How Attention Structures Consciousness*
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Introduction

I start with a parable about two versions of the Garden of Eden.

The first is the Garden of Satisfaction. In this garden you get everything you want. The garden fulfills all your desires and it satisfies all your preferences. But there is a price: you don’t get the capacity of the will, and thus you cannot choose anything. In such a garden an important element of agency would be missing: you would be no more than a slave to your passions.¹

The second garden is the Garden of Appearances.² In this garden everything is as it appears to you in conscious experience. The garden reveals its nature in consciousness. Yet, there is a price here too: you don’t get the capacity of attention, and thus you cannot focus attention on anything nor is your attention ever drawn to anything. Among the buzzing and blooming, you cannot selectively look at a rose, or its shape or color. You cannot listen to the song of a nightingale. And your attention isn’t captured by how the early morning sun illuminates the mountains.

My interest here is in the second garden. I will argue that something that is of similar significance to consciousness than the will is to agency would be missing in the garden of appearances: in this garden you would be no more than a bundle of appearances, since an important element of subjectivity, an element of subjective perspective or point of view would be absent.³ William James anticipated what is missing when he criticized empiricism. He said:

[E]xperience is supposed to be of something simply given. Attention, implying a degree of reactive spontaneity, would seem to break through the circle of pure receptivity which constitutes ‘experience,’ and hence must not be spoken of under penalty of interfering with the smoothness of the tale. But the moment one thinks of the matter, one sees how false a notion of experience that is which would make it tantamount to the mere presence to the senses of an outward order. […] Without selective interest, experience is utter chaos. Interest alone gives accent and

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* Acknowledgements removed for anonymous review. (in the text the removed acknowledgements occur as A1… An…).

¹ See Frankfurt 1971 or Velleman 1992 (among others who make similar points).

² See Chalmers 2006 (or Johnston 2007 for a related view of the actual world).

³ See Nagel 1974 for the modern origin of the connection between consciousness and the idea of a point of view. The idea of a “bundle of appearances”, of course, is an allusion to a Humean account of the self and of subjectivity just as the metaphor of a “slave to your passions” alludes to a Humean theory of motivation. Some of my critique of the appearance view as well as my own theory shares sympathies with aspects Kant’s critiques of the relevant Humean doctrines (themes having to do with the subject’s structuring activity). But there are also important differences to central Kantian ideas (see Fn 73 below).
emphasis, light and shade, background and foreground – intelligible perspective, in a word. (James 1890/1981, p. 402)

Following James, I will argue that we are not just samplers of appearances (Johnston 2007) nor do our brains produce what then exclusively appears as the presence of “an outward order” (James, op. cit.). The phenomenal character of conscious experience includes the actively structured point of view on the appearances. Our experience is organized and thus an “intelligible perspective” (op. cit) not “utter chaos” (op. cit.). What it is like for us includes the way we are structuring awareness into “foreground and background” (op. cit.). Because we look, as it were, through our point of view to the world this element of subjectivity, or “spontaneity” (op. cit.), is easy to miss. But it is there nonetheless.

My paper has two goals: to show that something is missing in the garden of appearances and to provide an account of what is missing.

In the first part of the paper, I argue that something is missing by arguing against a view of phenomenal character I shall call the appearance view. According to this view the phenomenal character of experience (what it is like) is exhausted by the way the world or an aspect of the world appears to the subject (I take as roughly equivalent the idea that phenomenal character entirely consists in what is present(ed) to the subject in experience or in what the subject is directly aware of). At least when restricted to a core of perceptual experience, the appearance view is widely accepted.

Against the appearance view I argue (by appeal to something like the garden of appearances) that attention scenarios have counterparts that present the same appearances without attention. These counterparts are phenomenally different from the attention scenarios. I will call my argument against the appearance view the counterpart argument.

In the second part of the paper, I provide an account of what the appearance view misses. It is the element of phenomenal consciousness that James hinted at. While the appearance view might be correct as an account of phenomenal qualities, it overlooks that these qualities occur in a phenomenal structure that gives shape to the perceptual experiences that are the focus of the appearance view. There is, for example, a phenomenal difference between an experience being at the center of consciousness and its being at the periphery (see Watzl 2011a). This structure, I will argue, is central to a subject’s point of view on the appearances.

There are two aspects to the idea that attention structures consciousness. First, the field of consciousness through which the world is present to us (experience, not what is experienced) has structure that cannot be reduced to the way the world appears. Second, this structure is phenomenally apparent to the subject as her point of view in part because she is reflexively aware of the process by which she herself structures experience.

The structural and the reflexive aspect together contribute essentially to the subjective character of consciousness. The appearance view only accounts for the qualitative character of

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4 I follow Alston 1999 in accepting this equivalence. Section 1 for more on the view.
consciousness. By missing phenomenal structure it misses its subjectivity (Levine 2001, Kriegel 2009). If this is right, we have an explanation for what is missing in the garden of appearances. Conscious experience presents the world of appearances from a subjective and actively structured point of view. It is to this aspect of consciousness that attention is central.  

Here is how I will proceed. In Section 1 I say a little more about the appearance view, the target of my criticism. In Section 2 I present the counterpart argument. In Section 3 I develop an account of the structure of consciousness. In Section 4 I argue that this structure is phenomenally transparent as a characteristic of a subject’s own point of view, because she has reflexive awareness of that structuring, and outline an account of that reflexive awareness. Section 5, finally, shows how structure and reflexive awareness provide an essential characteristic of the subjectivity of consciousness.

1 The appearance view

1.1 The appearance view versus intentionalism

Those who have followed recent debates in the philosophy of perception might ask whether my goal is to add to the growing stock of putative counterexamples to intentionalism. The answer is no. The appearance view is not the same as intentionalism (though most forms of intentionalism are committed to it) and while the usual counterexamples target the move from appearances to intentional contents, the counterpart argument targets the appearance view itself.

While intentionalism is often motivated by the appearance view, the two theses are independent. Think of intentionalism as an interpretation of the appearance view. By way of a number of arguments it moves from the rather vague notion of a way the world appears to the subject to the

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5 Everything I say in this paper is compatible with the claim that there is also unconscious attention in blindsight (Kentridge, Heywood and Weiskrantz 1999), or in subluminal perception (Jiang et al. 2006).


7 I discuss the question whether and in what way the phenomenal effects of attention pose a threat to intentionalism in Watzl (in preparation). There I discuss both the idea that the phenomenal contribution of attention can be captured in terms of the content of experience (suggested by Tye 2010, Nanay 2010, and Stazicker 2011), as well as the idea that this phenomenal contribution can be captured in terms of a special attitude (suggest by Speaks 2010, Pautz 2010a, and Wu 2011a). I argue that while recent challenges to capture the phenomenal effects of attention in terms of content (Nickel 2007, Speaks 2010) are not completely successful (I discuss the argument in Block 2010 in Watzl forthcoming b), the content view faces the challenge to account for the structure of experience introduced by attention, a challenge developed in more detail in this paper. Further, I argue that the attitude view is not a serious alternative to my own structuralist position: it has no successful account of the distribution of attention across the field of consciousness, of variations in the “objects” of attention (which can be objects, events, properties and states of affairs), and of how attention operates within and not on top of perception.
arguably more precise notion of an experiential attitude toward a content.\textsuperscript{8} Appearances become appearance contents, roughly: a way the world \textit{is} according to your experience.

There are both general arguments against the intentionalist interpretation as well as well-known problem cases that challenge the move from appearances to contents.\textsuperscript{9} Both types of problems do not challenge the appearance view itself.

Consider the following remark by Charles Travis, a well-known opponent of intentionalism:

“perception, as such, [simply] places our surroundings in view, affords us awareness of them […] it confronts us with what is there” (p. 65).

This is a paradigmatic expression of the appearance view.

Consider also Peacocke’s view of “sensational” properties (Peacocke’s terminology for the non-intentional phenomenal properties of experience). In agreement with an important motivation for intentionalism,\textsuperscript{10} he says

“[I]n being aware of something, we are aware of some of its (apparent) properties and relations, and the properties and relations of which we are aware in experience are never purely properties and relations of the experience (except perhaps the time at which it occurs), but are apparently properties and relations of other things[…]. In the case of the sensational properties, the experienced properties are, in the visual case, properties and relations of the visual field and its parts.” (p. 15).

Peacocke’s sensationalist view like Travis’ remark – while it rejects intentionalism – thus is compatible with the appearance view. The same holds for many other alternatives to intentionalism (see footnote).\textsuperscript{11}

\textsuperscript{8} Most obviously this move is in Byrne 2001. The argument from transparency (e.g. Harman 1990; Tye 2000, 2002) and the argument in Pautz (2007, 2008, 2010a,b) are similar in strategy. For a less ambitious move from the claim that experience presents appearances to the claim that experience \textit{has} content (whether or not this exhausts phenomenal character) see Siegel 2010 (Ch. 2.4 + 2.5).

\textsuperscript{9} For general arguments see e.g. Martin 2002 or Travis 2004. Specific problem cases include blurry vision: an apple might look blurry when you take off your glasses or squint your eyes; but it does not look to be blurry. The blurry appearance does not seem to specify a way the world around you \textit{is} (Block 1996, 2003). Other problem cases are afterimages, phosphenes or perspectival shape (Boghossian and Velleman 1989; Peacocke 1993). There is also the difference between the sensory modalities like touching the shape of an object and seeing the same shape. While the shape appears different it seems not appear to be different.


\textsuperscript{11} Most clearly, there is the so-called theory of appearing (e.g. Hicks 1938, Barnes 1944/45, Langsam 1997 and Alston 1999). The view in Johnston 2004, 2007 also self-consciously is a version of the appearance view. Disjunctivist views (e.g. Snowdon 1990; McDowell 1994; Martin 1997, 2004, 2005; Campbell 2002, Hinton 2003; Brewer 2004) similarly seem to agree on the appearance view (they just disagree on whether something appears to us in hallucination or illusion). Finally, even the mental paint Ned Block has argued for still seems to characterize
Given the disagreement between intentionalists and its rivals on how to interpret the appearance view, I will leave the view at the intuitive level I started with. It will be precise enough for my argument against it.

1.2 The piecemeal conception versus the specific conception

What exactly does the appearance view say about the phenomenal contribution of attention? Here is the conception I will work with.

**The Piecemeal Conception** For each phenomenal contribution made by attention there exists some way the world appears to the subject such that the phenomenal contribution supervenes on this way the world appears.

The piecemeal conception does not presuppose that there is a specific effect of attention on appearances: it might affect appearances differently in various scenarios. In this it can be contrasted with another view:

**The Specific Conception** There exists some type of appearance such that each phenomenal contribution made by attention supervenes on that type of appearance.

Against the specific conception, the piecemeal conception is a weaker claim. It is compatible with there being a common phenomenal aspect to all cases of attention, but does not require it. Note also that both views are compatible with holistic effects of attention on appearances on the overall phenomenal Gestalt of the appearances, so that its contribution cannot be removed while leaving all other phenomenal features unaffected.

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12 Both Watzl (2011) and Wu (2011), by contrast, seem to presuppose the specific conception. Thanks to A1 for making me more aware of this point.

13 One specific conception might, for example, appeal to the idea that in all cases attention makes a difference to the determinateness or resolution of what we are conscious. This idea would make talk about attention as focusing so appealing: to attend to something is like focusing a camera lens on it. Call this the *camera-lens view.* It can be precisified in various ways. On the one hand, a *literal* camera-lens view would propose that the phenomenal character of attention consists in increasing spatial resolution (see discussion in Wu (2011a). Yet, while there is empirical evidence that *spatial visual* attention does increase apparent spatial resolution (Shiu and Pashler 1995; Montagna, Pestilli, and Carrasco 2009), the literal cameral-lens view has no account of the phenomenology of feature-based attention to shape, color, motion, etc. (and it is hard to see how it would cover, for example, auditory attention). On the other hand, one might propose a *generalized* camera-lens view and suggest that attention increases the level of determinateness of the properties presented to you in experience (Nanay 2010, Stazicker 2011a,b). Yet, now it is quite unclear whether there is any empirical support for the view (see main text and Block 2011).
1.3 Arguments based on piecemeal/specific distinction

The specific conception would be hard to defend. The effects of feature-based attention to properties like color or movement on the appearances are most likely different from the effects of object-based or spatial visual attention to locations or visual objects. In addition the effects of attention on the appearances in different sensory modalities are mostly likely distinct. Furthermore, recent empirical results strongly suggest that even the effects of spatial visual attention are highly diverse: in some circumstances attention affects apparent contrast (Carrasco, Ling and Read 2004), in others apparent size (Anton-Erxleben, Heinrich and Treue 2007), apparent color saturation (Fuller and Carrasco 2006), apparent brightness (Tse 2005), apparent spatial distance (Liverence and Scholl 2011), or apparent duration (Tse et al. 1997). Attention enhances the spatial resolution of conscious vision (Yeshurun and Carrasco 1998), but degrades its temporal resolution (Yeshurun and Levy 2003). It is unlikely that a specific subset of these effects is present in all cases.\footnote{Yeshurun and Levy (2003, p. 231), for example, say: “it is essential to emphasize that an attentional mechanism that facilitates parvocellular neurons [which, they argue, is responsible for the effects of attention on spatial and temporal resolution] is probably not the only mechanism operating when an observer is attending a specific location. It is very likely that different mechanisms operate when different components of attention are triggered by different experimental paradigms […]. Even within the paradigm of peripheral precuing employed here, it is quite probable that several attentional processes take place at the same time, resulting in different outcomes depending on the task at hand. In this study, only a single target was present at any given moment, and the task required either high temporal resolution or high spatial resolution. With these conditions, attention enhanced spatial resolution but decreased temporal resolution. Different experimental conditions may reveal the operation of different attentional mechanisms.”} Furthermore, it is hard to find non-arbitrary reasons for picking a subset of the appearances correlated with attention as the ones that are constitutive of attention while others are “mere” correlations.

On the other hand, the denial of any common phenomenal element between all cases of conscious attention is not without costs either: such a view owes an explanation of why it was tempting to describe every phenomenal contribution of attention in terms of “concentration of consciousness” (Hamilton 1895, James 1890/1981, Wundt 1902), “experiential highlighting” (Campbell 2002), or “phenomenal salience” (Chalmers 2004, Wu 2010).

One argument against an appearance view would thus be a missing commonality argument like this:

( MC1) There is a unique phenomenal character common to all cases of conscious attention.

( MC2) There is no unique type of appearance common to all cases of conscious attention.

Thus, ( MC3) The unique phenomenal character that is common to all cases of conscious attention is not a unique type of appearance.
Thus, (MC4) Phenomenal character is not exhausted by appearances.\textsuperscript{15}

Another, similar, argument would be the following missing nature argument:

(MN1) There is a unique phenomenal character that constitutes conscious attention.

(MN2) There is no unique type of appearance that constitutes conscious attention.

Thus, (MN3) The unique phenomenal character that constitutes conscious attention is not a unique type of appearance.

Thus, (MN4) Phenomenal character is not exhausted by appearances.\textsuperscript{16}

Yet, while there is something to these arguments, it is unclear how much dialectical force they have against the appearance view, even if MC2 and MN2 are accepted on the basis of the considerations mentioned at the beginning of this section.

First, it is unclear how much argumentative weight can be put on MC1 or MN1: a proponent of the appearance view might, for example, argue that we talk about all effects of attention in similar ways, because all of these—though phenomenally diverse—lead to practical advantages in engaging with the relevant object or some other functional property of attention. In the end, this response seems implausible to me, but it shows that it is hard to argue for a common phenomenal element, specifically.\textsuperscript{17}

Second, the step from MC3 to MC4 relies on what may be called a commonality principle: if there is something in common between all X’s and there is nothing in common between all Y’s, then being an X cannot consist in being a Y. This commonality principle is stronger than a supervenience claim: not only should there be an appearance corresponding to each effect of

\textsuperscript{15} An argument like this might be reconstructed from Wu’s (2011a) argument against a “pure reductive account of synchronic salience” (p. 10). Wu appeals to cases not covered by the specific effects of attention on apparent contrast like a case when you keep your attention focused on a receding light.

\textsuperscript{16} An argument might be reconstructed from Pautz (2010a). Pautz speaks of what “constitutes” the phenomenal difference made by attention (p. 305), and thinks that it is implausible “that there is some cluster of properties such that, necessarily, one’s attending to an object just is one’s representing the object as having those properties.” (ibid.) (the context makes clear that by “attending” Pautz here means “conscious attending” or “the phenomenal character of attending.”). His formulation of “pure intentionalism” (p. 258) also seems to imply what I below call the commonality principle, since it requires that every phenomenal property is “wholly identical” (ibid.) with being sensorily conscious of a certain content. Pautz thus seems to accept both MN1 and MN2. Both Wu (2011a) and Pautz (2010a) use their arguments to suggest that what constitutes the phenomenal character of attention is to be sought in an attitude of experiencing. I discuss this view in Watzl (in preparation), and argue that this view is not defensible as a genuine rival of the structuralist position defended here (see Fn 7).

\textsuperscript{17} Even Stazicker 2011a, who officially defends aims at a unified account of the phenomenology of attention, in my view does not actually provide such an account. While his announced goal is to defend the William James’ idea of attention as “focalizing” consciousness (p. 2), in the end “focalizing consciousness” for Stazicker comes to two very different things for involuntary attention (where Stazicker is a proponent of the camera lens view), and for voluntary attention (where Stazicker thinks attention is a form of conscious cognition). It is hard to see on this account why voluntary and involuntary attention have a single phenomenal character (to call them both “focalization” does not seem to help). If unified, the two forms of focalization are probably unified only by their functional role and not their phenomenology.
attention on phenomenal character, but there should also be a common appearance corresponding to each common phenomenal character. The step from MN3 to MN4 similarly requires more than supervenience, namely that each type of phenomenal character be (type) identical with a type of appearance. Since, as I will argue, even piecemeal supervenience is problematic I will not pursue these arguments based on the stronger commonality principle or the type identity principle.

Yet, even given these dialectical problems of the missing commonality and the missing nature arguments, I take it to be an advantage of the view I will defend in the second part of this paper that it readily accommodates MC1 and MC2 as well as MN1 and MN2 while an appearance view might either have to give up at least one of these premises, the commonality principle or the type identity principle. While the effects of attention on appearances are indeed diverse, the element that is common to all cases and constitutes conscious attention is that the subject is structuring her experience around some more or less central elements.  

1.4 Consciousness outside the focus of attention

Before moving on, let me address an important objection to a central presupposition of my discussion. The counterpart argument presupposes that the phenomenal character of an experience at the focus of attention can be contrasted with that of an experience outside that focus. Call this the contrast presupposition.

The contrast presupposition would be undermined by a deflationary view according to which you are conscious only of what you are focusing attention on. If there were no experiences outside the focus of attention, then an experience with attention could not be phenomenally contrasted with an experience without attention. Some people express sympathy with just this form of deflationary view. If it were correct, the idea of a phenomenal contrast between attention scenarios and their counterparts without attention would not even get off the ground.

In reply, consider that in order to undermine the contrast presupposition, the deflationary view must make two bold claims. First, it must claim that we are never conscious without attention, and not just that in many cases there is no unattended experience. Otherwise, the study of differential effects of attention on consciousness would be intact if restricted to circumstances the deflationary view does not cover. Second, the deflationary must claim that there is no conscious experience outside a (fairly narrow) focus of attention, and not just that we are

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18 Those who are convinced of the arguments in this section may consider the counterpart argument as an additional piece of evidence for their conclusion or skip to section 3 for my account of what unifies the phenomenal character of attention.

19 For relevant empirical results see (among many others): Mack and Rock 1998; Simons and Chabris 1999. The deflationary view is one (not the only one!) way to make the slogan “attention brings a stimulus to consciousness” precise (e.g. in Mack and Rock 1998). See also appeal to the so-called a refrigerator light illusion (e.g. O’Regan and Noë 2001, Noë 2004): we are mislead to a rich view of consciousness, because we become conscious of something as soon as we focus on it, just like someone might naively think that the refrigerator light is always on because it is on as soon as he looks.
conscious only of what receives at least some attention. Otherwise, there could still be a phenomenal contrast between an experience with a lot of attention and one with only a little.

Yet, neither of these bold claims is warranted.

Consider the second claim first. The difference between a lot of attention and a little makes a phenomenal difference, and thus there must be consciousness outside the narrow focus of attention. Consider listing to a Jazz band. You might focus your attention on either saxophone or piano, but remain conscious of both in either case. While arguably both saxophone and piano receive some degree of attention, it makes a phenomenal difference which one you pay more attention to (Watzl 2010, 2011a). The same point can be made on the basis of Carrasco’s results concerning the appearance of simple visual displays (summarized in Carrasco 2009). In her experiments the subject is asked to compare the appearance of a simple figure at the focus of attention to the appearance of another simple figure outside the focus of attention. This experimental setup assumes and (by being successful) confirms that both attended and unattended figure appear some way to the subject, and that therefore she was conscious of both.

Second, while the discovery of inattentional blindness does suggest that there are more cases than we intuitively thought where subjects are not conscious of what they don’t (narrowly) focus attention on, the relevant experiments provide no evidence (indeed evidence to the contrary) that subjects are never conscious without focused attention. Just consider that around fifty percent of the subjects in Simons and Chabris (1999) famous gorilla experiment did notice the gorilla. Since the subjects who noticed the gorilla performed the task just as well as others (which was ensured by the experiment) we have evidence that their attention was focused on the task and not on the gorilla. Since they were conscious of the gorilla, they provide a counterexample to the claim that subjects are never conscious of anything outside the focus of attention.

To conclude this section: while some attention might be necessary for consciousness, it is not necessary in the sense that the deflationary view would need and that would threaten the contrast presupposition. The counterpart argument thus is unaffected by any empirically viable form of the claim that there is no consciousness without attention.

2 The counterpart argument

I now present the counterpart argument. It has two premises.

The Counterpart Claim For any scenario @ where attention makes some phenomenal contribution to consciousness, there exists a counterpart scenario @* where either the subject does not have the capacity for attention, or where her attention is evenly

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20 The figures are similar for other experiments on inattentional blindness. E.g. in Most et al. 2001 figures are between 30 % and 60 % depending on the exact experimental condition.

21 See also Silins (in preparation) and Silins and Siegel (forthcoming) for similar ideas. Thanks to discussions with A2 and A3.
distributed across her field of consciousness such that \( @^* \) presents exactly the same appearances as \( @ \).\footnote{This formulation of the counterpart claim assumes that appearances are phenomenally individuated, i.e. two appearances cannot be distinct if they are phenomenally the same. If appearances were \textit{not} phenomenally individuated, we would get only something slightly weaker, i.e. that there exists a counterpart \( @^* \) that presents appearances that are phenomenally the same as the appearances presented in \( @ \). This weaker formulation together with the phenomenal difference claim would still generate the required inconsistency with the appearance view (see Fn 35).}

**The Phenomenal Difference Claim** There is a phenomenal difference between (at least) some attention scenario \( @ \) and its counterpart \( @^* \).

Together these claims are inconsistent with the appearance view. Since \( @ \) and \( @^* \) present the same appearances, the appearance view together with the counterpart claim entails the following.

**The Appearance View Prediction** Every attention scenario \( @ \) and its counterpart \( @^* \) are phenomenally identical.

This appearance view prediction is incompatible with the conjunction of the counterpart claim and the phenomenal difference claim.

Before I get to the details of the defense, let me use an example to bring out the idea behind the argument.\footnote{The argument uses ideas similar to the phenomenal contrast method developed by Susanna Siegel (see Siegel 2010).}

### 2.1 The central idea

Suppose that you are listening to the sounds you hear out in the field. Your attention is focused on the song of a nightingale, and not on the other birds, the nearby waterfall, or the rustling of the wind. The fact that you’re your attention is allocated in this way probably has a variety of effects on how the environment appears to you.\footnote{In contrast to claims in Nickel 2007, Speaks 2010 and Pautz 2010a the counterpart argument thus is compatible with the claim that in all actual scenarios attention affects appearances or content.} The song of the nightingale might, for example, sound more crisp and loud than it would otherwise sound; or maybe its sound is presented to you with higher determinacy than the other sounds. But now suppose that someone – magically or through a little device in your ear – turns up the volume of the sound of the waterfall and down the volume of the nightingale, and adds noise to the sound of the nightingale or deteriorates its resolution or determinateness, while leaving the sound of the waterfall crystal clear. This might make it harder to keep focused on the nightingale. But the appearance view predicts that by making changes of the sort just mentioned, what it is like for you should just become what it is like to focus on the waterfall. We only need to change your environment or
your non-attentional relation to it so that the way it appears to you is the same as when you focus attention on the waterfall. But this prediction seems not to be borne out: it is impossible to replicate what it is like to focus attention on the waterfall in such ways.

The idea of the counterpart argument then is that one cannot mimic the experience of attending to something (i.e. create an experience with the same phenomenal character) by affecting the environment or the non-attentional relationship between subject and environment. The counterpart argument attempts to generalize this idea and make it precise: there is a phenomenal contrast between any way the world might appear to you in experience and what it is like to focus attention on an aspect of or object in that world (Lee 2009; Watzl 2010, 2011a,c). The argument exploits the commitment of the appearance view to the claim that any effect of attention on phenomenology could be matched by a corresponding difference in the world or your relation to it. The idea that phenomenal character is exhaustively characterized by how the world appears to you, after all, was what defined the appearance view.

Without loss of generality I will focus on perceptual attention. Perceptual attention is a highly intuitive phenomenon and scientifically well understood. For auditory examples, consider a case where you focus attention on one sound or melody among many, such as on the song of the nightingale or on one instrument in musical performance. For visual examples, consider selectively looking at one object in a scene, like a rose, or on one of its features, like its color or shape.

Because of its popularity in contemporary attention research and because of its simplicity, I will sometimes use the Posner paradigm where the subject is presented with a display consisting of two images (which could be anything from natural images of fruits, animals and scenes to so-called Gabor patches). These images are separated by a fixation cross in the middle. The subject now is either in a state where her attention is focused on the left figure (call it L) or in a state where her attention is focused on the right figure (call it R) while holding her eyes fixed to the cross. In different circumstances the process that results in her attending to L or R might either be voluntary (endogenous), i.e. based on her decision, or involuntarily (exogenous), i.e. based on a cue on either side (e.g. a flash that catches her attention). At this stage of my

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25 Block (2010) also mentions this idea, but his argument against intentionalism does not depend on it.

26 Which can be distinguished from executive (or central) attention, which is a central processing capacity or set of control mechanisms (e.g. Pashler 1998). Relatedly (and maybe equivalently), perceptual attention should also be distinguished from concentrating attention on a certain activity or train of thought (James 1890/1981), agent attention (White 1964 who opposes this to spectator attention), from an activity’s occupying your attention (Peacocke 2000), and from performing an activity attentively (Mole 2010). The relationship between these other attentional phenomena and perceptual attention remains controversial both scientifically (e.g. Pashler 1998; Fougnie 2008) as well as metaphysically (e.g. Peacocke 2000; Mole 2010; Watzl 2011c). It seems that executive attention often also affects conscious experience: what it is like to play the piano attentively is different from what it is like to play absentmindedly. The structuralist account presented in the second part of this paper can be extended to cover these other forms of attention: attentively performed activities can be viewed as ways of structuring the subject’s field of consciousness into center and periphery (see Watzl forthcoming a).

27 Not as much is known about attention in the other sensory modalities such as smell, touch or taste. There is also (quasi)perceptual attention to (localized) pains, itches, or mental images, etc.

28 Roughly, a grating of a certain contrast, size and orientation. See any vision science textbook for more.
argument I am interested in the resulting state and not in the process (I talk about the process in Section 4).

Perceptual experience in Posner scenarios is highly simplified compared to experience outside the laboratory. In our daily lives experience seems much more dynamic, shaped by how we move in our environments, by our goals and interests, by what we are looking for, and what we are watching, by prior experience, conceptualization, and mood. If we can show that the appearance view cannot accommodate the phenomenal contribution of perceptual attention in the simple Posner style scenarios we have defeated the view by considering the type of experience where it was most appealing.

I will now defend the two crucial claims. According to the counterpart claim, it is possible to match the way the world appears to you when you attend to something in a scenario where you don’t attend to anything. According to the phenomenal difference claim, a phenomenal difference between these two cases remains, a difference that thus cannot be explained in terms of appearances.

### 2.2 In defense of counterpart claim

My argument for the counterpart claim proceeds by showing that it is implied by a plausible claim about what constitutes (and what does not constitute) appearances. Once we recognize this implication we can also see how to construct and thus conceive of the counterpart to each attention scenario.

Consider any attention scenario @ and call \( c_@ \) the complete appearance that the subject’s experience thus presents. For example, suppose that in one of the simple displays just mentioned there are a figure \( L \) (an image of a rose, a colored dot or Gabor patch) on the left side and a qualitatively identical figure \( R \) on the right side. Let the attention scenario @ be a scenario where the subject is focusing her attention on \( L \). \( c_@ \) would then be the way the world appears to the subject in that scenario. Scientific research shows that this way of allocating attention in @ affects appearance in a variety of ways. All of these effects of attention on the appearance of the world (as well as any other) will go into \( c_@ \). It contains a complete specification of how the

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29 For some discussion of these issues see (among others) Crowther (2009) or Siewert (forthcoming).


31 Due to attention being focused on \( L \), that figure would probably: have a higher apparent contrast than figure \( R \) (Carrasco, Ling and Read 2004), look somewhat bigger than \( R \) (Anton-Erxleben et al. 2007), have a somewhat higher apparent spatial frequency than \( R \) (Gobell and Carrasco 2005), its color might look more saturated than \( R \)’s (Fuller and Carrasco 2006), its look might be more determinate spatially than that the look of other parts of the world (Shiu and Pashler 1995; Montagna, Pestilli, and Carrasco 2009), and its look might be less determinate temporally (Yeshurun and Levy 2003), and the apparent spatial distances between the various objects your are perceiving might be “warped” in ways characteristic of @ (Liverence and Scholl 2011); indeed maybe attention to \( L \) suppresses much of the background information so that the subject is only aware of the gist of the surrounding scene (Mack and Rock 1998).
world appears to the subject in that concrete scenario @ (I will speak of the subject’s experience presenting \( c_@ \)).

The crucial step towards the counterpart claim is to recognize that this way the world appears to the subject is independent of how her experience gets to present that appearance. To be more precise: the way the world appears to the subject in @ (that figure \( L \), for example, looks to have a higher contrast that figure \( R \)) is not constituted by the fact that she is attending to \( L \). We thus have the following argument from constitutive independence for the counterpart claim:

\[
\text{(CI1) For each attention scenario @, it is not the case that } c_@ \text{ is constitutively dependent on the fact that the subject attends to the aspect(s) of the world she in fact attends to in @.}
\]

Thus, \( \text{(CI2) For any } c_@ \text{, the subject’s experience could have presented } c_@ \text{ without attention or with her attention distributed in some other way (e.g. distributed evenly across her field of consciousness).} \)

Thus, \( \text{(CI3) There exists a counterpart scenario } @^* \text{ that presents } c_@ \text{ (equivalent to the counterpart claim).} \)

I take the step from CI2 to CI3 to be uncontroversial given how I defined counterpart scenarios.

The step from CI1 to CI2 should also be fairly uncontroversial. It is licensed by what I take to be a general modal implication of constitutive independence: if A is not constitutively dependent on B, then A could have existed, occurred or be instantiated (depending on the ontological category of A and B) without B (provided that B does not exist necessarily). For example, if the occurrence of some event \( e_1 \) is not constituted by the fact that it was caused by some other event \( e_2 \), then \( e_1 \) could have occurred without being caused by \( e_2 \). Similarly, if a property is not constitutively dependent on having the causal powers it in fact has, then this property could have been instantiated without having the causal powers it in fact has.\(^3\)

The heart of the argument from constitutive independence is CI1. The main reason to believe that premise is that the subject’s attention is not part of the world as it appears to the subject (it is an aspect of your mental life). This motivation for CI1 becomes transparent if we think, for a moment, of ways the world appears to the subject as properties her experience attributes to some aspect of the world (along the lines of the intentionalist interpretation of the appearance view). If it is indeed phenomenally to the subject as if her experience attributes a property to the world, then that property cannot be constituted by her own mental life. This feature of the intentionalist interpretation of the appearance view should be preserved on any of its interpretations in order to give substance to the notion of a way the world appears to the subject.

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\(^3\) The step from CI1 to CI2 should not be understood as relying on Hume’s Dictum, i.e. the claim that there are no necessary connections between distinct entities (see Wilson 2010 for discussion). On my understanding of constitutive dependency, CI1 is intended to imply the denial of the existence of a fundamental law of nature connecting attention to certain appearances. For this reason, it is compatible with the step from CI1 to CI2 that possibly if two distinct entities are connected through a fundamental law of nature, then one necessitates the other even though both are distinct entities.
The motivation for CI1 can be seen better by addressing two important objections to it.

First, someone might wonder about the level of determinateness with which some aspect of the world is presented to the subject. This level is not an aspect of the world (unlike, say, a blurry image) and probably does not appear to be one (see Tye 2003 for the relevant distinction), yet it is probably affected by attention. Could it not, against CI1, be constituted by attention (Stazicker 2011a; see also Nanay 2010)?

No. Increase of determinateness is not even actually limited to attention. The effect of attention on spatial resolution is mimicked by foveation (Yeshurun and Carrasco 1998), and it might be mimicked by putting on your glasses (Tye 2002). Since the resolution of visual experience does not appear to be part of the environment, but instead appears as resulting from the subject-environment relation, it is this relation that needs to be changed in order to mimic the effect of attention.33

Second, someone might wonder about non-reductive views of appearances. How about, for example, having an attended appearance or an appearance as attentionally salient or calling-for-attention? If there were such appearances, would they not undermine CI1, since these appearances look like they are constitutively tied to attention?

No. They would not. Let us first note that in order to avoid triviality appearances that are constituted by the subject’s attention cannot simply be defined into existence by defining for any phenomenal character, an appearance the world has when the subject’s experience has that phenomenal character. Attended appearances must indeed be ways the world strikes the subject (they must be experienced as “out there” or as “in or on the perceived object”).34 The fact that you can only speak and think of a certain appearance by using the term or concept of attention or its cognates provides no evidence that this appearance is constituted by attention, just like having only “The one who proved the Incompleteness Theorem” as a way of speaking and thinking of Gödel provides no evidence that it is essential to Gödel that he proved the Incompleteness Theorem. Thus, even if our initial grip on the relevant appearance is only via attention to some aspect of the world (i.e. even if what fixes reference to this appearance is simply a description like ‘an attended appearance’), the appearance itself is not constituted by the process used to fix reference to it. If something is a way the world appears to the subject, then it can exist unattended however we talk or think about it.35

This completes the argument from constitutive independence for the counterpart claim.

33 Stazicker 2011a accepts this claim (p. 115). He seems to reject the difference claim, though, claiming that in the counterpart scenario “the subject’s experience has just the phenomenology of attention.” (p. 116). I argue against this in Section 2.3 below.


35 Within the intentionalist interpretation of the appearance view suppose that representing relations to or dispositions for experiences with a certain phenomenal character accounts for the phenomenal character of experience, while nevertheless their relational or dispositional character makes no phenomenal contribution so that they are experienced as “in or on the perceived object” (see Shoemaker 1999, 2006). In this case there exists for each such relational property R an Edenic non-relational property E such that representing E is phenomenally identical to representing R.
One might ask though whether we can positively conceive of the counterpart scenarios. The answer is: yes, you can positively conceive of them by using the following construction scheme. Start by considering an *Edenic world* without attention: a world that is exactly how it appears to the subject in @. In that Edenic world it is not the subject’s uneven distribution of attention that results in the presentation of the appearance $c_@$. Rather, there is a pre-established harmony between world and subject that results in that appearance (a harmony we just stipulate for the sake of the argument).

Now add some complications (which arise because there are some appearances such that the world cannot be as it appears).

First, the way the world appears in some experiences might be contradictory. This rules out the existence of Edenic *worlds*. In the waterfall illusion, for example, one might say that something looks to be moving and at the same time looks still. In order to accommodate this option the counterparts should be thought of as what we might call *pointwise Edenic fragments*: there is an Edenic world fragment corresponding to each appearance (i.e. one for looking moving and one for looking still), but the scenario need not compose a complete and consistent world.

Second, consider that attention might affect how determinate the appearance of a fully determinate and non-fuzzy object or property might be (see above). Our construction so far cannot accommodate this effect since arguably even a fragment of the world is necessarily fully determinate and instantiates the determination of each determinable property together with that determinable.

In order to get around this, the increase of acuity or determinateness at the focus of attention should be built into the construction of $@^*$ by affecting the non-attentional subject-world *relationship*: we provide our subject with a visual or auditory aid that increases her acuity for the part of her visual or auditory field that corresponds to the focus of attention. Suppose, for

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36 See Chalmers 2002 for the notion of positive conceivable (I have in mind here his *ideal* positive conceivable). A further argument for the existence of no-attention counterparts thus would be an argument from positive *conceivability* such as the following.

PC1. For all $x$, if $x$ is positively conceivable, then $x$ is possible.

PC2. For any attention scenario @, its no-attention counterpart $@^*$ is positively conceivable.

Thus, (PC3) For any attention scenario @, its no-attention counterpart $@^*$ is possible.

Given the difficult issues associated with PC1, I am not directly relying on the argument from positive conceivable here, though.

37 Chalmers (2006). Chalmers constructs Edenic worlds in terms of representational *content*. The way I use the notion here, thus, is slightly different from his and generalizes from appearance contents to appearances. Given Chalmers fairly broad take on the intentionalist view, the notions, though, are so close that it seems justified to piggy-back on Chalmers’ terminology.

38 For example, consider that in @ $L$ looks to be a higher contrast than $R$ (though in fact they are both the same contrast). In the Edenic world, then, $L$ would actually have a higher contrast than $R$, just like it appears to the subject.

39 Crane 1988, Pautz 2008. Chalmers 2006, at least provisionally, defends the claim that there is an Edenic possible world. He addresses neither of the two problems I mention here (Chalmers focuses on color experience).
example, a scenario where our subject wears less than perfect glasses that give her a slightly blurry view of some parts of her visual field, while they provide a clearer view of other parts. Arguably, such glasses would—like attention—differentially affect the spatial determinateness of the appearances a subject is presented with. Alternatively, we might suppose that our subject has perceptual systems that are noisier in their representation of some parts of her visual field than others. Either way, we get an Edenic counterpart that mimics the distribution of determinateness in @.

Let me sum up this section. I have presented the argument from constitutive independence to show that if appearances are taken seriously as ways the world appears to the subject, then there must be counterparts to each attention scenario. I have also shown how to positively conceive of these counterparts by constructing Edenic scenarios (maybe fragmented, and partly incorporating non-attentional aspects of the subject-world relation) for each attention scenario @.

### 2.3 In defense of the difference claim

Let me then move to the second part of the counterpart argument, the difference claim. According to the difference claim, there is a phenomenal difference between (at least) some attention scenario @ and its counterpart @*. One main support for this claim is phenomenal. What it is like to focus your attention on figure L on the left is different from what it is like to be in any scenario where you do not focus your attention on anything in particular at all. This is true even if, for example, through the imperfect glasses just mentioned things on the left in that scenario look just as clear and determinate, and just as blurry and indeterminate elsewhere; indeed even if the two scenarios are matched in all appearances, experiences in no-attention scenarios just miss part of the phenomenal character of attention. It makes a clear phenomenal difference whether the world appears some way because the subject attends to something, or because of something else (like the pre-established harmony of our Edenic scenarios).

I find that almost everyone considers the difference claim to be intuitively obvious.

Yet, we don’t have to rely on phenomenal intuitions on their own. We can also support the difference claim epistemically: a subject will be able to discriminate @ from @*. If, for example, she were first in @* and then put in @ she would notice a difference.

The subject’s discriminatory ability here is similar to her ability to distinguish a scenario where she is moving her body with respect to her environment from a otherwise identical scenario where her environment is moving with respect to her body. If a subject were first in a scenario where her environment rotates and then in one where she is moving her head, she would notice a difference. Subjects have similar discriminatory abilities for the case of attention. We thus have the following.

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40 The determinateness view in fact is Tye’s (2002) account of blurry vision. Similarly, lenses might also be used to get indeterminate experiences of color.

41 I further exploit this analogy in Section 4.
The Knowledge Claim  A subject is in a position to know (immediately and on the basis of introspecting her experience) whether she is in @ or in @*.42 (the knowledge claim)

When considering the knowledge claim we have to consider somewhat idealized introspective capacities. The subject might not actually always know whether she is in @ or in @*: she might be too tired or have some other form of discriminatory impairment. But this idealizing does not distract from the main force of the knowledge claim that appeals to what the subject is in a position to know.43 Taken in this way, I consider the knowledge claim to be argumentative rock bottom.

One type of argument from the knowledge claim to the difference claim would be to rely on a general principle about self-knowledge according to which you can know immediately and without (external) observation whether you are in mental state S1 or in mental state S2 only if S1 is phenomenally different from S2.44 Yet, such a general principle would be highly controversial. There are many accounts of, say, one’s self-knowledge of (the contents of) one’s beliefs, intentions or intentional action that do not assume that beliefs, intentions or intentional actions have (in David Pitt’s (2004) words) a “proprietary phenomenology.” (e.g. Moran 2001).

Fortunately, the general phenomenal difference principle is not required for my argument. My argument, rather is the following argument to the best epistemic explanation.

(EE1) A subject is in a position to know (immediately and on the basis of introspecting her experience) whether she is in @ or in @*.45 (the knowledge claim)

(EE2) The best explanation of EE1 must appeal to a phenomenal difference between @ and @*.

Thus, (EE3) There is a phenomenal difference between @ and @* (equivalent to the difference claim)

Why then believe EE2? Let me start with a feature that positively supports a phenomenal explanation. You are not just in a position to somehow know whether you are in @. Suppose you are first in @* and the suddenly your attention systems are turned on (or become focused) and you are in @. You are in a position to notice a difference between being in @ and being in @*. This aspect of your self-knowledge is hard to explain without a phenomenal difference.

The case of attention thus is a counterexample to the following claim by Byrne (2001):

42 Thanks to A4 for originally suggesting a point along those lines.
43 The reader might indeed notice a certain similarity to an argument for intentionalism provided by Byrne (2001). Evidently, I do not accept his form of intentionalism. I have some sympathies with a non-standard form of intentionalism though (as will become clearer in Section 4 below).
44 A principle like this one seems to be at play in Pitt (2004). He there argues that the only explanation of why subjects are able to know immediately and without observation which thought they are currently thinking, is that there is a phenomenal difference between thinking a thought with one content rather than thinking one with a different content (see his principle K2).
45 Thanks to A4 for originally suggesting a point along those lines.
Suppose that [two phenomenally different experiences] e and e* are the same in content. Then the world seems exactly the same to the subject throughout e and e*. Concentrating on the world as it currently appears to her and recalling the way the world appeared a moment before, she will not notice a change in phenomenal character, because she has no basis for noticing one. Any other information she might extract from her experiences, if it is not information about the way the world appeared or appears, is not relevant. So, if the subject does notice a change in phenomenal character, e and e* are not the same in content. (p. 211)

In contrast to what Byrne claims, in the attention case it is obvious that even though the world seems exactly the same to our subject in @ and in @* she would be in a position to notice a change in phenomenal character. We don’t yet fully know what the basis for that discriminatory capacity is. What we do know is that subjects have that capacity. The full explanation of the knowledge claim will need to show how it is that the relevant phenomenal difference is epistemically accessible to the subject. I will get to this in Section 4 below.

Let me now turn to features of the attention case that rule out alternative explanations of the knowledge claim.

Consider the claim the subject knows that she is in @ on the basis of her intention to attend to L. Self-knowledge of intention (like self-knowledge of belief) might not rely on a phenomenal difference between intentions (or beliefs), and so this might look like an alternative non-phenomenal explanation of the knowledge claim. Call this the *intention strategy*.

It is unclear whether the intention strategy is sufficient to explain self-knowledge of intentional action. Knowledge that you are intending to do something does not seem to be sufficient for knowledge that you are actually doing it. Knowing that you are raising your arm plausibly also requires knowing that you followed through on your intention to raise your arm (Peacocke 2008, p. 284).

Yet, even if the intention strategy would work for intentional action, it would apply only to voluntary attention. Yet, there are many cases of involuntary attention where you attend to something without any intention to do so. Your attention might have been captured by some salient object or event, or your attention might have involuntarily drifted. Thus, the present proposal cannot provide a general account of how subjects know whether they are in an attention scenario @ or its counterpart @*.

In response to this reply my objector might propose a two-pronged strategy. True, she will say, the intention strategy works only for voluntary attention. But there is a different story for involuntary attention. In this case, the subject knows that she is in attention scenario on the basis of how salient the object or event that drew her attention to it appeared to her.

The two-pronged strategy amounts to denying the *phenomenal difference claim* for the case of voluntary attention, while denying the *counterpart claim* for the case of involuntary attention. You can know whether you are in an involuntary attention scenario rather than in a no-attention scenario, only if there is no counterpart.
Yet, the counterpart claim is not false for involuntary attention: something might appear as salient (or as calling out to attend to it), while you do not attend to it, just like a comfortable chair after a long hike in the mountains might appear as a salient possibility for sitting down (or as calling out to sit down on it), while you are nevertheless not sitting down on it. You cannot know that you in fact sat down on that chair simply on the basis of its calling-to-sit-on appearance; you must also know whether you responded to the chair’s call and actually sat down. Similarly, you cannot know that you attend to a salient object, simply because it appears as salient or its calling-to-attend-to appearance. You must know whether you responded to the object’s call and actually attended to it.

Finally, even if the rejection of the counterpart claim would have some plausibility for attentional capture, it is completely implausible for cases of attention drift. When your attention idly drifts nothing need appear especially salient or attention-worthy. Yet, it is characteristic of such drifts of attention that when prompted we come to notice to what we are now attending (even though we are, of course, not constantly noticing such drifts). So there would still be an important category of cases where the two-pronged strategy finds no application.

Overall the argument to the best epistemic explanation strongly supports the difference claim. Furthermore, the latter also stands on its own.

Let me now sum up this and the last section. I have argued for the counterpart claim and the difference claim: attention scenarios are phenomenally different from scenarios that match them in appearances. This completes the counterpart argument. We should thus reject the appearance view. It does not capture the phenomenal contribution of attention.

3 The Structure of Experience

What then is the phenomenal leftover that the appearance view misses? Why is it resistant to treatment in terms of appearances? Might there even be a type of leftover that is plausibly common to all cases of conscious attention and constitutes its phenomenal character (see Section 1.3)?

Someone might propose that we need intrinsic qualitative properties of experience (“qualia”, see Block 1996), or some kind of sense-datum, awareness of which cannot be included among the appearances (maybe in O’Shaughnessy 2000?).

46 The guidance of unconstrained attention in everyday circumstances plausibly is the result of a complex confluence of top-down and bottom-up factors. It is hardly ever it the result of an explicit decision, but attention also is hardly ever captured simply on the basis of an extremely salient stimulus. The subject’s task and goals, her prior experience, and implicit memory work together with local stimulus factors such as novelty, sudden onset, reward value, etc, and global stimulus factors such as stimulus similarities, and global scene arrangement (in humans the guidance unconstrained attention is best studied through its correlation with eye-movements; but work in monkeys shows that the same complex interplay of top-down and bottom-up factors is also present in covert attention when eye movements are prevented (see Wright and Ward 2010 for a fairly up-to-date overview of the empirical research on these issues).
Both of these suggestions would be radical departures from the appearance view. They are problematic for various reasons. Famously, they seem to impose a qualitative “veil” between the subject and the world as it appears to her. The more important defect of such views, though, is that they do not actually seem to capture the phenomenal difference between attention scenarios and their counterparts. They don’t show why the appearance view is incomplete. If such views were the only alternatives to the appearance view, we might have to reconsider our case against it.

On my proposal – announced at the beginning of this paper – no such radical departure is needed. When you attend to one thing rather than another your experience is “positioned” differently with respect to the appearances. What the appearance view misses is the structure of consciousness, i.e. the way the parts of a subject’s experience are put together. Consider how the attention scenario @ differs phenomenally from its counterpart. What immediately springs to mind is that in @ your experience of L is at the center of consciousness, while in the counterpart nothing is more central in experience than anything else. Your experience in @* is flat while in @ it is structured.

The proposal thus is the following.

**Structuralism** Attention structures complex experiences so that some of their parts are more central than others.\(^{47}\)

The structure of experience may be simple or complex. There may be one central element or many, and the structure can take various forms including the shape of a complex “attentional landscape” (Datta and DeYoe 2008). The structure of experience thus is present whether attention is highly focused or (partially) divided or distributed. The fact that your experience is structured is what constitutes the phenomenal character of attention in all cases.

How then should we think of the relevant structure?

Your experience in @ is a complex experiential event with at least two experiential events as parts – your experience of L and your experience of R (of course, there are other parts as well). Considered by itself, each of these parts may be exhaustively characterized in terms of appearances. Let the experience of L and the experience of R, for example, be instantiations of an experiential presentation relation between a subject and a certain appearance, one that characterizes L and one that characterizes R. We can call these appearances c\(_L\) and c\(_R\) respectively and the experiences e\(_L\) and e\(_R\). For example, we have e\(_L\) = the subject S is presented with c\(_L\). (What it means for a certain appearance to “characterize” L will depend on one’s take on appearances).\(^{48}\)

\(^{47}\) See also Watzl (2011a). Similar ideas can be found in Gurwitch (1964), Evans (1970), O’Shaughnessy (2000), and Arvidson (2006)

\(^{48}\) So, there would be differences between, for example, intentionalist and non-intentionalist views of appearances, as well as between various forms of intentionalist views. In the present case, one might, for example think of c\(_L\) as like a complex demonstrative <that-F> (Burge 2010), or as a property cluster instantiated in non-illusory circumstances by L (Johnston 2004, Pautz 2010a,b).
The subject’s complex experience $E$ now is built from parts like $e_L$ and $e_R$.

On the structuralist proposal the appearance view remained incomplete because of its overly simplistic account of that building relation, i.e. on the appearance view there is no structure to the way complex experiences are built from their parts.

The appearance view might, for example, see a complex experience $E$ as the mereological sum of phenomenally unified simple experiences. We would get something like the following (where ‘$a + b$’ depicts the mereological sum of phenomenally unified experiences $a$ and $b$; see Bayne and Chalmers 2003 or Bayne 2010):

**MERELOGICAL BUILDING**  
$E = e_L + e_R$ (i.e. $S$ is presented with $c_L$; $S$ is presented with $c_R$)

An appearance intentionalist could even dispense with the mereological characterization in favor of a characterization of a single event with a conjunctive content as follows (where ‘$<x \& y>$’ is a conjunctive operation on contents $<x>$ and $<y>$; see Tye 2003):

**CONJUNCTIVE BUILDING**  
$E = S$ is presented with $<c_L \& c_R>$

None of this captures the center-periphery structure of experience. In contrast to these proposals we need structured building. The way a complex experience is made up from simpler experiences is organized. The complex event should be represented by an ordered pair where the relevant ordering is provided by a relation ‘$>'$ that depicts which experiential part is more central in the subject’s experience than the other (its converse ‘$<$’ would be the relation ‘is more peripheral than’). So we have:

**STRUCTURAL BUILDING**  
$E = e_L > e_R$

The experience of $L$ is more central than the experience of $R$. According to the structuralist proposal the parts of experience thus bear phenomenally significant relations to each other. The ordering of the complex experiential state would be lost when considering only mereological or conjunctive building. What the counterpart argument shows, according to this proposal, is that the ordering is phenomenally significant (See Section 4 for more explanation of why this structure does not show up in experience as structure in the world).

Structuralism is compatible with much of the spirit of the appearance view. In particular, it is compatible with the claim that each (simple and proper) experiential part of a complex experience consists in being presented with a certain appearance. When we consider a simple experiential state such as the experience of a color chip the appearance view might be the correct

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49 If $x$ and $y$ are propositions then ‘$\&$’ will simply be propositional conjunction. If $x$ and $y$ are non-propositional (e.g. like Burge’s complex demonstratives), then ‘$\&$’ might function somewhat differently.

50 This is a somewhat misleading representation (since $E_L$ is not the fact of $e_L$ being more central than $e_R$.) $E_L$ is itself an event that is composed of two sub-events in such a way that one of them ($e_L$) is more central than the other. A more precise representation might be $E_L = (e_L, e_R)$. Since the same problem of representation affects the mereological view, I chose the less precise but hopefully more intuitive representation.
account of that state considered, as it were, in isolation. Let us say that the appearance view is the correct account of phenomenal qualities.

What the appearance view misses is that besides phenomenal qualities, there is also phenomenal structure that relates the parts of a complex experiential state. In particular, some of these parts are more central than others. This is what structuralism adds to the appearance view. A complex experiential state has an overall phenomenal quality (this is what the appearance view gives an account of), and it has an internal structure (this is what structuralism accounts for). This structure, at least to first approximation, is given by the set of peripherality relations ‘>’ that hold between the various parts of the conscious experience. We can call it the peripherality structure of experience. The phenomenal character of a complex experience is constituted by (a) the phenomenal character of each of its parts, and (b) the phenomenal structure that relates these parts.

3.1 Parts of Experience

A few more words about the notion of a part of experience. As I said experiences, as I understand them, are complex temporally extended events. Understood as such complex events experiences have parts.⁵¹ For example, there are temporal parts: certain events that form a part of the stream of experiences occur before others: an auditory experience of the song of the nightingale might have preceded conscious thoughts about Vaughan William’s musical poem *The Lark Ascending*, and a conscious desire for a fresh apple.

But complex events do not just have temporal parts. In general, events have a “multi-dimensional part structure.”⁵² The types of parts of an event are determined by the structure of that event. Consider a performance of Vaughan William’s orchestral piece of music. Only considering its temporal parts would leave out the most important structure of the event: how the concert is made up from the performance of the violin solo and the performance of various parts of the orchestra, the violins and violas, the cellos and flutes, etc. The musical structure of the piece induces its own type of parts.

The attentional structure of the stream of consciousness similarly imposes its own type of mereological structure to the type of event experience is. These parts of an experience are events such as the subject’s auditory experience of the sound of the nightingale, her auditory experience of the sound of a waterfall, her visual experience of figure *L*, her visual experience of figure *R*, as well as her experience of pain in her foot. The relevant parts of the experience are just those “aspects” such that attentional relations hold between them. Structuralism, thus, does not presuppose a preferred and attention-independent partitioning of the stream of consciousness into experiential “atoms.”⁵³

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⁵¹ For one example of a formal account of the structure(s) of events see: Pianesi and Varzi (1996).

⁵² For this terminology see Moltmann (1991, 2003).

⁵³ We need the flexibility in dividing the stream of consciousness into parts just mentioned in order to account for the variety of ways attention can be deployed: attention can be directed at objects (figure *L* vs. figure *R*), at features
The question remains whether the assumption that there are parts of experience is compatible with the unity of consciousness.\textsuperscript{54} The answer is yes. Indeed if structural building occurs and if a certain condition holds on the way all parts of experience are attentionally related (peripherality connectedness, see below) holism about consciousness follows: the phenomenal whole will be more fundamental than its parts such that the phenomenal character of the whole does not even supervene on the phenomenal characters of its parts (since an unstructured collection or “bundle” of the parts leaves out phenomenal structure). Furthermore, since – as I will argue in Section 4 below – the subject is aware of structuring her experience, she is aware of her experience as one complex whole by being aware of structuring just that whole. As I will suggest there, the status of a phenomenal quality as a part of a fully subjective experience might depend on the subject’s activity of structuring the whole of which it is a part. Since the relata of the structure thus would not be fully subjective experiences (i.e. experiences with subjective character in addition to qualitative character; see Levine 2001 or Kriegel 2009) without the holding of these relations, the metaphysical priority of subjective phenomenal wholes over their parts follows.\textsuperscript{55} Complete subjective points of view are more fundamental their elements.

3.2 Some Developments

With the help of the peripherality structure we can make sense of the idea that some part of your experience might be further in the periphery than some other part. While looking at the screen in @ you might also be visually aware of, say, the edge of the computer screen. Call this experience e\textsubscript{Edge}. In this case then: e\textsubscript{L} > e\textsubscript{R} and e\textsubscript{L} > e\textsubscript{Edge} and e\textsubscript{R} > e\textsubscript{Edge}. That is, your experience of the edge is peripheral to both your experience of L and your experience of R. In this sense, it is more peripheral than your experience of R.

We can apply this idea not just within a single sensory modality, but also cross-modally. While you look at the screen, you might be dimly aware of some music in the background. Maybe e\textsubscript{Music} is peripheral even to e\textsubscript{Edge}.

In terms of the peripherality relation, we can define what it is to be the focus or object of conscious attention. Let e\textsubscript{a} be an experience as of object, event or property a. We then have (during a specific interval of time):

\begin{equation}
\text{FOCUS OF ATTENTION} \quad a \text{ is the focus of attention iff } \exists x (x \neq a \rightarrow e_x > e_a)
\end{equation}

(contrast vs. color) or at states of affairs (figure L’s being a certain contrast or it’s being a certain color). The elements related by the attentional structure thus cannot always be relations to complete propositional contents (because otherwise we cannot explain the phenomenal difference between attending to an object, its color, its contrast, or it’s being that contrast. I discuss this as a problem for an attitude view of attentional experience in Watzl (in preparation)).

\textsuperscript{54} See Searle 2000 or Tye 2003 for this worry.

\textsuperscript{55} The argument here parallels to the one concerning holism about the physical world in Schaffer 2010.
In our example, \( L \) is the focus of your attention, because all other parts of the subject’s experience are peripheral to her experience of this figure. We can say that an experience of the focus of attention (which, at least in the case of perceptual experience normally is an external object, event or property) is at the center of consciousness.

**Center of Consciousness**  
\[ e \text{ is at the center of consciousness } \iff \exists x (e_x \neq e \rightarrow e_x > e) \]

Note that nothing about the peripherality structure as defined guarantees that there always is a (single) center of attention (and its corresponding focus). For that to be the case we would need our total experience (assuming connectedness, see below) to be bounded from above with respect to peripherality. Most likely, our experience is not bounded from above in this way. Attention probably can, for example, be divided (roughly) equally between two or more objects or events.\(^{56}\)

One simple possibility, for example, is that attention is split between two objects as follows.

**Split of Attention**  
\[ \forall x (x \neq a \land x \neq b \rightarrow e_x > e_a \land e_x > e_b) \]

Splits of attention are still fairly simple structures. Ordinary experience arguably is much more complex. When dealing with our environment, for example, the many objects we are interacting with might all be somewhat focused, while the regions around them are somewhat peripheral to them. Indeed, there might be regions within an object that is at one of the foci of attention that are experienced peripherally (like a specific branch on the tree you are watching).\(^{57}\) For these cases arbitrary “attentional landscapes” (Datta and Deyoe 2009) can be constructed.

The notion of a center of consciousness has a natural dual. We can call it the fringe of consciousness. It is defined as follows.

**Fringe of Consciousness**  
\[ e \text{ is at the fringe of consciousness } \iff \exists x (e_x \neq e \rightarrow e > e_x) \]

In our example, your experience of the music might be at the fringe of your consciousness. The way a fringe experiences presents an aspect of the world is not constitutively different from the way a central experience presents it (though they actually might be less determinate). Rather, they stand in a certain phenomenal relation to the other parts of your experience. Just as for the center nothing in the apparatus guaranties that every experience has a fringe. Yet, it seems more plausible that experiences all do have fringes and that peripherality structure thus is bounded from below.

What more can we say about the peripherality relation? On a natural understanding the peripherality relation induces a strict partial order between the parts of your experience: i.e. no experience is in the periphery of itself (\( \neg \exists x (e_x > e_x) \)); if one experience is in the periphery of a

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\(^{56}\) E.g. Müller et al. 2003, or Kawahara, and Yamada (2006). Sustained division of attention, though, might require training (Jans, Peters and De Weerd 2010).

\(^{57}\) An interesting discussion of these issues can be found in Siewert (forthcoming).
second one then that second one is not in the periphery of the first ($\forall x,y \, (e_x > e_y \rightarrow \neg (e_y > e_x))$); and finally that if one experience is in the periphery of another one, and if that second one is in the periphery of a third, then the first is in the periphery of the third ($\forall x,y,z \, ((e_x > e_y \& e_y > e_z) \rightarrow e_x > e_z)$).

In order for the peripherality relation to be a building relation we also might want a condition to ensure that all the parts of a complex experience (which is what is getting structured) are connected in the right way. Everything said so far leaves open that a subject may structure a complex experience $E$ that has attentional parts $e_1$, $e_2$, $e_3$ and $e_4$, but only $e_1 > e_2$ and $e_3 > e_4$ (while no relation between $e_1$ and $e_4$ obtains).

One might suggest that peripherality is connex with respect to each complex ($\forall x,y (e_x > e_y \lor e_x > e_y)$). Yet, this seems too strong. There might, for example, be two experiences at the fringe that are not peripheral to each other (though they are both peripheral to the center).

Yet, there is a slightly weaker notion that might still apply. Let the notion of a peripherality path between two experiences abstract away from the directedness of the peripherality relation. We can define it via the notion of a peripherality edge, where there is a peripherality edge between $e_x$ and $e_y$ just in case $e_x > e_y$ or $e_y > e_x$. There is a peripherality path between $e_x$ and $e_y$ (which I will abbreviate as ‘$e_x -- e_y$’) in case there is a sequence of peripherality edges between $e_x$ and $e_y$. Now each complex is plausibly peripherality connected in the following sense (letting ‘$x \in y$’ stand for ‘$x$ is an attentional part of $y$’).

**PERIPHERALITY CONNECTEDNESS** $\forall E,x,y \, ((e_x \in E \& e_y \in E) \rightarrow (e_x -- e_y))$

Toward the end of this paper we will see that whether a subject’s total experience is peripherality connected will bear significantly on how the subjectivity and the unity of consciousness might be connected (the domain of the variable ‘$E$’ thus will be total experiences).

What I have said in this section leaves open further questions about peripherality structure.

For example, does the fact that one experience is in the periphery of another have a reductive explanation? Along the lines of William James’ idea quoted at the beginning of this paper someone might try to rephrase talk of peripherality in terms of notions such as relevance or interest. Yet, since we can focus attention on something whether we are interested in it or not, this form of reduction is unlikely to succeed. By contrast, I think it is highly plausibly that the structure of experience is realized in computational and neuronal structure in our brains.

There might also be more attentional structure than described so far. For example, with enough structure the ordering of experiences by the peripherality relation could be translated into an assignment of *degrees of centrality* (or attentiveness) to each part of experience. This, in my

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58 The fMRI studies by Datta and DeYoe (2009), for example, can be interpreted with a bridge principle like this: if you attend to region $R$, then neuronal activity in those neuronal areas with receptive fields in $R$ is strengthened relative to other regions. Relative strength of activity corresponds to relative centrality, and relative inhibition of activity corresponds to peripherality.
view, is an empirical question that will be answered by a psychological and neuroscientific investigation the structure of attentional space and its neuronal underpinnings.

For present purposes we can leave these further questions open (see Watzl forthcoming a for more detail and discussion). All we need is that a total state of consciousness can be represented by listing its parts, the monadic phenomenal properties of these parts, and the peripherality structure that characterizes the relations between these parts.

4 Reflexive Awareness

4.1 Awareness of Structuring

Some other questions, though, do need to be answered. I said that subjects would be in a position to notice a phenomenal difference when their attention systems are being turned on and their situation changes from the counterpart of an attention scenario to that attention scenario itself. And I have suggested that what makes that phenomenal difference is the structure of experience. Yet, it would be unsatisfactory to end here. While I have argued that there is some phenomenal difference between attention scenarios and their counterparts, one wants to hear more about why the structure of experience is the right kind of phenomenal character that could make that difference. In other words: why is it phenomenally manifest that phenomenal structure (unlike phenomenal qualities) is not part of how the world appears to the subject? Relatedly, why would the subject be in a position to know whether her experience is structured?

We can begin to make progress by conceiving of the structure of experience as constitutively deriving from a process or activity of structuring. The structure is an element of the subject’s point of view and not of the appearances because unlike appearances the structure is constituted by the subject’s mental activity. The process of structuring stands to the structured experiential state like the activity of holding of a pen stands to the state of the pen being held. It is constitutive of the holding of a pen that it maintains that type of state. Similarly, it is constitutive of the state of a pen being held that it is maintained by a process of holding it. The process of structuring and the state of an experience being structured can thus be inter-defined (see also Watzl 2011a,c): the temporally extended process consists in maintaining a certain structured state for a certain period of time.\textsuperscript{59,60}

The connection between structure and structuring, I am about to argue further, is epistemically accessible to the subject, because she is aware of the process of structuring. In this awareness her

\textsuperscript{59} For further discussion of the temporal dynamics of this process see Watzl (forthcoming a) and Watzl 2010. Crowther (2009) contains a detailed and helpful discussion of what, in my view, is a special instance of the temporal shape of attention. Crowther (2010) discusses what is agential about the relevant process. Watzl (2010) also develops a notion of activity so that all forms of attention are activities. These activities, roughly, are personal level, internally guided processes. Not all of them are intentional actions.

\textsuperscript{60} Note that the process/state duo is different from the temporally more localized event of shifting attention from one thing to another. We can define the event of shifting as a change in the state.
own structuring of experience is manifest to the subject. The following passage from Gustav Fechner (quoted by William James) illustrates the point.61

“A gray paper appears to us no lighter, the pendulum-beat of a clock no louder, no matter how much we increase the strain of our attention upon them. No one, by doing this, can make the gray paper look white, or the stroke of the pendulum sound like the blow of a strong hammer. - everyone, on the contrary, feels the increase as that of his own conscious activity turned upon the thing.” (Gustav Fechner; approvingly quoted in James 1890/1981, p. 426).

We know that Fechner was wrong in one sense: attention does affect appearances, as Carrasco and others have shown.62 But he was right about something else: it is phenomenally manifest that one central phenomenal effect of attention is not an effect on appearances, because we “feel” this effect as deriving from our own activity. Because the subject is aware of creating and sustaining the structure of experience she is in a position to know that this structure is her own contribution to phenomenal character rather than a contribution coming from the world (thus giving rise to the knowledge claim).

We can now further complete the explanation of the knowledge claim. The reason a subject is in a position to differentiate the phenomenology of an attention scenario from a scenario that is the same in how the world appears to her but without attention is that the subject is aware of herself bringing about and sustaining what makes the relevant phenomenal difference (which is the structure of experience).

We can compare this explanation to the following (already hinted at on p. 12 above). Suppose our subject, after having looked at the display with figures L and R, turns her head. Her visual experience would change radically. Previously her experience was as of L and R now it is, say, as of the bush of wild roses that stands outside. The subject will feel no inclination to attribute the change in her experience to a change in the world. The obvious explanation is that she was aware of having moved her own head (whether proprioceptively or through a different form of awareness).63 Since she is aware of having herself produced a change in her bodily position with respect to the environment, she will not be inclined to believe that her environment has changed.

I claim that the case of attention is similar. The role of the positioning of the body is now played by the structure of experience. The subject is aware of bringing about and sustaining that structure and therefore feels no inclination to attribute the structure to an aspect of her surroundings.64

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61 Ned Block (2010) also uses cites a part of this passage in a relate context.

62 While he probably was right about the piece of gray paper, had Fechner looked at a gray semitransparent image instead (as in Tse 2005, and discussed in Block 2010) he should probably have reached a different verdict: in this case attention does affect apparent brightness (though it makes things appear darker, not “lighter”).

63 E.g. awareness of agency (see Bayne 2008 for an overview).

64 In the perceptual case subjects are aware of bringing about only the structure of experience. In the case of imagination they are aware of bringing about structure and instantiation of a certain content. Consequently when
There are many ways a subject may be aware of her activity of structuring her experience around her perception of figure L. In the case of covert attention (where she moves her eyes), she might, for example, look in the mirror and observe her behavior. In the case of overt attention (where her eyes don’t move) she might observe a display that indicates brain activity corresponding to attention to L. In these cases attention would be present to the subject as an event in the world, as an appearance. Such awareness could therefore not explain why she would attribute the result of what is aware of to herself. The relevant form of awareness of one’s own attending must take a specific form; it must be awareness “from the inside” or as I shall call say reflexive awareness (as in “being directed at oneself” not in “like a reflex”).

I therefore suggest that the best explanation of the resistance of the structure of experience to a treatment in terms of appearances must appeal to the following claim:

**The Reflexive Awareness Claim**  The subject is reflexively aware of structuring her complex experience.

According to the reflexive awareness claim when a subject attends to something she has double awareness. She is aware both of what she is attending to, as well as of her own attending to it.  

The reflexive awareness claim in my view is true of both cases of voluntary and cases of involuntary conscious attention. In the first case, the process of structuring is controlled or guided by the subject’s intentions or goals (and in this sense an intentional action), whereas in the second case the process occurs without such intentional or voluntary control (e.g. when attention is grabbed by a salient stimulus, or drifts involuntarily). On the view I am about to develop reflexive awareness is an aspect of the phenomenal character of experience that accounts for your own perspective on the way the world appears to you whether you take that perspective intentionally or not. Reflexive awareness plausibly contributes to a subject ability to voluntarily control attention (see Frankfurt 1987/1988), but it is not sufficient for its voluntary exercise.

Let me now provide some characteristics of reflexive awareness.

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65 This view is close to Eastern philosophical traditions according to which conscious attention is accompanied “by a type of meta-awareness that is not focused on an object per se, but rather is an awareness of that intentional relation itself” (Lutz et al. 2006).

66 Wu (2011a) argues for a view of the phenomenal character of attention that also includes something close to the Reflexive Awareness Claim. But there are important differences: (i) what the subject is aware of on Wu’s view is just selection and not structuring, (ii) the way the subject is aware on Wu’s view is a propositional and cognitive demonstrative thought. On my view, by contrast, reflexive awareness is non-propositional and non-conceptual.

67 As I said in Fn 46 unconstrained everyday attention most of the time probably is the result of a complex confluence of both voluntary and involuntary factors.
4.2 Characteristics of reflexive awareness

First, reflexive awareness implies a form of self-awareness. The subject is not just aware of someone’s attending but of her own attending. Furthermore, she is aware of herself as subject. By contrast, when she looks into the mirror or to the display of brain activity, she would be aware of herself as an object that is attending to something. This can be precisified by the following minimal constraint on reflexive awareness:

**Self-awareness** A subject $S$ is reflexively aware of $q$-ing only if $S$ were to possess the first person concept $<I>$ – a judgment involving $<I>$ that is based on that awareness exhibits immunity to error though misidentification with respect to $<I>$.

Consider a subject’s judgment $<I$ am now attending to $L>$ based on reflexive awareness of her attending to $L$. In this case, the subject could not when making the judgment based in this way be in a position to know that someone is attending to $L$, while not knowing that she is attending to $L$. This is to say: when based in this way that judgment will exhibit immunity to error through misidentification with respect to the first person. By contrast, when she judges $<I$ am now attending to $L>$ based on observing the mirror image she might know that someone is attending to $L$ without knowing that it is herself (she might be in a mirror cabinet with her identical twin and might have misleading evidence that through the mirror she is observing the twin while in fact she observes herself. In such a case, the subject would not know that she is attending to $L$ while she would know that someone is attending to $L$).

Note that the self-awareness constraint does not apply only to creatures who possess the first person concept. Creatures that don’t possess this concept may also have reflexive awareness. In their case the condition has to be applied counterfactually as stated. For the purposes of this paper I am neutral on whether anything more than the constraint just given needs to be true to explain the connection between reflexive awareness and first-person judgments. For example whether reflexive awareness needs to have a separable first-person component. My neutrality extends to whether a more positive account can be given for the primitive creatures mentioned above.

Second, reflexive awareness is belief and judgment independent. For example: while our subject is trying to concentrate on the rose in front of her, her attention might have drifted to a buzzing fly that circles around her head. She believes that her attention is still completely focused on the rose because she has not noticed that her attention has drifted and thus she is not aware that her attention is now focused on the fly. Nevertheless, in my view she might still have reflexive awareness of her attending to the fly. Reflexive awareness, then, is awareness of the process that is one’s structuring, and not of the fact that one is engaging in that process. So we have the following feature.

**Property-awareness** A subject might be reflexively aware of her own $q$-ing without

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being aware *that* she is ϕ-ing.$^{69}$

In this respect, reflexive awareness is like perceptual awareness. One might be perceptually aware of the rose without seeing *that* (and believing *that*) there is a rose in front of one (because, for example, one believes that one’s visual system plays a trick on one or that one is otherwise deceived). Given the judgment independence implied by the property awareness claim we should thus not over-intellectualize reflexive awareness by requiring of any subject that has such awareness full grasp of the first person concept or of the concept of attending or structuring. Reflexive awareness is non-conceptual in this sense.

Third, reflexive awareness (again like perceptual awareness) may ground knowledge. It is epistemically basic in the following sense.

**Epistemic Grounding** A subject S is reflexively aware of ϕ-ing *only if*, if S were able to base her introspective judgments or beliefs on that awareness and S has the relevant concepts to make those judgments (including the concept <$I>$), then S would be in a position to know that she is ϕ-ing.

Epistemic grounding is important for the explanatory work of reflexive awareness in grounding the knowledge claim. Epistemic grounding provides an explanation of why the subject is in an epistemic position to discriminate an attention scenario or in its counterpart. A subject is in a position to know that she is in an attention scenario because she is aware of structuring her experience in that scenario. I thus accept that being in a position to know whether you have an experience with one phenomenal character or another must be based in what you are aware of. But what is “in” your awareness need not be a way the world appears to you: it may be your own mental activity given as such.

Epistemic grounding also shows why we needed to idealize in the knowledge claim. In certain cases, a subject might *not* know that she is attending to a certain thing. Failure to have knowledge could either consist in failure to have the required concepts or in problems with basing your judgment on the required awareness. In the buzzing fly case the subject does not know that she is attending to the fly because she hasn’t noticed the attention shift and thus is not able to base her judgment on her reflexive awareness. The explanation here is the same as for perceptual awareness: suppose you are perceptually aware of a fly in the background of your experience without noticing it. Because you cannot base your judgment on your experience you might not know that there is a fly in your environment (see Smithies 2011 and Silins and Siegel forthcoming on the connection between basing and noticing).

Arguably, there is more to be said about the nature of reflexive awareness. A full account would, for example, answer whether reflexive awareness of ϕ-ing consists in bearing an intentional experiential attitude towards ϕ-ing. To decide on this we would probably need to answer whether a subject could have reflexive awareness of ϕ-ing without actually ϕ-ing. Can reflexive awareness be inaccurate or (alternatively) might reflexive awareness of ϕ-ing be an essential part

of what it is to be ϕ-ing (you are, as it were, reflexively ϕ-ing)? I am leaning toward the latter conception (see Kriegel 2004 for a similar form of self-awareness), but we don’t need to decide here (a full account would also relate reflexive awareness of structuring experience to various other forms of self-awareness like the phenomenology of agency).70

For present purposes getting into these debates would lead us from the main path of the paper (I provide a more detailed account of reflexive awareness in Watzl forthcoming). However it is exactly construed: as long as it has the features mentioned in this section reflexive awareness of structuring her experience can explain why a subject would know whether and how she is structuring it.

5 The Subjective Point of View

Let me put the pieces together. Experience has structure and subjects are reflexively aware of structuring their experience. As we saw in the quote from William James that started this paper, it is highly intuitive to think of this as connected to the notions of subjective perspective, spontaneity or subjective point of view. We can now see why.

Of course, it is notoriously difficult to say what the subjectivity of consciousness exactly is. Here is David Chalmers (1996, p. 10):

> This phenomenology of self is so deep and intangible that it sometimes seems illusory, consisting of nothing over and above specific elements such as [perceptual experiences, bodily sensations, conscious thoughts, etc.] Still, there seems to be something to the phenomenology of self, even if it is very hard to pin down.

What I would like to do in the remainder is to connect what I have argued to one of thinking of subjectivity without arguing that this is the right way to think of it (see Levine 2001 or Kriegel 2004, 2009). Consider the experience you are having when listening to (and looking at) the nightingale. On the one hand, there is the qualitative character of your experience: the “Nightingale-ish” way it is like. This is the appearance. On the other hand, there is the subjectivity of your experience: the for-you-ness of what your listing and looking is like for you. Every conscious experience seems to have these two aspects. Subjectivity and qualitative character (see Kriegel 2004, 2009).

One idea about how to think of subjectivity is this: you have a subjective point of view, because you are aware of the way you are engaging the world. Some indeed think that any

70 See Bayne 2008 for an overview. A view of agentive awareness somewhat sympathetic to the view of reflexive awareness in Kriegel 2004 might be in Bayne 2010b.
“phenomenally conscious state will be a state of which the subject is aware.” (Carruthers 2011). Call this the self-awareness intuition about subjectivity.

The mental process or activity of structuring experience, then, will be a process with subjective character according to the self-awareness intuition about subjectivity. There is something it is like for you to structure your experience because you are reflexively aware of that structuring.

From here there are several options.

One option would be to treat reflexive awareness of structuring experience as a special instance of a wider phenomenon. On an atomistic view of subjectivity, there are many other subjective occurrences (from conscious feelings of pain to conscious perceptual experiences). On this view each and every simple phenomenal state has a qualitative character given by which appearance that state presents, and a subjective character given by the subject’s reflexive awareness of being in that state. We get a fairly standard version of a higher-order (or self-representational) theory of consciousness where each subjective state not only presents the world but also itself (see Kriegel 2004, 2009).

It might be worth exploring a different option, though. This one is closer to William James’ idea and takes more seriously the connection between attention and point of view or perspective. On this holistic view of subjectivity, reflexive awareness of structuring is the basis of all subjectivity. On this view you have a point of view because you have reflexive awareness of structuring experience, and you have a specific point of view because you structure your experience in some specific way (thus people who attend differently have different points of view). The idea thus is that experience in general has subjective character because the subject is reflexively aware of structuring her experience.

On this view, simple phenomenal events do not have their subjectivity in isolation from others (as the standard higher order or the self-representation views have it). Rather, we take a complex experiential whole and account for its subjectivity on the basis of the subject’s reflexive awareness of structuring that complex. The holistic view accounts for the self-awareness intuition once we allow the idea that the subject is aware of a complex experiential event by being reflexively aware of structuring the event (a form of “structural” self-awareness).

The holistic view has at least one advantage over the atomistic view: atomistic theories have notorious difficulties to account for the unity of consciousness because being (reflexively) aware of each simple state does not imply that the subject is (reflexively) aware of the complex composed by these simples. While the unity and the subjectivity of consciousness are naturally thought to be intimately connected the atomistic view has no account of that connection. The...
holistic version, by contrast, does not have this difficulty. Indeed, it directly connects the subjectivity and the unity of consciousness: there is only one “act” of self-awareness, which is of an activity or process (of structuring) that unifies simple experiences into structured wholes.\(^{73}\)

In order for the holistic view to have plausibility, though, we would need some further assumptions. I won’t defend those here, but simply offer them for consideration:

a) Most importantly we would need that every experiential event with subjective character is part of an experiential complex so that the subject is reflexively aware of structuring that complex. So, we would need to be convinced that both unstructured subjective (but maybe complex) experiences and simple subjective experiences that are isolated from all structured complexes are impossible.\(^{74}\)

b) We might want to require that each total and phenomenally unified experience is peripherality connected (see p. 25) to ensure that a unique structuring is associated with each unified experience and so to validate that “every subjective phenomenon is essentially connected with a single point of view” (Nagel 1974, p. 437, my emphasis).

c) On pain of threatening regress, we need to rule out that a subject’s reflexive awareness by itself is an event with subjective character (otherwise the subject would also need reflexive awareness of that reflexive awareness, etc.).\(^{75}\)

Assumptions a) - c) are substantial. I defend them in other work.\(^{76}\)

Whether or not these further assumptions are met, I hope that the present paper has convinced that by structuring experience attention forms at least an important element of our subjective point of view on the world. If the further assumptions were met, then the way attention shapes experience might be at the heart of what it is to have a subjective point of view at all.

Let me end by returning to the parable of the two gardens, the garden of satisfaction and the garden of appearances.

What I have argued here is that by lacking attention creatures in the garden of appearances would lack a central element of subjectivity. We are not mere bundles of appearances, because we unify

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\(^{71}\) It is here where the connections between my view and Kant’s are most evident who also seeks to ground the unity and subjectivity of consciousness in the organizing activity of the agent. Yet there are differences as well as similarities. For example, while both Kant and I believe that consciousness is unified through the structuring activity of the agent, for Kant the relevant activity (transcendental apperception) probably involves conceptualization, while for me structuring experience has (at least in the first instance) nothing to do with conceptualization.

\(^{74}\) Even the “flat” experiences in no-attention scenarios would thus need to be viewed as experiences the subject is aware of structuring, though in a distributed way.

\(^{75}\) The most plausible route to go, in my view, is to say that reflexive awareness is that part of a whole that explains why the whole has subjective character without by itself being a subjective event when considered in isolation (see also the self-representation theories in Fn. 71)

\(^{76}\) See Watzl (forthcoming a) for a defense based on both more empirical considerations (such as the role of attention in disorders like hemi-neglect or the split-brain syndrome), as well as more a priori ones (such as appeal to the unification of subjectivity and unity of consciousness).
experience by structuring it and are aware of so doing. What is the element of agency lacking in the creatures of the garden of satisfaction that corresponds to this element of subjectivity? Why are we not slaves to our passions? According to William James, intriguingly, what is crucial is a form of attention as well: “[e]ffort of attention”, he says, “is the essential phenomenon of will” (James 1890/1981). According to this perspective, then, the creatures in the garden of satisfaction are thrown around by their passions from moment to moment because they cannot use their attention to select among what pushes them in one direction or the other (see Wu 2011b), and because they cannot keep their attention focused on their long-term goals in the face of distraction (see Holton 2009). The idea is that attention essentially structures not only consciousness, but also action. If this idea could be made to work and the relevant notion of attention could be connected to the one at play in the present paper, then what was missing in our two gardens might be single faculty. By investigating attention we might thus be able to discern deep connections between two of the most central elements, agency and subjectivity, of who we as minded creatures are.
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