Attention and Synthesis in Kant’s Conception of Experience
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Abstract:
In an intriguing but neglected passage in the Transcendental Deduction, Kant appears to link the synthetic activity of the understanding in experience with the phenomenon of attention (B156-7n). In this paper we take up this hint, and draw upon Kant’s remarks about attention in the Anthropology to shed light on the vexed question of what, exactly, the understanding’s role in experience is for Kant. We argue that reading Kant’s claims about synthesis in this light allows us to combine two aspects of Kant’s views that many commentators have thought are in tension with one another: on the one hand, Kant’s apparent commitment to naïve realism about perception and, on the other, his apparent commitment to the necessity of synthetic activity by the understanding for any kind of cognitive contact with external objects.

Keywords: perception; conceptualism; non-conceptualism; naïve realism; Critique of Pure Reason; Anthropology from a Pragmatic Point of View

1. Introduction

In an intriguing footnote in the Transcendental Deduction of the Critique of Pure Reason, Kant registers the following complaint:

I do not see how one can find so many difficulties in the fact that inner sense is affected by ourselves. Every act of attention can give us an example of this. In such acts the understanding always determines the inner sense, in accordance with the combination that it thinks […]. (CPR §24, B156-7n)

The context of this passage is Kant’s account of the ‘synthesis of the imagination’, which he presents as ‘an effect of the understanding on sensibility and its first application (and at the same time the ground of all others) to objects of intuition’ (B152). Our passage, then, implies that working out Kant’s views on attention could provide clues to the difficult question of what the

References to Kant’s works, with the exception of the Critique of Pure Reason, follow volume and page of the German Academy of Sciences edition (Kant 1902-). Quotations follow the translations in Kant (1998 and 2007), with some modifications. References to the Critique follow the pagination of the 1781 and 1787 editions, abbreviated A/B. The following abbreviations are also used:

Anth Anthropology from a Pragmatic Point of View (1798)
H Handwritten manuscript of the Anthropology
CPR Critique of Pure Reason (1781/1787)
synthesis of the imagination is, and more generally shed light on the role of the understanding in perceptual experience. Moreover, our passage is not an aberration: in the *Anthropology* Kant goes so far as to identify the ‘faculty of apprehending given representations to produce intuition’ with attention (using the Latin gloss, ‘*attentio*’), as a function of the understanding (Anth 7:138). Our aim in this paper is to explore the interpretive path such remarks open. We argue that it leads to a promising and novel way of reading Kant’s views on perceptual experience.

Recent commentary on Kant’s views on perceptual experience has been dominated by the split between ‘conceptualist’ and ‘non-conceptualist’ camps. At the core of this debate is a disagreement over the role of the understanding in perceptual experience. In broad terms, non-conceptualists argue that, for Kant, perceptual experience rests on a primitive level of awareness of external objects (identified with what Kant calls ‘intuition’, *Anschauung*), which involves neither concepts nor any synthetic activity by the understanding. Conceptualists reject this: on their view, all cognitive contact with the world of experience (at least for creatures like ourselves, neither gods nor brutes) involves concepts, or at least the understanding.²

As we will argue, our approach offers a potentially attractive middle ground between these two positions.³ On our approach, intuition, considered as a faculty for receiving a spatiotemporally ordered manifold of sensations, may indeed be independent of the understanding. Thus we are not committed to radical versions of conceptualism, according to which the understanding somehow *constitutes* sensibility, perhaps by giving it its spatiotemporal

² The qualification is needed because some of the commentators that fall in this camp, including Béatrice Longuenesse and Henry Allison, distinguish conceptual from pre-conceptual acts of synthesis. McLear (2015) uses the term ‘intellectualism’ instead of ‘conceptualism’ to respect this distinction. We will use the more familiar ‘conceptualism’.

³ Gomes (forthcoming) also argues for a middle ground between conceptualism and non-conceptualism, though in quite different terms and without consideration of the role of attention in Kant’s conception of experience; cf. Land (2011) and Ginsborg (2008) for acknowledgement of some of the insights and motivations of non-conceptualism in the development of what are ultimately conceptualist positions.
form (a view argued for by Longuenesse (1998), and at least implicit in Allison (2004), McDowell (1994, 1998) and Strawson (1958), among others).4

To that extent, then, our approach is friendly to non-conceptualist readings of the Critique. But non-conceptualism comes in different flavours. According to commentators such as Allais (2015) and McLear (2015; forthcoming), the best way to develop non-conceptualism is to see Kant as a proponent of a naïve realist and anti-representationalist view of experience, of the sort defended by Martin (1998; 2002; 2006), Campbell (2002; 2014), Travis (2004), and Brewer (2011) among others.5 For reasons that we will explain below (in Section 2), we agree that a naïve realist reading of Kant is attractive. But a naïve realist reading of Kant ought to demand more of intuition than simply a spatiotemporally ordered manifold of sensations. Intuition, for the naïve realist, ought to acquaint us with the familiar objects of our naïve ontology, and indeed explain how we are able to cognise those objects. And, as we will argue, Kant’s view seems to be that intuition can play this role only as directed by the understanding. This is because, we will argue, for

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4 An anonymous referee asks whether we take there to be wide and narrow senses of ‘intuition’ in Kant: the wide sense would be any sensible representation (and so may be one involving synthesis and concepts as well), while the narrow sense would be wholly independent of understanding. While our account is consistent with such a distinction, it does not require it. We need not read Kant as equivocating on ‘intuition’: we can take there to be just one mental state that an intuition is, and recognise that it succeeds in acquainting us with ordinary objects only when it is guided by the understanding in acts of directed attention. We discuss this point in Section 4.

5 A naïve realist view of perceptual experience is a relational view, according to which perception relates us to the ordinary three dimensional particulars of our naïve ontology. There are relational views which do not count as naïve realist, e.g. because the objects of acquaintance are claimed to be either sense data — Russell (1911), O’Shaughnessy (2001) — or universals (Johnston (2006)). A naïve realist view of experience is anti-representationalist just in case the fundamental perceptual relation is non-representational, i.e. does not possess content and cannot be assessed as correct or incorrect, or accurate or inaccurate. While (as indicated in the text) some prominent non-conceptualists are also anti-representationalists, Hanna (2005; 2008; 2015) has developed a view which is non-conceptualist and naïve realist but nevertheless representational, by relying on a notion of non-conceptual content. We will indicate some points of contact between Hanna’s view and our own in what follows. Finally, there is also the possibility of conceptualist naïve realism, a position suggested by McDowell (2009; 2013).
Kant the paradigmatic instances of intuition putting us in cognitive contact with objects are acts of directed attention; and attention — as the quotation at the start of the paper suggests, and as we will further substantiate below — is directed by the understanding, in accordance with ‘the combination that it thinks’.

The paper proceeds as follows. In Section 2, we set out the interpretive question we aim to address, and explain the apparent conflict between naïve realist and conceptualist readings of Kant’s views on perceptual experience. Then in Section 3 we develop the core of our positive proposal, which is based on reading Kant’s views on synthesis on the model of directed attention. Finally, in Section 4 we explain how our view bears on the broader debate over Kant’s views on perception.

2. The Interpretive Issue

Our aim in this section is to set out more clearly the interpretive problem we seek to address. As we already mentioned, a helpful way to approach the issue is by looking at the opposition between naïve realist and conceptualist readings of Kant’s views on perception. Accordingly, we will begin by going into a bit more detail on how this conflict appears to arise in Kant’s own texts.

Naïve realists can draw on two lines of evidence for their reading (for detailed discussions of the following passages, see Gomes (2014) and McLean (2015)). On the one hand, there are numerous passages where Kant affirms that sensibility — the faculty ‘which alone yields us intuitions’ (A19/B34) — relates us directly to objects (A19/B33; A50/B74), and is neither reducible to nor interchangeable with the understanding (A51-52/B75-76; A89-90/B122). Moreover, since the core function of the understanding is judgment (A69/B94), this implies that the type of relation to objects that can be established through sensibility is fundamentally unlike judgment. And indeed, we find Kant affirming that the senses do not err, ‘not because they always judge correctly, but because they do not judge at all’ (A293/B350).
Furthermore, there is reason to think that Kant not only conceives of perceptual experience as fundamentally relational, but also that he conceives of it in terms of relations to ordinary external objects — ‘appearances’, in the transcendental (rather than the empirical) sense (A30/B45, A45-46/B62-63). In the first Critique’s Refutation of Idealism, Kant contrasts his own transcendental idealism with the ‘material idealism’ that he attributes, in distinct versions, to both Berkeley and Descartes (B274). He calls Cartesian idealism ‘problematic’, and portrays it as a sceptical position professing ‘our incapacity for proving an existence outside us […] by means of immediate experience’ (B275). According to problematic idealism, we are only ever immediately aware of the contents of our own minds, through inner experience; our grasp of a world outside our minds is indirect or mediated, and hence less secure. Thus in rejecting problematic idealism, Kant rejects the idea that in perception our awareness of external objects is only indirect (see especially B277n). Combining this with the claim, already made plausible above, that Kant’s conception of perceptual experience is fundamentally relational, makes plausible a reading of Kant as a naïve realist, or someone who thinks that perceptual experience fundamentally rests on a relation of acquaintance to ordinary external empirical objects.

We agree that these lines of evidence make the naïve realist reading of Kant attractive. This is not the end of the matter, however. As is well-known, Kant in the Transcendental Deduction — and especially the second half of the B-Edition Deduction — revisits the relations between the understanding and sensibility with a view to securing the a priori applicability of the categories to objects of experience (A85/B117, B144, B159-160). This is where Kant’s notion of ‘figurative synthesis’ or ‘transcendental synthesis of the imagination’ comes in. The imagination is explained here as ‘a faculty for determining the sensibility a priori […] in accordance with the

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6 Allais (2015: 102) also draws on the Refutation of Idealism as a starting point for her own project. As Allais points out, any such reading of Kant will have to come to grips with Kant’s own idealism, and his repeated assertions that the objects we come into direct contact with in experience are, in some sense, ‘mere representations’. For the purposes of this paper we bracket questions about the ontological implications of Kant’s views on perception, which Allais (2015) examines in depth.
categories’, and (as already mentioned in Section 1) its activity is characterized as the ‘first application’ of the understanding to the objects of intuition, and ‘the ground of all others’ (B 152). Thus not only is the understanding apparently capable of determining sensibility a priori, such determination is the ‘ground’ of all cognition of empirical objects.

Should these parts of the Critique worry naïve realist readers of Kant? Some ways of developing those ideas may suggest so. Sellars, for one, takes Kant’s official position to be that intuitions have conceptual content which, although not identical to the content of any possible judgment (and so not strictly truth-evaluable), is still intimately connected to such content.7 McDowell (1994; 1998; 2009) — influenced by Sellars — also takes the content of intuition to be conceptual and closely related to the content of judgment.8 More recently, Griffith (2012) has argued that, although the sensory content of perception might be too fine-grained for our empirical concepts to capture, intuitions also possess pure categorial — and hence conceptual — content. Since such readings suggest that the way intuition relates us to the world is similar to (if not identical with) the way in which judgment relates us to the world (i.e. via conceptual content), they indeed seem incompatible with the core commitment of naïve realism to an irreducible perceptual relation of acquaintance.

Much more could be said about each of these positions. But, since our aim in canvassing them was simply to give some context for our own project, we are not going to pursue them further here. On our view, both naïve realist and conceptualist readings of Kant not only have

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7 According to Sellars (1967: 4-5), on Kant’s official position intuitions have conceptual content of the form ‘this F’, which can then be taken up in the perceptual judgment ‘this is F’. Sellars also recognises elements in Kant that point to a more radical non-conceptualist view of the deliverances of sensibility; but he takes these to be overridden in Kant’s final view by the doctrine of synthesis (Sellars 1967: 8 and 15). Gomes (forthcoming: 30) attributes a hybrid conceptual/non-conceptual view of perception to Sellars. Gomes is right that this is Sellars’s own view, but Sellars doubts that it is Kant’s view.

8 In earlier work, McDowell (1994) took the content of perception to be identical to the content of perceptual judgment; more recently (McDowell 2009) he distinguishes between intuitional content and the content of judgment, in something like the way Sellars (1967: 4-5) does.
backing in the text, but also considerable philosophical interest. More specifically, we think that naïve realist readers make a good case that Kant thought of intuition as an irreducible and basic cognitive relation to objects. At the same time, we also think that conceptualists are correct in thinking that part of the aim of the Transcendental Deduction is to argue for an essential role of the understanding in perceptual consciousness.9 Thus, we hope to demonstrate the possibility of a reading that preserves insights from both.

The approach we are recommending does not require that concepts (whether pure or empirical) enter into the content of intuitions. For all our approach says, intuition might lack content altogether — it might simply not be the sort of thing that can be assessed as correct or incorrect, or as accurate or inaccurate.10 Its function, instead, might be simply to relate us to objects. Our core claim rather is that, for Kant, intuition can play this role only if it is under the guidance of a faculty of attention. While a creature that lacks a capacity for directed attention may enjoy conscious sensory states (or ‘perceptions’, in the broad sense Kant introduces at A320/B376), the sensory states of such a creature would lack the objective cognitive significance that intuitions have for us. Since, as we will see, it is very plausible that Kant thought of attention as guided by the understanding, it turns out that the understanding does, after all, have a necessary and essential role in perceptual consciousness of external objects.11

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9 It is important to note that the question is not whether the understanding has a role in experience (Erfahrung). For Kant, experience is ‘empirical cognition’ (empirische Erkenntnis: CPR B147, B165-6, A176/B218, A189/B234, B277; Anth 7:141 and 7:167 and H 7:398), which everyone agrees involves both intuitions and concepts. The question is whether the mere awareness of external objects in perception requires concepts or the understanding.

10 We thank an anonymous referee for pressing us to be clearer on this point.

11 Though A320/B376 suggests a broad notion of perception as any conscious sensory state, this can be distinguished from perception in a narrower sense, which we argue involves directed attention. See Tolley (2013: 122) for what we believe is a compatible point about the distinction between intuition and perception in Kant — where intuition is the work of sensibility alone, but perception is the representation of intuitions that puts one in determinate relation to an object; and see Matherne (2015) for a related case,
3. Attention and Synthesis

As we saw above, the central text in support of conceptualist readings of Kant on perceptual consciousness is the Transcendental Deduction, and especially Kant’s talk of synthesis there. Our guiding idea is that Kant’s talk of synthesis is best understood in terms of the employment of basic capacities for exploration of one’s physical environment — paradigmatically, the capacity for directed attention. While Kant says relatively little about attention in the first Critique, he discusses it at length in the Anthropology. So we will first look at the Anthropology, in order to figure out how Kant thought of attention in concreto, as it were. Having thus equipped ourselves with a ground-level view of Kant’s conception of attention, we will turn to the discussion of synthesis in the Critique. We will argue that Kant’s discussion of synthesis fundamentally concerns the same sort of activity that goes by the name of attention in the Anthropology, only considered at a higher level of abstraction.

3.1 Attention in the Anthropology

In Anthropology §3, Kant considers the ‘voluntary consciousness’ of one’s representations, which he says is possible either by ‘paying attention [das Aufmerken] (attentio) or […] turning away [das Absehen] from a representation of which I am conscious (abstractio)’ (7:131). This ‘turning away’, he elaborates, is a ‘real act of the cognitive faculty of holding off a representation of which I am focusing on the role of imagination in perception — an angle that requires a particular focus on the A Deduction and Schematism. The compatibility of our account with those texts is too large a topic for the space allotted here.

12 Although we often use the term ‘synthesis’ without qualification, we emphasise that our account concerns only the synthesis that according to Kant is involved in perceptual experience, and particularly as this claim figures in the B-edition Critique. Given the complexity of assessing the differences in style (and possibly also substance) between the separate versions of the Deduction in A and B, we cannot here take on the question of how our account of synthesis as directed attention relates to the ‘threefold synthesis’ of the A Deduction.

13 For discussion of the related idea that experience requires attention by Kantian lights, see Roessler (2011).
conscious from combination with other representations in one consciousness’ — and on these grounds should be distinguished from *distraction* (7:131). This presents abstraction as a matter of stopping a ‘combination’ of representations that might otherwise obtain. Attention and abstraction are presented here as flip sides of the same coin: one attends as one disregards this or that. And this simply means that I could direct my attention in some other way, and I would accordingly combine representations differently.

Kant also observes that attention may or may not be voluntary. One’s attention can be seized — say by a strange birdcall, or a sudden stabbing pain in one’s tooth; and likewise, as far as involuntariness goes, one might give one’s attention indifferently — say, to whatever happens to fall within one’s line of sight as one walks down the street. By contrast, Kant takes it that the capacity to abstract ‘demonstrates a freedom of the faculty of thought and the authority of the mind to have the state of one’s representations under one’s control (*animus sui compos*)’ (7:131). At this point, Kant distinguishes abstraction from *distraction* — which, when intentional, can also be conceived as stopping a combination that might otherwise obtain: to get that annoying children’s television theme song out of my head, I might try humming another tune. Although both abstraction and deliberate distraction involve making it such that one does not have present to mind what one might have present to mind, with distraction it is a matter of some indifference where one’s attention may then settle: whatever does the trick, as long as the dreaded song no longer chimes away within.

In Kant’s account, then, attention is dynamically linked with abstraction — one attends as one disregards this or that — which accordingly presupposes a background of representations

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14 Distraction is the ‘mere failure and omission’ of attention (7:131); later Kant says that it is ‘the state of a diversion of attention [der Zustand einer Abkehrung der Aufmerksamkeit] (abstractio) from certain ruling representations through its dispersal onto other, dissimilar ones’ (Anth §47, 7:206). There is an art to purposefully distracting oneself, Kant claims, that belongs to ‘mental dietetics’ (Anth §47, 7:208), and memorably points to ‘suitor who could make a good marriage if only he could overlook a wart on his beloved’s face, or a gap between her teeth’ (Anth §3, 7:131-2).
that are not attended, but could be. Kant develops this point as he considers, next, Locke’s famous complaint against the very idea of having representations without being conscious of them. Kant responds by suggesting that we can be ‘indirectly conscious’ of certain representations without being ‘directly conscious’ of them (Anth 7:135). The representations that we are directly conscious of are ‘clear’, but there is an ‘immense field’ of representations that we are only ‘indirectly’ conscious of, which Kant deems ‘obscure’ (7:135).  

What does Kant’s talk of being ‘indirectly conscious’ of our representations amount to? There seem to be two ways to read Kant here. On one reading, Kant concedes nothing to Locke. His claim is just that, through some sort of theoretical argument, we can conclude that we have such unconscious representations. But although such reasoning might make us conscious that we have such representations, it would do nothing to make the representations themselves into conscious states. This reading is supported by the following statement: ‘The field of sensuous intuitions and sensations of which we are not conscious, even though we can undoubtedly conclude that we have them […] is immense’ (Anth 7:135). But Kant’s more phenomenologically inclined examples in this context suggest a slightly different reading. On this alternative reading, obscure representations are conscious — but dimly (or obscurely) so. They form the background against which clear representations stand out.  

15 Baumgarten refers to the ‘sum’ of obscure representations as the ‘FOUNDATION OF THE SOUL’ (Metaphysica §511), and suggests that what figures as obscure, versus clear (and possibly also distinct) in one’s sensible perception of things depends upon the position of one’s body (Metaphysica §513); he also points to attention and abstraction as powers that ‘reveal themselves’ not only in thought but also in sensible representation of the world (Metaphysica §625) — see Watkins ed. (2009: 116-118). Although much of this is suggestive of Kant’s discussion of these topics in the Anthropology, it is not our project to work out how Kant both draws upon and distinguishes himself from his German rationalist predecessors on these topics.

16 On our consciousness of obscure representations, see also Critique (B414-5n). A further aspect of Kant’s account of the phenomenology of empirical consciousness in the Anthropology concerns the distinctness of one’s representations: this is clarity that extends to the composition (Zusammensetzung) of representations (Anth 7:138). Cognition (Erkenntnis) requires that ‘order’ is thought in the manifold, and
For present purposes it is not essential to determine exactly how Kant thought of obscure representations. What matters is that this discussion suggests a picture of attention, wherein attending is a matter of actively selecting some representations out of an ‘immense field’. Kant illustrates this type of attention in his example of a ‘freely improvising’ musician, who plays a fantasy on the organ with ten fingers and both feet and also speaks with someone standing next to him. In a few moments a mass of representations is awakened in his soul, each of which for its selection requires still a special judgment as to its appropriateness, since a single stroke of the finger not in accordance with the harmony would be heard as a discordant sound. (Anth 7:136)

This is meant to illustrate the idea that clear and obscure representations stand in a foreground-background relation, now specifically with regard to ‘sensations of hearing’ (7:136). But the example is complex on several counts, and we might first canvass a simpler case: you follow a busker’s tune across several train platforms in a busy station. Your task is keeping track of a patterned sequence of sounds, produced by an external object. In addition to this sequence of sounds, however, a host of other things impinge on your senses at the same time — the roar of an incoming train, public announcements, the sights and smells of the station. All of these representations, to the extent that they are conscious at all, form for you a single, ‘immense field’. The task of attention is to select from this field those that continue the tune you have been tracking, and to elevate them to the foreground of ‘direct’ or ‘clear’ consciousness.

How does this case bear on Kant’s example? One complication of Kant’s example is that the hearer is not a bystander: the musician is himself the source of the tune to which he attends.\(^\text{17}\)

\[^{17}\text{A further complication is that the musician is ‘multitasking’ — chatting away with someone as he improvises his tune. But this seems to be just a case of divided attention; as such, it does not raise special trouble for our purposes.}\]
Nevertheless, our model still applies. The representations awakened in the musician’s soul as he begins to play form simply one more part of the immense field of obscure representations, along with any publicly audible sounds, visual and tactile perceptions of his environment, and any passing thoughts and feelings. The musician keeps track of the tune as he plays it, just as in our earlier example you were keeping track of the tune the busker was playing. His attention selects from the mass of representations in his soul, picking out those that can carry the tune forward. These are the representations he perceives clearly — and, presumably, the notes that he actually plays. Moreover, those notes are selected on grounds of their appropriateness, as ways of going on in accordance with principles of harmony. And as Kant implies by speaking of a judgment of appropriateness, he takes such guidance to be a job for the understanding.\(^{18}\)

The same general model of attention as selection seems to be part of what Kant requires for experience, at least as he presents it in the handwritten manuscript of the *Anthropology*. Consider the following passage, where Kant elaborates on the idea that experience is empirical cognition:

> Therefore experience is the activity (of the power of representation) whereby appearances are brought under the concept of an object of experience[,] and experiences are made by employing observations (intentional perceptions [absichtliche Wahrnehmungen]) and being reflective about their unification under a single concept. (H 7:398)

The idea that experience requires intentional perceptions is perhaps overstated: after all, as we have noted, Kant acknowledges that a person’s attention can be involuntarily grabbed by (e.g.) the call of an unfamiliar bird. However, we can read Kant as making the more modest claim that experiences are made through perception that is active, in the sense that involves selection via attention. We put ourselves in a position to know about an objective external world by actively

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\(^{18}\) The model of attention as selection, which we are here attributing to Kant, plays a significant role in psychology and philosophy of mind; for an overview, see Wu (2014).
selecting which out of the immense field of representations potentially on offer to attend to and which to disregard. Moreover, these selections are not made at random, but rather follow certain principles or rules, and are thus unified ‘under a single concept’.19

We think these remarks from the Anthropology contain valuable clues about how Kant understands attention and its role in perceptual consciousness. Armed with these hints, we turn next to the Critique’s Transcendental Analytic.

3.2 Attention and synthesis in the Transcendental Analytic

Let’s return to the passage from the Deduction presented at the outset of this paper, quoting it now at further length:

I do not see how one can find so many difficulties in the fact that inner sense is affected by ourselves. Every act of attention can give us an example of this. In such acts the understanding always determines the inner sense, in accordance with the combination that it thinks, to the inner intuition that corresponds to the manifold in the synthesis of the understanding. (B156-7n)

This note is appended at the end of a discussion of the ‘paradox’ that inner sense ‘presents even ourselves to consciousness only as we appear to ourselves, not as we are in ourselves’ (B152-153), which is itself a coda to Kant’s discussion of the figurative synthesis. In particular, Kant’s resolution of the supposed paradox consists in arguing that through inner sense we are conscious of ourselves only insofar as our inner sense is affected by ourselves, and that this self-affection is an act of the understanding ‘under the designation of a transcendental synthesis of the imagination’

19 In this last phrase (über die Vereinigung derselben unter Einem Begriffe nachgedacht (reflectirt) wird), Kant suggests that the subject must also stand to be reflective about the unification of the perceptions under a concept. We take it that this is also what Kant has in mind when he presents the ‘faculty of cognition as such’ as involving capacities of apprehension (there glossed attentio), abstraction, and reflection at Anth 7:138. Parsing that particular account of our cognitive faculty would require greater discussion of Kant’s conception of reflection than can be offered here.
(B153). The passage just quoted is meant to dispel the sense of mystery that might surround the notion of self-affection, by linking it to the phenomenon of attention. For present purposes, we are not interested in the details of how Kant proposes to resolve the ‘paradox’ of inner sense. What we are interested in is showing how the model of attention as selection that we recovered from the Anthropology can help make sense of Kant’s difficult notion of self-affection, and hence the ‘transcendental synthesis of the imagination’.

Recall our freely improvising musician. As he begins to play, ‘a mass of representations is awakened in his soul’, to form part of the immense field of representations that he is (obscurely) conscious of. The crucial point here is that all of these representations — including those whose objects are ‘outer things’ — are, ipso facto, contents of his inner sense (A34/B50-51). The musician’s task, as we discussed, is to select those among them which accord with his grasp of the harmony he aims to produce — or, as we might put it, those which accord with ‘the combination that [he] thinks’. Moreover, as we saw, in selecting these representations he lifts them up from the field of obscure representations, and into (clear, direct) consciousness: in selecting them, therefore, he determines his own inner sense. On our reading, Kant’s talk of the understanding determining inner sense in acts of attention corresponds to the idea that attention involves selecting representations to bring into direct or clear consciousness.20 Furthermore, Kant informs us, attention does not determine inner sense at random, but rather in accordance with the ‘combination that [the understanding] thinks’. We can interpret this claim just as we did in our discussion of the Anthropology: out of the immense field of representations that we could potentially attend to in each given perceptual setting, we select in accordance with principles — fundamentally, the Principles of the Pure Understanding that Kant derives from the categories.

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20 This way of putting things presupposes that dimly or obscurely conscious representations are nonetheless conscious, rather than merely representations we can infer we possess. But this assumption is not essential. On the alternative, the job of selective attention would be to make the selected representations available to inner sense for the first time.
One point that deserves special emphasis is that, although according to Kant in acts of attention the understanding determines specifically inner sense, the objects of those acts of attention may well be outer.\textsuperscript{21} Our reading thus contrasts with Allison’s (2004: 284) reading of the same passage. Allison takes Kant’s claim that every act of attention provides an example of self-affection to be a slip of the pen: what Kant really has in mind, Allison contends, are only those acts of attention specifically directed towards the subject’s own inner states. By contrast, on our reading it is entirely straightforward that just the same sort of self-affection is involved in acts of attention whose objects are outer. Consider again the case of following a busker’s tune in a busy train station. Doing so requires selecting, from among the immense field of obscurely conscious representations in your inner sense, those that continue the tune. By selecting those representations, you bring them into clear or direct consciousness — thereby determining your inner sense.\textsuperscript{22}

Moreover, and again in contrast to Allison’s reading, our approach makes good sense of Kant’s claim that acts of attention are merely examples of self-affection or synthesis. If this is so, we should expect there to be instances of synthesis which cannot, strictly speaking, be classified as acts of attention. And it is not hard to see why Kant suggests this. As we already saw, attention is used in the Anthropology as a gloss on ‘the faculty of apprehending given representations’ (Anth 7:138), and so it is restricted to empirical employments of sensibility. Since, however, Kant believes sensibility can also be exercised in non-empirical contexts, there is scope for a priori syntheses too. Consider this example, invoked multiple times in the Critique.

\textsuperscript{21} We thank an anonymous referee for pressing us to be clearer here.

\textsuperscript{22} One might object that our reading does not obviously help with Kant’s main concern in B152-153, i.e. our knowledge of ourselves as appearances through inner sense. This topic is too large to tackle here. Schematically, we suggest the following. Through acts of attention (i.e. self-affection as we understand it), the cognitive subject constructs a perspectival, and egocentric take on the world. She is thereby in a position to know herself as the centre or origin of a point of view on the world. For a reading of Kant on empirical self-knowledge along similar lines, see Valaris (2008).
We cannot think of a line without drawing it in thought, we cannot think of a circle without describing it [...] and we cannot even represent time without, in drawing a straight line, [...] attending merely to the action of the synthesis of the manifold through which we successively determine inner sense, and thereby attending to the succession of this determination in inner sense. (B154; see also B137-138 and A162-163/B 203-204)

How are we supposed to understand this ‘action of the synthesis of the manifold through which we successively determine inner sense’? In this case it cannot be a matter of selecting from among a field of given representations, since the context is the determination of sensibility a priori. But we still think that something like our model applies.

Consider what you do when you visually attend to a moving object. Sometimes you might need to move your eyes or head in order to keep the object in view; but let’s set this aside, by assuming that the object is either small enough or far enough away. Even if you do not engage in such overt actions as moving your eyes and head, tracking a moving object still involves a clear sense of motion on your part: the focus of your attention shifts successively to take in different parts of your visual field. Accordingly, as you track the object the focus of your attention traces a figure in your visual field. Presumably, however, you can perform the same activity even abstracting from any given representations: if you have a capacity to direct your sensibility to trace shapes in space at all, there may be no reason why that capacity cannot be exercised a priori as well.

That something like this pure motion is what Kant has in mind seems to be confirmed by the following note, which occurs in the same context:

Motion of an object in space does not belong in a pure science, thus also not in geometry [...] But motion, as description of a space, is a pure act of the successive synthesis of the manifold through which we successively determine inner sense.

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23 The ‘attending’ in this translation renders Acht ... haben.

24 There is some empirical evidence that, in the absence of visual objects, attention does not trace continuous shapes through empty space (Pylyshyn 2011: 63); but this obviously has no bearing on what Kant may have thought on the matter.
manifold in outer intuition in general through the productive imagination, and belongs not only to geometry but even to transcendental philosophy. (B155n)

In tracking an empirical object we trace figures in space by successively attending to different parts of the manifold of an empirical intuition. When doing geometry in our heads we employ the same capacities, only directed to the manifold of ‘outer intuition in general’. Indeed, Kant suggests that we can abstract not just from sensation, but even from space (and hence outer sense) altogether, and in that way ‘[m]otion, as action of the subject […] first produces the concept of succession at all’ (B155).

Thinking of synthesis on the model of directed attention proves fruitful when we turn to Kant’s account of the Principles of the Pure Understanding, and specifically the Analogies of Experience. Synthesis in the Analogies has often been read as concerning how we interpret the succession of our own sensations, so as to arrive at representations of an outer temporal order. Here is Longuenesse, for example:

We believe that we perceive the succession or simultaneity of the states of things. Actually all we perceive (apprehend) is the succession of our representations, whereas the simultaneity and succession in states of things are not directly perceived. Rather, the representation we have of objective simultaneity and succession is the result of the way we interpret the succession of perceptions in our apprehension. (Longuenesse 1998: 335)

The suggestion seems to be that we are first aware of our perceptions, as a sequence of mental events in us, and then from this awareness we somehow arrive at conclusions about the objective temporal order. But although the details of Kant’s positive account of temporal consciousness may be hard to decipher, this particular suggestion is plainly at odds with the text of the Analogies, which contains numerous passages that reject the idea that our awareness of objective temporality is derived from some prior awareness of an inner temporal order (e.g. A193/B238; also A182/B225-226 and A201/B246).
Thus thinking of synthesis in the Analogies in terms of interpretation does not seem like a promising approach. Let’s see if we can do better with our alternative approach to synthesis as selective attention. The general principle of the Analogies, Kant announces, is that ‘experience is possible only through the representation of a necessary connection of perceptions’ (B218). Representing such a necessary connection, however, would not be possible through the merely haphazard uptake of sensory representations: ‘apprehension is only a juxtaposition of the manifold of empirical intuition [with] no representation of the necessity of the combined existence of the appearances that it juxtaposes’ (B219). Experience is possible, therefore, only in the ‘synthetic unity of the manifold of perception in one consciousness’ (B218), which is accomplished through ‘a priori connecting concepts’ (B219).

This is very abstract, but we can get a sense of what Kant has in mind by looking at some of his examples. In the Second Analogy (as stated jointly in both editions), Kant begins with the familiar idea that ‘apprehension of the manifold of appearance is always successive’ (A189/B234). But a random succession of perceptions is not yet sufficient for experience. Rather:

I must […] derive the subjective sequence of apprehension from the objective sequence of appearances, for otherwise the former would be entirely undetermined and no appearance would be distinguished from any other. The former alone proves nothing about the connection of the manifold in the object, because it is entirely arbitrary [beliebig]. (A193/B238)

This point is illustrated by Kant’s notorious example of a ship being driven downstream (A192/B237-238). What is crucial in this illustration, we suggest, is that it provides an example of visually tracking a moving object. Clearly, if I am to keep track of the ship, my apprehension (the direction of my attention) must follow the movement of the ship:

My perception of its position downstream follows the perception of its position upstream, and it is impossible that in the apprehension of this appearance the ship should first be perceived downstream and afterwards upstream. The order in the
sequence of the perceptions in apprehension is therefore here determined, and the apprehension is bound to it. (A192/B237)

The sequence in which I apprehend successive glimpses of the ship cannot be haphazard, but must be ‘bound’ to the motion of the actual ship, as Kant puts it. To put the point in the terms used in our earlier discussion: from the immense field of representations on offer to me, I must successively select those that follow the motion of the ship. (This, in terms of the A193/B238 passage, is the ‘subjective sequence of apprehension’.) How am I to do this? Well, by ‘determining my inner sense in accordance with the combination that I think’ — that is, through my grasp of the ship as a persistent object following a determinate trajectory. I must grasp that the ship’s position at one moment is causally determined by its position at earlier moments, and direct my attention (select from among the immense field of representations on offer) accordingly. If I were not able to direct my apprehension in this way — ‘in accordance with a priori connecting concepts’ (B219), or the ‘objective sequence of appearances’ (A193/B238) — I would simply not be able to track the ship as it moves downstream.

Similar remarks may be made about the concept of substance, which is the topic of the First Analogy. In the First Analogy, Kant indicates that to represent something as undergoing change there must be something that ‘always exists, i.e., something lasting and persisting’ (A182/B225-6). It is only with the representation of something persisting (‘das Beharrliche’) that it is possible to represent it as changing — and to keep track of it as it does — whether one is keeping track as it changes position in space, or else as it undergoes some alteration in quality. But there is no perception of this persisting substratum as such. Instead, we do things like track a ship as it changes its position. To track in this way, we apprehend (select) successive representations in a determinate order, guided by our grasp of the object in question as something that persists through change.

For a different example, Kant contrasts the perception of a moving ship with looking at a house. While in this case too ‘the apprehension of the manifold that stands before me is
successive’ (B235), as Kant points out we do not experience the manifold of the house itself (its different spatial parts) as successive: rather, we experience them as all existing simultaneously, despite being unable to take them all in at one time. Moreover, unlike the case in which I track a moving object, there is no fixed order in which I must take in its various parts:

[M]y perceptions could have begun at its rooftop and ended at the ground, but could also have begun below and ended above; likewise I could have apprehended the manifold of empirical intuition from the right or from the left. In the series of these perceptions there was therefore no determinate order that made it necessary when I had to begin in the apprehension in order to combine the manifold empirically. (A192-3/B237-8)

The representation of a house is not given to me all at once — as it might be represented in a cubist painting, for example. Rather, I explore the house, whether merely visually, and at some fixed distance, or else by moving around and through it. And indeed, my experience of the manifold of the house as simultaneous rather than successive is linked to my awareness that the house is all there for me to explore however I please: I can choose to scan it from top to bottom, or from left to right.25

We have been arguing that we should understand Kant’s claims about the role of the understanding in perceptual experience in terms of the idea that perceptual contact with objects requires directed attention. Our proposal accords with a further claim that Kant defends in the Anthropology: namely, that the capacity to enjoy experience is a cognitive achievement. In order to further illustrate our view, we will turn to this idea next.

3.3 The ‘progress of perceptions’

The first book of the Anthropology is devoted to ‘the cognitive capacity’, and the first section to self-consciousness. Kant asserts here in rapid succession that it is because a human being ‘can have the “I” in his representations’ that ‘he is a person’ rather than a thing; that thought as such is

25 See also Kant’s similar remarks about the moon and the earth, in the Third Analogy (A211/B257).
essentially first-personal; and that the faculty of thought ‘is understanding’ (Anth §1, 7:127). He then notes that the capacity for thought, so conceived, is a developmental achievement; and he speculates that a child may be capable of genuine thought before he actually speaks in the first person (7:127). But how does the ‘I’ enter into a child’s representations, so that he is capable of genuine thought? Here Kant gestures towards a ‘progress of perceptions’ that has some ‘crude beginning’ in activities like tracking shiny objects, and expands ultimately to ‘cognition of objects of the senses, that is, experience’ (7:127-8). He concludes with the striking remark that childhood ‘was not the time of experiences, but merely of scattered [zerstreute] perceptions not yet united under the concept of an object’ (7:128). It is this latter claim — that a capacity for experience is a developmental achievement — rather than Kant’s views on self-consciousness, that will concern us here.

Notice, first, that Kant must be talking of early childhood — infancy, really: the time of working up from shiny object-tracking and the like. It might seem that Kant takes infants to be fundamentally distracted (zerstreut) — for he goes on to discuss attention (Aufmerken, glossed attentio) and distraction (Zerstreuung, glossed distractio) in the ensuing pages (Anth §3, chiefly). Let’s query this. An infant — call her Zoë — who is not more than a few days old can track with her eyes the movements of a white string against a black background. And we would intuitively describe her as doing so attentively, in some sense: it is fully occupying her, at least for a few seconds at a time. Now, the progress of perceptions to which Kant gestures begins with the ‘apprehension of sensation [Apprehension der Empfindungsvorstellung]’ (7:127), which surely encompasses episodes like this. But the sort of attention exhibited in such episodes is evidently different from the attention that Kant takes to be required for full-blown experience.

Zoë surely enjoys ‘apprehensions of sensation’, and so perceptions (in the sense of conscious sensory representations, as in A320/B376). Moreover, Zoë can even keep track of these perceptions to some extent. Thus, considered from the outside, her perceptions are not merely haphazard or random: they are the result of the tracking motions she makes with her
eyes; and these, we may assume, reliably respond to the movements of the string. And yet they remain ‘scattered’ in Kant’s terms, because they are not ‘united under the concept of an object’ (7:128). Zoë’s tracking is a mechanical impulse set into gear with the appropriate stimuli (of suitable size, and contrast against its background); it presupposes that certain raw resources have come online (e.g. suitably developed muscular reflexes) and that other enabling conditions are in place (she is awake, not hungry, not tired). This impulse is engaged as a reflex, much like the grip reflex infants manifest in closing their fists around objects. And this, we suggest, entails that even though Zoë’s perceptual states co-vary systematically with the movements of the string, she is not thereby aware of the string.

How should we characterize the contents of Zoë’s consciousness?26 There are different options here, depending on one’s broader understanding of Kant’s views. Perhaps infants like Zoë possess a merely solipsistic consciousness, in the sense of McLear (2011: 3): they are only aware of their own sensations rather than of anything external. Or, perhaps, their consciousness enjoys at least spatiotemporal structure. In that case, they may be aware of shifting shapes and colour surfaces in a three dimensional landscape. For the second, richer option to be viable, it would have to be the case that spatiotemporal structure is independent of the understanding or apperception (the capacity for ‘having the “I” in [one’s] representations’), a topic we cannot discuss in this paper.27

Suppose now it is a few months later and her father starts to play a game with her using this string — say it is the white string of the black hoodie that he wears most days. He dangles it in front of her; she tracks it assiduously. Quickly, he flicks it over his shoulder. Where did it go? She is no longer tracking the string. Maybe the father makes it clear that he is bringing it back: the same string. Zoë is conceivably in a position to recognise that the string could have been

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26 We thank two referees for pressing us to clarify our position here.

27 For a thorough recent discussion see McLear (2015), who argues that spatiotemporal structure is indeed independent of the understanding.
followed to the other side. She is now beginning to be able to react to the string, as opposed to just sudden or striking visual sensations. And what this example suggests is that, as part and parcel of this, she must be disposed to treat (e.g.) two temporally and spatially distinct impressions as belonging to the same persisting thing, and to anticipate where this thing might be located next, in light of its present location and state of motion. This capacity is significantly different from the capacities involved in neonate string-tracking, as it involves the agent’s guiding her attention in accordance with categorial concepts. This, we suggest, makes a difference to the status of the perceptions themselves: they are now, as they were not before, perceptions of the string. They carry objective reference. This is a result of the fact that they are now, as they were not before, guided by a capacity for directed attention.

4. Attention, Synthesis, and Naïve Realism in the *Critique*

As we noted at the beginning of this paper, contemporary work on Kant’s views on perception appears to face a dilemma. On the one hand, there are reasons to favour a naïve realist relationalist reading of Kant on perception. One the other hand, there are also reasons to think that Kant takes the synthetic activity of the understanding to play an essential role in perceptual consciousness. Moreover, as we saw, prominent attempts to explain the role of the

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28 Infants have been shown to be capable of this kind of expectation at six months of age or even younger (Pylyshyn 2011: 50).

29 Our discussion of infant sensory consciousness here raises the question of what we would say about non-human animal consciousness. McLear (2011) has recently argued that Kant held that non-human animals enjoy sensory consciousness of external objects, and that this tells against conceptualist readings of Kant. We do not discuss non-human consciousness in this paper. What’s more, we do not think that one can extrapolate from the infant to the non-human animal case. According to Kant, infants are incapable of directed attention, and so their perceptions are ‘scattered’ (zerstreute). But it is not obvious that the same would have to be true of non-human animals: non-human animals may not be capable of giving their perceptions the kind of apperceptive or categorial unity that we can, but they are — as McLear (2011: 8) notes, citing Kant’s lectures on metaphysics (28: 689-90) — endowed with some form of the faculty of imagination, and so perhaps some capacity for directed attention. Their attention might take a merely Humean associative form, but this might suffice for some degree of objective reference.
understanding in perceptual consciousness turn out to be in tension with naïve realism. We would like to close this paper by revisiting this dilemma, in order to show how our approach might help to resolve it.

To see this, it may help to contrast our view about the role of the understanding in Kant’s conception of experience with that of some prominent naïve realist readers of Kant. Allais (2015) and McLear (2015 and forthcoming) grant that full-blown experience (Erfahrung), as empirical cognition (see note 9 above), requires us to unify states of perceptual consciousness under concepts. However, on their view, the perceptual states (intuitions) that get unified under concepts carry their cognitive significance anyway — independently of any top-down influence or guidance by the understanding. More specifically, their status as states of acquaintance or awareness of external objects is independent of any such activity by the understanding. Intuitions — which, on the views under question, possess only spatiotemporal, and not categorial, unity — are supposed to provide us with representations of particular objects — where such a particular is a ‘distinct, bounded thing to which the subject can pay individual attention’ or which ‘the subject can pick out as a unit’ (Allais 2015: 147n2, 154).

But our reading suggests that this is not Kant’s view. We grant that sensory consciousness is possible without the understanding. However, Kant suggests, the states that get unified under a concept are not simply conscious sensory representations, but rather observations, which — as argued above — involve exercises of our faculty of selective attention.30 And, as we have already seen, selection via attention is directed by the understanding — in accordance with ‘the combination that it [the understanding] thinks’ (B156-7n), or by the need for unity ‘under a

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30 As mentioned earlier (note 4), an anonymous referee asks whether we think that sometimes Kant uses a wide notion of intuition, which includes synthesis and hence conceptual content. ‘Observations’ in the present sense would fit this bill, and our account is compatible with this suggestion. But we are not presupposing that observations (or intuitions in the wide sense) constitute a separate type of mental state in their own right: for all we have said here, observations may simply be intuitions in the narrow sense, deployed in a certain way.
single concept’ (H 7:398). This is because in attending to and tracking particulars in the world, we need to treat them as relatively persisting unitary objects that follow causally continuous trajectories through space. Thus the objective cognitive significance of intuitions is not there anyway, independently of their being unified (or, perhaps, independently of their potential for being unified) under concepts. On our reading, it is because we possess the capacity for directed attention — a capacity governed by the understanding — that we are capable of sensory states with objective cognitive significance at all.

This, we believe, is an independently well-motivated suggestion. For, how much sense can we make of objective representations — representations of objects — that possess merely spatiotemporal unity? If we are to ascribe objective reference to a mental state, such as an intuition, then it must make a difference to the subject’s mental life that this state picks out a particular environmental object — as opposed to a different object, or just the play of her own sensations. What sort of difference? Allais provides some suggestions:

It requires that the subject is able to discriminate the thing [...] from other things and its surroundings. Typically, the subject will be in a position to attend to the thing, to track it, and perhaps to do things to it (such as reaching out and grabbing it), and move around it. (Allais 2015: 154; emphasis added)

This list points to a cluster of abilities that is plausibly more or less characteristic of objective perceptual reference. Part of the point of taking a subject to be aware of environmental objects — rather than, say, merely of her own sensations — is that she is able to keep track of such objects even through changes in the shapes and colours they project onto her retinas, and despite short-term occlusions. The question for Allais, however, is whether this list of abilities can be explained by sensibility alone, independently of any categorially-grounded activity by the understanding. On the contrary, one might think, doing these things just is manifesting a capacity to direct one’s sensibility in accordance with the categories, by treating the objects one perceives as persisting and causally interacting substances.
Non-conceptualists might be tempted to respond by impoverished their conception of the objects of intuition: perhaps the things that intuitions relate us to are not the ordinary three-dimensional objects of our naïve ontology, but rather momentary instantiations of manifest qualities, like fleeting colour patches and perspectival shape.\textsuperscript{31} If so, one might think, then perhaps the sorts of categorially guided capacities for attention we have been highlighting might not be necessary. Indeed, this seems to be McLear’s (2015, and forthcoming) view. In a somewhat similar spirit, Allais (2015: 147) points out that we can attend to and track particulars — like shadows, or spots of light on a wall — that are not full-blown material bodies.

This, however, gets things backwards. For one thing, it is plausible that our capacity to attend to such insubstantial particulars as shadows, reflections, or momentary instantiations of sensory qualities is parasitic upon our capacity to attend to ordinary objects. In tracking a moving spot of light on the wall we are treating it as if it were an ordinary object, by expecting it to conform to rules of persistence and causal continuity that properly apply to such objects.\textsuperscript{32} If so, attending to insubstantial particulars is no less cognitively demanding than attending to ordinary objects. For another, taking this route would seem to run afoul of at least some of the motivations for reading Kant as a naïve realist. As suggested in Section 2, one such motivation is

\textsuperscript{31} An alternative non-conceptualist line is pursued by Hanna (2008; 2015). Hanna recognises the rich dispositional structure of acquaintance relations. As he puts it, ‘in being perceptually acquainted with the object I am directly acquainted with the whole worldly object via my whole living minded body’ (2015: 115). This aspect of his view is congenial to our own, and immune to our criticism. Instead of relying on the categories, however, according to Hanna the rich dispositional structure of acquaintance is grounded in non-conceptual perceptual and sensorimotor content. But the content Hanna requires for this role seems too rich to be non-conceptual by Kant’s lights. For example, it involves ‘rules for the skilful manipulation of tools and the proximal or distal environment’ (2015: 106). But any such rules would clearly have causal content, and thus it is hard to see how Kant could have construed them as non-conceptual.

\textsuperscript{32} An anonymous referee wonders whether this is correct. If, as we suggested earlier, it is possible for a pre-apperceptive infant to enjoy spatiotemporally structured consciousness, wouldn’t she be aware of such insubstantial particulars? The answer is no: she would be aware of surfaces of colour shifting from moment to moment, but not of their identity and persistence as they move about in space.
making sense of Kant’s rejection of Cartesian scepticism in the Refutation of Idealism.

According to such scepticism, we are incapable of ‘proving an existence outside us […] by means of immediate experience’ (B275). On the reading in question, however, the ‘existence[s] outside us’ we could prove by means of ‘immediate experience’ would be restricted to such insubstantial particulars as momentary instantiations of perceptual qualities. This would seem to go counter to Kant’s argument in B275-276. Although this argument is obscure, it evidently turns on the claim that ‘all time-determination presupposes something persistent in perception’ (B275), which, as Kant’s glosses make clear, involves the perception of actual persistent external objects — not just insubstantial particulars.

At the same time, however, we hope that our approach will have made it plausible that such defensive moves on the part of non-conceptualists are not necessary. This is because, as we promised in Section 2 of this paper, nowhere does our approach require that concepts figure in the content of intuitions. For all we have said, it is perfectly possible to think of sensibility as a faculty that allows us to stand in irreducible and contentless relations of acquaintance with external objects. It is just that it can only do so as directed by the understanding, in acts of attention.33

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