively refreshed or it quickly decays. These differences—differences in the kind of control that we can or cannot exert over extended visual experience and extended visual imagination—gives rise to a sense that the information sources present in visual imagery are *mind-dependent* in a way that those present in visual experience are not. We might summarize the point this way: part of the difference between the Scene-Immediacy of visual experience and the Scene-Immediacy of visual imagination is that the former seems to present *mind-independent objects* before the mind, while the latter does not.

8. Conclusion

 Visual experience and conscious thought can both directly represent the yellow station wagon. Despite this, the former seems to involve a Scene-Immediacy not found in the latter. Among other things, the visual experience seems to give us a “direct access” to the wagon not found in the thought. Similarly, the phenomenal character of the visual experience seems to indicate that the *source* of the wagon-information it carries is the wagon itself, and not one’s memory.

 In this paper, I have developed a GOFR response to these Challenges of Scene-Immediacy, a response that emphasized the (often ignored) fringe of visual experience. This fringe makes additional high-detail information about the wagon “present as accessible” within our visual experience; it provides us with a type of “access” to this information. Investigating the nature of this access—and comparing it to the kind of access that conscious thought (and its fringe elements) gives us to additional wagon-information stored in memory—gives the defender of GOFR important resources for tackling the Challenges of Scene-Immediacy.

1. Notes

 Early versions of some of the ideas in this paper were presented at the 2008 meeting of the Tennessee Philosophical Association and at the 2009 Pacific Division meeting of the American Philosophical Association. I want to thank my commentators—Brendan O’Sullivan and Philippe Chuard—for their helpful comments and suggestions. I also want to thank an anonymous referee from *Philosophical Psychology* for an extensive set of comments that greatly improved the paper. [↑](#endnote-ref-1)
2. Byrne (2001) calls this “the Common Worry” about Representationalism. Other expressions of the Common Worry can be found in Chalmers 1996, Robinson 1998, and Kreigel 2002. [↑](#endnote-ref-2)
3. For additional discussion of whether thought has an introspectible character, see Lycan 2008. [↑](#endnote-ref-3)
4. For more on this conception of “direct” vs. “indirect” perception/representation, see Jackson 1977. [↑](#endnote-ref-4)
5. According to Chalmers (2004), the defender of reductive Representationalism actually has three tasks: 1) give a theory of content in non-phenomenal terms, 2) show that the representational contents of experience can be specified independently of any phenomenal terms, and 3) explain the difference between phenomenal representation and non-phenomenal representation in non-phenomenal terms. [↑](#endnote-ref-5)
6. Other versions of GOFR can be found in Harman 1990 and Dretske 1995. [↑](#endnote-ref-6)
7. For more on transparency and GOFR, see Harman 1990, Tye 1995, 2000, and Schroer 2007. [↑](#endnote-ref-7)
8. See, for example, Siewert (1998), Horgan and Tienson (2002), Loar (2003), and Chalmers (2004, 2006). [↑](#endnote-ref-8)
9. Defenders of Naïve Realism tend to be “Disjunctivists” who maintain that there is no common element between veridical perception and hallucination. This is what allows Naïve Realists to deny that the external objects/features that are constituents of veridical experiences are also constituents of hallucinations. (Disjunctivists disagree about what side of this divide to put illusion on.) For more on these topics, see the papers in Haddock and Macpherson 2008 and Byrne and Logue 2009. [↑](#endnote-ref-9)
10. In fact, I have serious doubts about whether acquaintance can actually explain the phenomenon. In this respect, I follow Sturgeon 2000. [↑](#endnote-ref-10)
11. There are different types of memory that can store and, hence, be the source of wagon-information: for instance, wagon-information could be stored in *episodic* memory (a memory of particular wagon at a particular place and time) or in *non-episodic declarative* memory (a memory of more general facts involving wagons, facts that are not tied to a particular wagon or a particular time/place). This distinction in types of memory, however, is not important to the arguments of this paper. [↑](#endnote-ref-11)
12. A representation carries a “nonconceptual” content insofar as it carries a representational content that can be about something (e.g. a specific, fully determinate shade of red) even if the subject fails to possess a concept of that thing. For additional discussion of this notion, see Evans 1982, Peacocke 1992, and Tye 1995, 2006. [↑](#endnote-ref-12)
13. See, in particular, Dretske 1981. [↑](#endnote-ref-13)
14. See, for example, Pitcher 1971. [↑](#endnote-ref-14)
15. For additional discussion, see Tye 1995. [↑](#endnote-ref-15)
16. I say “at least in part” because I do not want to discount the other GOFR-friendly resources mentioned at the end of section 3. [↑](#endnote-ref-16)
17. Due to the absence of a particular type of cone at the very center of the fovea, color perception actually drops off at the very center of the visual field. [↑](#endnote-ref-17)
18. See Grimes 1996. [↑](#endnote-ref-18)
19. See Erickson and St. James 1986. [↑](#endnote-ref-19)
20. For discussion of this idea, see Erickson and Yeh 1985 and Erickson and St. James 1986. [↑](#endnote-ref-20)
21. For a preliminary discussion of this debate and further references, see Palmer 2002. [↑](#endnote-ref-21)
22. See Saarinen and Julesz 1991. [↑](#endnote-ref-22)
23. For models of how visual search is influenced by both of these factors, see Wolfe 1994 and Torralba et al. 2006. [↑](#endnote-ref-23)
24. For more on these forms of control, see Schroer 2008. [↑](#endnote-ref-24)
25. For a cursory discussion of issues involving memory retrieval and additional references, see Roediger and Goff 1998. [↑](#endnote-ref-25)
26. Shifts of an object-based form of attention, of course, will not be completely driven by information about the locations of objects. For in using such a form of attention, the subject can attend to one object while ignoring another *that resides in the same space.* [↑](#endnote-ref-26)
27. “Access” involving an object-based form of attention, in contrast, would not be entirely spatial. [↑](#endnote-ref-27)
28. For the record, Dennett (1991) argues that it would be *impossible* for a scientist to induce the appropriate visual experiences in response to the apparent shifts of fixation/attention made by a brain in a vat—the number of possible shifts (and thus the number of possible subsequent experiences) is just too large for a scientist to manage. [↑](#endnote-ref-28)
29. I am grateful for an anonymous referee for pressing this concern. [↑](#endnote-ref-29)
30. This trend in thinking about visual experience is connected to what Churchland et al. (1994) describe as “The Pure Vision” conception of vision. [↑](#endnote-ref-30)
31. I am grateful to an anonymous referee for pressing this point. [↑](#endnote-ref-31)
32. This example comes from an anonymous referee. [↑](#endnote-ref-32)
33. This is not to say that there is no processing of unattended stimuli by a dorsal simultanagnosiac. It is only to say that *if* there is any processing of these stimuli, it is conducted outside the sphere of consciousness. [↑](#endnote-ref-33)
34. Cf. Block’s (1992) discussion of “super blindsight”. [↑](#endnote-ref-34)
35. For discussion of this point, see Kosslyn, 1994, p. 102-3.

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