ORIGINAL RESEARCH



'Lessons from Blur'

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Abstract

This paper is a contribution to the philosophical debate on visual blur from a relationalist perspective. At the same time, it offers a methodological reflection on the adequacy of explanations of phenomenal similarities and differences among perceptual experiences. The debate on seeing blurrily has been shaped by two implicit assumptions concerning our explanations of differences and similarities between experiences of seeing blurrily and other experiences. I call those assumptions into question, and argue that we do not need to provide a unified explanation of the character of blurry experiences for our account to be adequate. The diversity of blurry experiences supports a different, pluralist approach to explanations of how things appear to subjects.

Keywords Perception · Blurry vision · Phenomenal character · Relationalism

1 Introduction

Most of us are familiar with blurry vision. Perhaps you have an eyesight deficiency and when you take your glasses off things can come to look blurry to you. Maybe you have once felt dizzy after standing up too quickly and everything around you looked a little blurry for a moment. You may have had a blurry experience in the absence of eyesight problems and temporary impairments to your vision: looking at a laptop screen close to your face and 'un-focusing' your eyes, or focusing your attention onto a spot further away from you. Philosophers have become very interested in these everyday phenomena, which are taken to challenge some general claims about perceptual experience.

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To begin with, visual blur challenges the phenomenological claim that in experience we only seem to be aware of external objects and their properties (see e.g. Smith 2008). When a short-sighted subject takes their glasses off, it does not seem to them that the objects around them suddenly become blurred or acquire fuzzy boundaries like those of a smudgy water-colour painting; the blurriness rather seems to be a feature of their experience or the way in which they see. But visual blur is also taken to have consequences for the metaphysics of perceptual experience: blurry experiences seem to show that the way things look to one in having the experience or, in other words, the phenomenology of the experience, cannot be fully determined, and thus explained, by what one experiences.

Consider the following case.¹ In the ophthalmologist's studio, an eye chart with letters of different sizes is being used to test the eyesight of two subjects, Norma and Shorty. Norma is a normally-sighted subject, who passes the eyesight test with ease; Shorty is a short-sighted subject, who struggles to report the smaller letters on the eye chart and will be prescribed corrective lenses. Some letters on the eye chart look different to Norma and Shorty. The 'T' in the third row, for instance, looks blurry to Shorty, but not to Norma. This may be confirmed by the subjects' reports: looking at the T, Shorty might observe 'Oh, that T looks blurry!'; initially puzzled, Norma would reply 'It doesn't look blurry to me'.

If one is a representationalist, one faces the worry that the phenomenal or qualitative character of blurry experiences does not seem to supervene on their representational content, as Norma's and Shorty's experiences differ in character even though they seem to represent the same objects and visible properties.² The eye chart example also presents a challenge to relationalist or naïve realist views of perceptual experience, on which genuine perceptual experiences are fundamentally relations of awareness to mind-independent aspects of the environment (see e.g. Pace 2007; Smith 2008; Allen 2013; Cassam 2014; French 2014, 2016). As French puts it, visual blur is 'an aspect of the subjective character of one's experience which seems not to be contributed by aspects of the world' (2014, p. 398).

To address these challenges, both representationalist and relationalist philosophers have developed a variety of accounts of seeing blurrily, either arguing that, after all, there is a visible property that the subject experiences or a kind of representational content which explains the blurriness of their experience, or appealing to a qualitative property or mode of the experience itself. In the first camp are the view that seeing blurrily is an illusion as of something's being fuzzy (Crane, 2001; Dretske, 2003; Gow, 2019), views on which seeing blurrily involves perceiving or representing less determinate location or shape properties (French, 2016; Nanay, 2018) or indeterminately representing those properties (Tye, 2003), the view on which seeing blurrily is misrepresenting things as having a boundary simultaneously located at different points (Allen, 2013), and the view that blurry experiences have a distinctive kind of interoceptive content (Skrzypulec, 2021). In the second camp, we have views on which, possibly in addition to having an informationally depleted or indeterminate

² See e.g. Schroer (2002), Tye (2003), Bourget (2015) for discussion.



¹ This example is described by Cassam (Campbell & Cassam 2014, p. 141) and discussed by French (2016).

content, blurry experiences are characterised by a quale of blurriness or a blurry property of the subject's visual field (Boghossian & Velleman, 1989; Pace, 2007), by a blurry mode of experiencing (Crane, 2006), by a subjective or mental quality of blur affecting how things are presented (French, 2014) or by a distinctive mode correlated with imprecise visual processing (Vance, 2021).

This paper is a contribution to the debate from a relationalist or naïve realist perspective. I will be working within a framework on which genuine perceptual experiences are fundamentally relations of awareness to mind-independent aspects of the environment, where these aspects are constituents of the experience and contribute to determining its qualitative or phenomenal character (see e.g. Martin 1998; Brewer 2011; French 2014; French & Phillips 2020). My main aim, however, is to identify and call into question two explanatory assumptions, often implicit within the current debate on blur, concerning our explanations of differences and similarities in the phenomenal character of perceptual experiences. I argue that the phenomenon of visual blur does not support these two assumptions, and so failure to comply with those assumptions does not render a response to the challenge from visual blur inadequate. In particular, it does not render inadequate a certain 'pluralist' approach to addressing this challenge that a relationalist could easily adopt.

I begin by proposing a simple relationalist answer to the eye chart challenge which appeals to the role of the perceivers' visual sensitivity (Sect. 2). This answer may seem unsatisfactory to many participants in the debate on visual blur, both relationalists and not. The paper focuses on spelling out the reasons for this dissatisfaction, and why these reasons should be questioned. I identify two assumptions that are implicitly or explicitly made, either alone or together, within the debate: we should explain the phenomenal aspect that distinguishes blurry experiences from non-blurry ones in terms of a distinctive property of blurry experiences—whether a distinctive content, quality or mode (Sect. 3); and we should explain phenomenal similarities between cases of seeing blurrily and other experiences (e.g. cases of seeing something fuzzy clearly) in terms of a similar component or structure (Sect. 4). The variety of experiences where things can look blurry to us supports questioning these assumptions and adopting a more pluralist approach, on which there is no distinctive property of blurry experiences that accounts for their blurriness, but different explanations of the phenomenal differences and similarities between blurry experiences and other experiences are given in different cases. The assumptions I challenge exemplify more general assumptions about what proper philosophical explanations of phenomenal differences and similarities across perceptual experiences should look like. The phenomenon of visual blur gives us an opportunity for a methodological reflection on how we asses these explanations.

2 The Difference Question: A Simple Answer

Let us focus on the scenario above involving Norma, Shorty, and an eye chart. A question that the scenario raises is the Difference question:



Difference: what explains the difference between the phenomenology of blurry experience E1 and that of non-blurry experience E2?

In that scenario, Difference asks what explains the phenomenal difference between Norma's experience and Shorty's—in other words, the difference in how things look to Norma and Shorty—where Shorty's experience, but not Norma's, is a case of seeing blurrily. The Difference question arises because the objects and properties Shorty and Norma are presented with—the eye chart and its visible features—are the same. Relationalists can in general appeal to various factors that determine which among the objects and properties in one's environment one experiences on an occasion, such as one's distance and orientation with respect to the objects, the illumination, the presence of occluders or intervening media (e.g. Campbell 2009; Brewer 2011; French & Phillips 2020). In the eye chart scenario, however, all these factors are kept fixed.

A simple answer to the Difference question, then, appeals to differences between Norma and Shorty themselves. Something we know is that Norma and Shorty differ in their visual acuity—that is part of what it means for them to be normally-sighted and short-sighted, respectively. Visual acuity is understood as a measure of a subject's ability to discern or recognise visual detail and fine distinctions in their environment (e.g. Levenson-Kozarsky 1990). Part of what one's visual acuity reflects is one's visual sensitivity: Norma and Shorty differ in their visual sensitivity to certain visible properties, such as shapes and spatial locations. Shorty's sensitivity being lower than Norma's explains the difference between their two experiences. Shorty's experience has the character it does in virtue of being a relation of seeing with sensitivity S a certain scene in certain conditions. Seeing the scene in this way, in those conditions, results, in particular, in the third-row T looking different to Shorty than it does to Norma.

This explanation is simple and does not make any novel commitments that we did not already have independently of explaining blurry vision. Visual sensitivity can be understood as a property of subjects, determined by features of their visual system. We can characterise this property in terms of one's perceptual discrimination capacities: someone who has higher sensitivity is someone who can make more fine-grained and perhaps faster discriminations, with more kinds of stimuli, in a wider variety of conditions. Plausibly, visual sensitivity is a property that we appeal to in order to explain visual perception in general. In particular, it is an explanatory resource available to relationalists or naïve realists: since the perceiving subject is one of the relata of the perceptual relation, properties of the subject can contribute to determining the character of the experience (e.g. Logue 2012, p. 180; French 2016, pp. 394–396). More generally, it is plausible that perception is always partial: the perceptual condi-

⁴ Which visible properties are at stake exactly is presumably something for ophthalmologists and vision scientists to establish.



³ Visual acuity only partly reflects one's visual sensitivity. On the one hand, depending on how acuity is tested, one's capacities for recognising and reporting what one is visually discriminating may affect the acuity assessment. On the other hand, acuity is not a measure of overall visual function; it specifically concerns how well small patterns and fine-grained details are recognised in the centre of the visual field. I will talk of visual sensitivity to simplify the discussion.

tions as well as some of our properties, such as our sensitivity, constrain our perceptual experience on an occasion (Kalderon, 2011b; French, 2016).

Moreover, the simple explanation respects the widely-held intuition that when we see blurrily, things do not normally seem to be blurry, or fuzzy, or more generally other than they are. That Shorty is classified as short-sighted tells us that his sensitivity to shape is not only lower than Norma's, but lower than the norm: with respect to what we consider to be 'normal vision', his sensitivity is reduced. But having such a reduced sensitivity does not necessarily result in illusory experiences. In the eye chart scenario, while the T looks blurry to Shorty, nothing suggests that the T looks to him to be a different shape than it really is. Compatibly with the T in the third row looking blurry, we could suppose that Shorty reliably recognises that blurry-looking letter as a T, that he easily discriminates it from the other letters in the same row and that he would notice if the order of the letters in that row were to change.

In fact, it is not clear that there is a difference in the objects and properties Norma and Shorty perceive in the eye chart scenario. Sometimes, having a reduced visual sensitivity will result in a failure to perceive what normal subjects perceive; in our example, some of the letters in the fifth or sixth row of the eye chart might look so blurry to Shorty that he cannot reliably tell them apart, and that could potentially be a reason to think that Shorty does not count as perceiving their shape. However, this is not necessary: there may be differences in how blurry things look to different perceivers, or to the same perceiver in different conditions, that are not matched by differences in what is perceived in each case. For instance, it is plausible that both Norma and Shorty perceive the eye chart, the letters on it, and many of their visible properties, including the shape of the T; if the T started to look slightly blurrier to Shorty, this would not per se mean that he no longer perceives its shape. In general, having a certain visual sensitivity, and thus having a certain partial perspective on a scene, can make a difference to what one perceives—compared to a different scene, or different viewing conditions, or to a different perceiving subject—but it can also just make a difference to the way in which one perceives what one does.⁶

Relationalists in the literature agree that it is both phenomenologically plausible and compatible with the relationalist framework to hold that the visual blur characteristic of an experience like Shorty's is a matter of the way or manner in which the subject perceives what they do (e.g. French 2014, 2016; Brewer 2017; Anaya & Clarke 2017). On my proposed account of the eye chart scenario, Shorty's sensitivity affects the way in which he sees the eye chart, so that Shorty's perceptual relation to the eye chart is different from Norma's perceptual relation to it. As Brewer observed, in seeing blurrily one's acquaintance is degraded (2017, pp. 224–225). I thus follow French

⁷ While I agree with characterising blur as a matter of the way in which one perceives, I do not endorse specific relationalist accounts of this way of perceiving that have been proposed or considered in the literature. These include accounts appealing to a subjective or mental quality of blur (considered by French 2014) or to a distinctive blurry mode of seeing (considered by Anaya & Clarke 2017 and by Allen 2013 on behalf of relationalists), as well as accounts which ultimately appeal to the sort of properties we see in seeing blurrily. Section 3 discusses why I do not endorse these accounts.



⁵ On this see the discussion in Sect. 3 below.

⁶ This is one reason against pursuing a strategy on which each difference in blurriness corresponds to a difference in perceived properties—for a relationalist version of this strategy, see French (2016).

& Phillips (2020) in defending a version of relationalism on which some aspects of the phenomenal character of an experience are determined by the way in which one perceives what one does, and in particular by the kind of perceptual relation one bears to a scene. As they argue, this is fully compatible with the central relationalist thesis that that character is partly determined by the mind-independent things one perceives.

We thus have an answer to the Difference question: the difference-maker is the subjects' visual sensitivity to shape and location properties, which affects their perceptual relation to the same scene. A difference in visual sensitivity explains the phenomenal difference between Shorty's experience—a case of seeing blurrily—and Norma's. Since this simple answer is compatible with a relationalist approach, and does not appeal to any resources other than those already needed to account for perceptual experiences more generally, it would seem that seeing blurrily does not pose a special challenge to relationalist views.

Many, I suspect, would find this simple answer unsatisfactory. Consider what French observes after mentioning that there is a difference in visual acuity between the two perceivers in the eye chart scenario:

'It is not clear how far this gets us. We want an account of *how* such facts about [the subjects] can make a difference to the character of [their] experience (...) We grant that [one subject] has low visual acuity, (...) and this is part of what causes [them] to see in a blurry way. But the question is, what does [their] seeing blurrily, and the distinctive character of such experience, consist in?' (2016, p. 395).

One concern French voices is that while appealing to Shorty's visual acuity or sensitivity gives us part of a causal explanation of how he ends up seeing blurrily, we still need an explanation of how his visual sensitivity contributes to the phenomenal or qualitative character of his experience. My proposed account of the scenario addresses this concern. Within a relationalist framework, Shorty, qua perceiver related to the scene before him, is a constituent of the perceptual experience. Shorty's sensitivity, then, is not just part of a causal story, but makes a difference to Shorty's perceptual relation to the scene, and so contributes to determining how he sees what he does.

What, then, is felt to be missing from the simple answer I outlined above? One might find in French's quote a different concern: that appealing to a perceiver's limited visual sensitivity does not tell us what seeing blurrily consists in. The thought would be, then, that an adequate philosophical account of seeing blurrily would need to tell us that. As we will see, there is reason to think that many participants in the debate on blur—most of whom are not relationalists—would share this concern. In what follows, I identify two assumptions that various philosophers make about explanations of the character of blurry experiences and which allow us to spell out what this demand for an account of what seeing blurrily consists in exactly amounts to.



3 Distinctiveness

The first assumption concerns the phenomenology of seeing blurrily and how we should account for it:

Distinctiveness: the blurry character of experiences where one sees blurrily is explained by a certain property that distinctively characterises these experiences.

Some experiences have a distinctive 'blurry' quality or character to their phenomenology— for instance, the experience that a short-sighted subject has when they take their glasses off. The main claim Distinctiveness makes concerns how we should account for this distinctive blurry aspect of the phenomenology. Namely, there is a property of the experience that covaries with, and explains, this blurry aspect of the phenomenology. Whenever there is a difference in blurriness—between a blurry and a non-blurry experience, but also between experiences characterised by different degrees of blur—there is a difference in that property.

Many accounts of seeing blurrily in the literature explicitly or implicitly subscribe to Distinctiveness. This assumption is endorsed by philosophers who take blurriness to be a qualitative property or a mode of the experience. For instance, Smith starts by observing that 'when an object looks blurred, we typically have no problem detecting this blurriness' (2008, p. 200) and goes on to claim that 'blurriness is (...) a feature of experience of which we are usually aware when it is there' (p. 201). Crane points out that 'blurriness does seem to be a property of some kind, which does seem to be instantiated somewhere', and holds that the most plausible option is for it to be instantiated by one's experience (Crane, 2006, p. 131). Much like experiences can be in the visual rather than the auditory modality, he proposes, there is a blurry mode of seeing that distinguishes blurry visual experiences from 'clear' visual experiences, and more fine-grained blurry modes can account for different degrees of phenomenal blurriness. Within a relationalist framework, French (2014) considers a view that respects Distinctiveness on which blur is a subjective or mental property that modifies the character of the experience.

However, Distinctiveness is also accepted by philosophers who explain blurriness by appealing to what subjects experience, or the content of their experience. To begin with, Distinctiveness is respected by views on which when we see blurrily, we experience certain intrinsic properties of our visual field: the visual field is itself blurry, and this accounts for the blurry phenomenology (Boghossian & Velleman, 1989; Pace, 2007). Another example are proposals on which seeing blurrily is a matter of experiencing or representing relatively indeterminate shape or boundary location properties: having this kind of content is characteristic of blurry experiences; and the more indeterminate the shape or boundary location experienced, the blurrier the phe-

⁸ A further example of a view that respects Distinctiveness is Vance's (2021) version of the view on which seeing blurrily is characterised by a distinctive mode. Vance's approach is even more ambitious than the above because it aims at explaining a phenomenal aspect ('perceptual clarity') that blurry experiences supposedly share with a much wider range of experiences including for instance seeing in dim light (2021, pp. 5, 9).



nomenology of the experience (Nanay, 2018; French, 2016). In order to explain the distinctive phenomenology of blurriness in accordance with Distinctiveness, some accounts propose that blurry experiences have more surprising contents. Allen highlights that blurry experiences have a positive, unique phenomenal feature: when one sees blurrily, objects appear to have 'haloes' around their edges (2013, p. 267). So as to account for this feature, Allen holds, the contents of these experiences need to be construed as inconsistent: blurry experiences 'over-represent' an object's boundary as simultaneously located at multiple points. Going in a different direction, Skrzypulec takes seeing blurrily to exhibit a 'specific phenomenal quality' which appears when one's vision becomes blurry; in accordance with Distinctiveness, this quality 'corresponds to' and is 'determined by' a distinctive component of the content of the experience (2021, pp. 3282, 3287). We should acknowledge, Skrzypulec argues, that visual experiences also have an 'interoceptive' component to their content, representing the visual system itself—in particular, representing visual acuity in relation to eye focus (2021, p. 3276).

That Distinctiveness is ingrained in the debate on visual blur can be appreciated when considering common objections to some views in the literature. Many criticise the view—defended by Crane (2001), Dretske (2003) and Gow (2019)—that seeing an object blurrily consists in illusorily experiencing it as having fuzzy boundaries, like those of a cloud or watercolour patch. The reason, it is agreed, is that the illusion view does not account for the distinctive phenomenology of seeing blurrily. When seeing a fuzzy watercolour, we also have an experience of fuzzy boundaries—in this case, a genuine, not illusory, experience. But, it is argued, this experience is not blurry. Evidence for there being a phenomenal difference across seeing blurrily and seeing fuzzy things is that blurry experiences do not dispose us to judge that what we see has fuzzy boundaries—or to judge anything about the boundaries we see more generally—instead disposing us to pay attention to how we see things. 11 One could argue—as proponents of the illusion view do—that it is far from obvious that there is a distinctive phenomenology of seeing blurrily, because experiences of fuzzy things can also have that phenomenology. Things can even look just the same, or at least indiscriminable, whether one is seeing blurrily or seeing something fuzzy (e.g. Crane 2001, pp. 143–144; Gow 2019, pp. 417–418). When seeing through a small aperture and without contextual cues, for instance, one may not be able to tell, just by looking, whether one is seeing a blurred picture or fuzzy watercolour patch as opposed to seeing blurrily. 12 Either way, a common criticism of this view is motivated by Distinctiveness insofar as if seeing blurrily has a distinctive phenomenology, then there

¹² For cases of this kind, see e.g. Schroer (2002, pp. 299–300); Allen (2013, pp. 264–265); Gow (2019, p. 417).



⁹ See also Bourget (2015). Bourget argues more generally for an account on which for each variation in degree of blurriness of the experience, there is a variation in the properties one experiences, even if it is difficult to establish what this variation amounts to.

¹⁰ Some of these views have been argued to have controversial commitments—for discussion see e.g. Pace (2007), Allen (2013). Here I focus on defending a certain relationalist proposal, rather than on the disadvantages of other views.

¹¹ See Pace (2007, pp. 336–340); Smith (2008, pp. 203–204), Allen (2013, p. 265), French (2014, pp. 403–404); Skrzypulec (2021, pp. 3281–3282).

cannot be experiences that are not cases of seeing blurrily and have the property that explains that distinctive phenomenology.

Similarly, many authors argue that blurry vision cannot be satisfactorily characterised in terms of the relative indeterminacy of the location and shape properties one perceives, because perceiving relatively indeterminate location and shape properties (or having indeterminate spatial content) is not unique to blurry vision. For instance, seeing in the periphery of the visual field also involves a loss of visual detail, but, it is argued, it does not involve the phenomenology of blurriness. These common objections are informed by the Distinctiveness assumption: an account of visual blur is threatened by cases where the proposed blurriness-explaining feature is present but the distinctive blurry character is not.

Now, the simple answer to the Difference question put forward in Sect. 2 does not respect Distinctiveness. This is because it does not identify a property that distinctively characterises blurry experiences. Beyond the shortsightedness example, there is a range of cases where things look blurry to one and one's sensitivity is lower than normal, including not only other eyesight conditions (e.g. astigmatism) but also cases where one's normal visual sensitivity is temporarily impaired, such as when one is dizzy, tipsy or tired, or one receives a blow to the head. For instance, a blow to one's head momentarily impairs one's standing visual sensitivity, and this can explain the phenomenal difference between seeing an eye chart before and immediately after the blow. In these cases, seeing with a visual sensitivity that is limited or impaired (with respect to some reference) is associated with visual blur. But seeing with a lower-than-normal or impaired visual sensitivity does not always co-vary with a blurry phenomenology.

On the one hand, having comparatively lower visual sensitivity to shape—for instance having Shorty's visual sensitivity—does not per se result in blurry experiences. If the eye chart were very close or the size of the letters much larger, the T in the third row may no longer look blurry to Shorty. On the other hand, things can come to look blurry to one even if one's visual sensitivity is normal and stays constant. For instance, if the eye chart were placed further away from Norma, our normally-sighted subject, the letters could look blurrier to her than in the original scenario even though her sensitivity would stay the same. Similarly, if the letters on the eye chart became smaller, it would be the change in the objects Norma is presented with that accounts for the fact that some letters come to look blurry to her. Perhaps they eye chart will not look to Norma just the same way it looks to Shorty but it seems plausible that it could look blurry.

So while in the eye chart scenario we can say that Shorty, in seeing with sensitivity S, sees in a blurry way, seeing with that sensitivity cannot be identified with seeing in a blurry way. In the particular case we started with, Shorty's visual sensitivity explains the difference in how things look to him and to Norma, but in other cases where we compare two experiences that differ in blurriness, the difference-maker is something else entirely: sometimes what is perceived changes (e.g. if the size of the letters changes), sometimes the perceptual conditions (e.g. if one's distance from the perceived objects changes).

¹³ See Smith (2008, p. 207); Pace (2007, pp. 334–335); Allen (2013, pp. 266–267).



The simple explanation I proposed for the eye chart scenario thus contrasts with accounts that respect Distinctiveness. On these accounts, there is a distinctive property of the experience that 'matches' and explains the phenomenal blur, whether a certain kind of content or perceived properties (e.g. the experience represents indeterminate boundary locations, over-represents such locations, represents a property of the visual system or the blurriness of one's visual field; or the experience is a perception of indeterminate shape properties), a subjective quality of blurriness, or a certain mode of perceiving (a blurry mode of seeing). Moreover, each difference in the degree of blurriness of one's experience can be explained by a difference in one of those properties. The answer to the Difference question will appeal to the same kind of property in all cases where we compare a blurry and a non-blurry experience. In other words, the answer to the Difference question, on these accounts, also aims to be the answer to the question of what blurriness consists in, or of what makes an experience a case of seeing blurrily.

Unless we assume Distinctiveness, however, it is not clear why an explanation that does not conform to this structure would be inadequate. In fact, the phenomenon of seeing blurrily does not motivate a unified answer to the Difference question in all cases where we compare a blurry and a non-blurry experience. For example, seeing something very small or very far with normal visual sensitivity can result in seeing blurrily—if Shorty's experience in the original scenario is one of seeing blurrily, it would be arbitrary to hold that Norma's experience when the letters on the eye chart are smaller and look blurry to her is not. The answer to the question of what explains the difference between the phenomenal or qualitative character of Norma's blurry experience of the smaller letters and some other experience depends on which experiences we are comparing. Compared to Norma's initial non-blurry experience, for instance, her experience now has a different object, i.e., an eye chart with different visible properties. That is why there is a difference in how things look to Norma. Compared to Norma's experience of the same small-lettered eye chart up close—an experience where things do not look blurry—what differs is Norma's spatial relation to the eye chart, which will affect her perspective on the scene.¹⁴

The range of blurry experiences, and so the range of difference-makers, may be even wider. As many in the debate on blur acknowledge, there are experiences which are not cases of seeing blurrily but such that things might look to one just as they do when one sees blurrily. For example, consider seeing a blurred print of an eye chart with normal visual sensitivity, as Norma would. Things may look, in having this experience, just as they do when seeing a sharp print of the same eye chart with lower or impaired visual sensitivity. What explains the difference in phenomenology between each of these two experiences and a third, non-blurry experience where the subject sees a sharp print of the eye chart with normal visual sensitivity? A different factor in each case: first the difference in the subject's sensitivity, then the difference in the visible properties of the object. When we consider a range of blurry experiences, we can find a difference-maker and answer the Difference question in each

¹⁴ There is a general question of whether one's spatial position with respect to a scene makes a difference to one's perceptual relation to the world, like one's sensitivity plausibly does, or rather makes a difference to what objects, parts, and properties one perceives. I remain neutral on this issue here.



case. But no difference-maker tells us what in general the difference between blurry and non-blurry experiences is, and so what blurriness is or consists in, because the difference-maker differs across cases.

Moreover, the difference-maker we cite in each comparison case is not what on its own accounts for the visual blur of each blurry experience, or what on its own makes it so that the experience is blurry, and blurry to that degree. We encountered examples where things do not look blurry to someone with lower visual sensitivity, like Shorty, and examples where things look blurry to someone with normal visual sensitivity, like Norma. Varying the distance between perceiver and eye chart or the size of the printed letters can make for a change in whether things look blurry to one, or in how blurry they look. What these examples show is that a variety of factors contributes to determining whether things look blurry to one on an occasion and how blurry they look. We can only predict whether an experience would be one where things look blurry when we consider all those factors, including the subject's standing visual sensitivity to shape, any impairments to the exercise of this sensitivity, what kind of visible objects are present and what visible properties they have, and where the subject is located with respect to those objects. It is not clear what further property, component, or factor may be present that could, on its own, match and account for the blurry aspect of the phenomenology. 15 Given this, the project of identifying a property of experience—whether a kind of content, a mode of perceiving, or a qualitative property—that on its own accounts for the blurry phenomenology in all cases, as per Distinctiveness, seems unmotivated.

These observations give us reasons to question Distinctiveness and adopt a different approach: a humble explanatory pluralism. On this approach, there is no general answer to the question of what seeing blurrily, or the phenomenology of visual blur, consists in. On the one hand, our answer to the Difference question depends on which particular experiences we are comparing, and so will differ across cases. On the other hand, we allow that multiple factors and components of an experience jointly contribute to determining its character, and so to explaining why things look blurry to the subject of a certain blurry experience. For each blurry experience we can explain what makes it the case that, in looking as they do, things look blurry to one. But this explanation will be pluralist in that it will differ across cases and will not appeal to a distinctive property of that experience that on its own accounts for the blur. It is not obvious whether there is a unique phenomenal blurry quality or aspect shared by all and only experiences of seeing blurrily that we are required to account for, as opposed to a mere similarity we can notice. But even if there was one such shared aspect, our explanatory approach can be pluralist and yet perfectly adequate. This approach allows us to easily address the challenge of accounting for the phenomenon of visual blur compatibly with relationalism about perceptual experience.

¹⁵ When comparing seeing blurred or fuzzy things with seeing blurrily, one could insist that there is a distinctive feature or aspect of the experience in each case that alone accounts for the blurriness: the blurred-ness or fuzziness of the visible objects in one case, and another property in the case of seeing blurrily—any of those proposed by existing accounts, say. However, as the examples considered show, the issue of multiple factors arises already among examples of seeing blurrily.



4 Similarities

There is a second assumption that informs discussions of seeing blurrily, and that could motivate dissatisfaction with the simple account of the eye chart example and with the overall pluralist approach. This assumption has to do with other experiences that are somewhat phenomenally similar to seeing blurrily. Most often, philosophers focus on the experience of non-blurrily seeing something with fuzzy boundaries.

Similarities: the phenomenal similarity between seeing blurrily and other experiences is explained by a commonality or similarity in the properties of these experiences.

While authors disagree over the extent of these similarities, it is generally accepted that at least some cases of seeing blurrily are phenomenally similar to some other kinds of experience. For instance, the way things look to one when one sees blurrily can resemble the way they look to one when one sees a fuzzy object (a cloud, a bush, a fuzzy duckling, or a patch of paint) or blurred object (a photograph or a print) clearly (e.g. Schroer 2002; Tye 2003; Allen 2013; Gow 2019). Evidence for these similarities is the fact that, as we have already seen, there may occasionally even be indiscriminability. As Allen observes, we sometimes mistake one kind of experience for the other: one may put on one's glasses to make reading a text easier without realising that the text is blurred, or one may adjust the focus on a data projector without realising that one's eyesight is the reason why things look blurry (2013, pp. 264–265).

The key claim in Similarities is, again, one about explanations: phenomenal similarities among experiences must be explained by common properties or similar structures. Rather than being explicitly stated, this assumption is relied upon in some philosophers' criticism of opponent views. Both Pace and Allen, for instance, argue that views on which visual blur is explained in terms of a blurry mode of seeing fail to explain the phenomenal similarities between seeing blurrily and seeing something fuzzy or blurred, and our resulting occasional difficulties in telling the two kinds of experience apart (Pace 2007, pp. 341–342; Allen 2013, pp. 262–263). On the view on which seeing blurrily is a mode of seeing, Allen observes, those similarities would have to be accepted as 'brute' (p. 263).

As Pace's reasoning reveals, what is missing from the mode view is not simply an explanation, but an explanation that respects the Similarities assumption. The view has the consequence that 'the two experiences have very different metaphysical structures' (Pace, 2007, pp. 341–342). Seeing blurrily has a specific blurry mode of seeing, but the phenomenally similar experience does not have that mode, and instead is characterised by a certain content, presenting the object seen as apparently fuzzy or blurred. What Pace is looking for is 'a view that would explain the similarity in phenomenology by appeal to some similarity in the metaphysical structure of the two experiences' (ibid.), that is, a view that respects Similarities. For instance, Pace notices, views that explain blurriness in terms of a property of the visual field can give 'a unified account of the property of being blurry', a property that can be instantiated by worldly objects such as blurred pictures as well as by one's visual



field (2007, p. 343). The phenomenal similarities between seeing blurrily and seeing something fuzzy are thus explained by a common element: both kinds of experiences are experiences of the same blurriness property.

Although not as explicitly, other views in the literature are sensitive to Similarities. Most obviously, the view on which seeing blurrily involves an illusory experience of fuzziness explains the phenomenological similarity between seeing blurrily and seeing something fuzzy or blurred with a commonality in what is experienced: in both cases one experiences the object's boundaries as fuzzy, and so experiences fuzziness, although in the first case the experience is an illusion (e.g. Allen 2013, p. 264). Views appealing to indeterminacy also respect Similarities. On Tye's view, when one sees blurrily, one indeterminately experiences an objects's boundaries, when one sees something fuzzy clearly, one experiences indeterminately located boundaries (Tye, 2003, p. 20). This common indeterminacy, whatever its source, could explain the phenomenal similarities between the two kinds of experience. For another example, Allen's view aims at explaining the phenomenal similarities between seeing blurrily and seeing a blurred representation clearly by holding that both experiences and representations such as pictures can over-represent objects' boundary locations (2013, p. 269).

The simple account I proposed for the eye chart example, and the pluralist approach more generally, do not comply with Similarities. On the pluralist approach, there can be different explanations of why things look blurry to one, appealing to the joint contribution of multiple factors, across different experiences that are either instances of seeing blurrily or may be such that things look just like they do when one sees blurrily. Not only are there different causal histories that can result in an experience with a blurry phenomenology. But experiences with a blurry phenomenology, and indeed even experiences with the paradigmatic phenomenology of seeing blurrily, may be metaphysically very different and lack any common component, property, or structure. There can be blurry experiences of different things (e.g. small or large sharply-boundaried objects and pictures, blurred pictures, fuzzy objects), had by subjects with different visual sensitivities (and with impaired or unimpaired sensitivities), in different conditions of perception. It is plausible that among those blurry experiences, some are phenomenally indiscriminable from each other while being metaphysically very different. For instance, there are circumstances in which things can look just the same to one whether one is looking at a tiny printed letter, at a larger letter further away, at a larger letter whilst feeling dizzy, or at a blurred print of the letter. Since we are allowing that experiences that are phenomenally indiscriminable lack any common element, property, or structure, a fortiori experiences that are merely phenomenally similar in some respect, such as typical instances of seeing blurrily and typically instances of seeing fuzzy objects, need not have any similar or common element, property, or structure.

Failure to comply with Similarities is not just a consequence of the explanatory pluralism I recommended. When we consider the diverse range of experiences that are the target of the Similarities assumption, there is little reason to think that Similarities is plausible. While philosophers usually focus on the case of seeing blurred or fuzzy things, things can look similar to how they do in typical cases of seeing blurrily (such as Shorty's experience in the eye chart scenario) in many more circumstances.



Potential examples include seeing through a semi-transparent glass pane, through thick mist, under the surface of water, or whilst wearing distorting lenses, seeing something that moves very fast, de-focusing one's eyes or changing the focus from foreground to background. While things will usually look a bit different to one across these scenarios, they may well look blurry; in fact, in special circumstances, one's experience may even be indiscriminable from a paradigmatic case of seeing blurrily. These phenomenally similar—or even indiscriminable—experiences are different in ways that go beyond the different causal histories leading to them. For instance, they may have different epistemic status (e.g., if one is short-sighted, one's experience may be taken to be a worse guide to the shapes of things in the distance than a normal perceiver's), be experiences of different objects and scenes (e.g. of a fast-moving object, of a misty scene), and be more or less idiosyncratic (e.g. when a semi-transparent glass pane is there, things may look blurry to every observer looking through it; if one is currently dizzy, the way things look to one may not be the way they look to one's interlocutors). The sheer variety of scenarios where things can look similar to how they look in typical cases of seeing blurrily supports questioning the project of finding a common or similar element, property, or metaphysical structure.

A reason to propose Similarities as a criterion for assessing the adequacy of an account of visual blur was the worry that the alternative would be accepting the relevant phenomenal similarities as 'brute'. However, it is not obvious that there should be a distinctively philosophical explanation of such similarities, or an explanation appealing to the metaphysical nature of the experiences. These experiences happen to strike us in similar ways, or we happen to find what it is like to have them to be similar: this as a psychological fact about perceivers like us, and for each pair of experiences there will be explanations that vision scientists can give of this psychological fact. ¹⁶

Finally, one may note that typical experiences involving visual blur may have a similar functional profile. When things look blurry, one's visual access to the shapes and boundary locations of the things one sees is limited or reduced with respect to conditions where things do not look blurry. These comparative limitations may be due of one's visual sensitivity or a temporary impairment to it, to unfavourable viewing conditions, to intervening media, or, for the special case of looking at blurred pictures or prints, to the way the depicted object or the symbol are depicted or rendered. Experiences may play this kind of functional role with respect to the cognitive and epistemic position they put their subjects in and yet have very different metaphysical natures.

¹⁷ Schroer (2002) relatedly argues that we discern whether we are seeing blurrily by implicitly comparing current and past experiences of edges—rather than by noticing an intrinsic property of blurry experiences.



¹⁶ A similar idea can be found in Martin's account of perceptual appearance reports (2010, Sect. 3).

5 Conclusion

There are a few lessons we can draw from our discussion of visual blur. First, seeing blurrily and related phenomena do not pose a special challenge to relationalist views of perceptual experience. Relationalists can accommodate the contribution that various factors, including properties of subjects and conditions of perception, make to the overall character of blurry experiences either by making a difference to what one sees or by modifying the perceptual relation itself, and so the way or manner in which one sees.

Second, we should be aware of the two assumptions of Distinctiveness and Similarities at play in the current debate. One's implicit acceptance of these assumptions may be motivated by prior commitments. Consider Distinctiveness. If one is a representationalist who believes that the representational content of an experience determines its phenomenology (e.g. Tye 2003; Bourget 2015; Nanay 2018), then one needs to find a different represented property for each variation in visual phenomenology. Another motivation may be one's endorsement of the 'diaphaneity' thesis, on which sameness and difference in phenomenology are a matter of sameness and difference in the objects a subject is perceptually presented with. 18 Given one's independent theoretical commitments, one may be motivated to look for a one-to-one correspondence between the blurry aspect of the phenomenology of an experience and a property of the experience—whether a kind of content, certain perceived properties, a purely qualitative feature, or a mode. However, Distinctiveness and Similarities are not supported by the phenomena to be explained. So, one's prior commitments notwithstanding, it is possible for one to reject them. As a result, some of the objections commonly raised against various views in the literature—such as the view that blurry experiences are characterised by indeterminate contents, or the view on which seeing blurrily is a mode of seeing—are not obviously effective.

Third, a pluralist approach to explaining phenomenal differences and similarities among instances of seeing blurrily and other experiences deserves our consideration, as it is supported by reflection on the variety of cases where things can look blurry, or even have the paradigmatic phenomenology of seeing blurrily. It is an open question to what extent representationalists may be able and happy to adopt elements of this approach, proposing different accounts for different blur-related phenomena rather than seeking a unified account.

There is also a wider methodological lesson that extends beyond the phenomenon of visual blur. The class of blurry experiences is one where it is at least prima facie plausible that there is a common phenomenal aspect to be accounted for, where this aspect does not seem to be simply a matter of what is experienced—one does not need to experience a blurred object in order for things to look blurry to one. We then want theories of perceptual experience to explain the fact that, in those experiences, things look that way, i.e., blurry—a certain appearance fact. If a unified approach to explaining this appearance fact is not motivated for the class of blurry experiences, then it may be even less motivated for other perceptual phenomena. Consider other appearance facts, such as the fact that things look red across a wide range of experi-



¹⁸ For a discussion of diaphaneity, see French & Phillips (2020)).

ences, including in particular experiences where there are no red things for one to see. That there is a respect in which things look a certain way W—e.g. blurry, red, square, like a lemon—across a range of experiences is not per se a good reason for taking these experiences to have a common property, element, or structure that accounts for the fact that things look that way W in having the experience. Explanations of phenomenal similarities and, at the limit, indiscriminabilities across those experiences, and of phenomenal differences between those experiences and others where things do not look that way, are not to be regarded as inadequate just because they only apply to particular cases or appeal to a variety of factors rather than to a distinctive property or element of the experience. In fact, a pluralist explanatory approach may turn out to be a better fit in light of the diversity of the experiences at stake.

Distinctiveness and Similarities can be seen as examples of more general demands that one may place on adequate explanations of appearance facts. In discussions of relationalist views one may find similar demands at play. Consider accounts of perceptual illusion such as Kalderon's (2011a). On Kalderon's account, an illusory experience in which, for instance, a white object looks red (e.g. due to misleading illumination) involves a genuine perceptual relation to the white object and its colour. Such an account may be deemed inadequate because it does not explain the phenomenal similarity—at the limit, indiscriminability—between that instance of seeing a white object and an experience in which one sees a red object in terms of a common property or component of the two experiences. For instance, the account does not appeal to a common redness-related property of the experiences nor to a looking-red appearance property that one perceives in both cases. Applying the lesson from the case of blur, we should question whether this is a good reason to reject the account.

A related example is Logue's (2012, 2013) criticism of certain relationalist accounts of hallucination—negative epistemic accounts. These accounts, she argues, are inadequate because they cannot explain the fact that certain hallucinations are indiscriminable from certain genuine perceptual experiences. More specifically, what a philosophical account should provide is an explanation 'in terms of personal-level psychological facts' or 'personal-level psychological features of the hallucination' (2012, p. 177, also fn. 8). Logue's own explanation appeals to a personal-level psychological commonality among the indiscriminable experiences (2013, p. 185). One reading of this criticism is that an explanation would only be adequate if it appealed to common personal-level psychological properties of the two experiences—see also Logue's observation that 'we tend to suppose that indiscriminability facts are (typically) grounded in commonalities' (2013, p. 177). Applying the lesson from the case of blur, we should be open to questioning this as a demand on an adequate explanation of indiscriminability among experiences.²⁰

Whenever an account of a certain phenomenon is criticised on analogous grounds, relationalists may of course simply reject the demands placed on adequate explana-

²⁰ Brewer (2017, p. 222) makes a similar point.



¹⁹ Brewer's (2011, 2017) account can also be considered an example. While he holds that the white object would have certain visually-relevant similarities to red things, it is not obvious that these are properties in common across the two phenomenally similar experience (e.g. properties that both experiences present).

tions. Looking at the case of visual blur, this paper has explored a 'bottom-up' strategy, finding reasons to question those demands in the phenomena to be explained.

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