The role of imagination in perception

Michael Pendlebury

Department of Philosophy, University of the Witwatersrand, Private Bag 3, WITS 2050, Johannesburg, South Africa

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This article is an explication and defence of Kant's view that 'imagination is a necessary ingredient of perception itself' (*Critique of Pure Reason* A120, fn.). Imagination comes into perception at a far more basic level than Strawson allows, and is required for the constitution of intuitions (= sense experiences) out of sense impressions. It also plays an important part in explaining how it is possible for intuitions to have intentional contents. These functions do not involve the application of concepts, and I offer a schematic account of how they are carried out by preconceptual syntheses.

Hierdie artikel bied 'n uiteensetting en verdediging van Kant se beskouing dat verbeelding 'n noodsaaklike bestanddeel van persepsie is (*Kritik der reinen Vernunft* A120, vn.). Verbeelding funksioneer in persepsie op 'n meer basiese vlak as dit waarvoor Strawson toelaat, en dit is noodsaaklik vir die konstitusie van intuïsies (= sintuiglik ervaringe) op basis van sintuiglike indrukke. Verbeelding speel ook 'n belangrike rol in die verduideliking van hoe dit moontlik is vir intuïsies om intensionele inhoud te hê. Hierdie funksies behels nie die toepassing van konsepte nie en ek bied 'n skematiese uiteensetting van hoe hierdie funksies uitgevoer word deur voorkonseptuele sinteses.

In a well-known footnote in the Transcendental Deduction in A,[1] Kant makes the intriguing claim that 'imagination is a necessary ingredient of perception itself' (A120, fn.). Strawson, in his paper 'Imagination and Perception' (Strawson 1970),[2] suggests that Kant is on to something significant here, and I agree. However, I disagree with Strawson's view that the imaginative ingredient of perception always involves the application of concepts.[3] In this article I offer an alternative account in terms of which the most basic contribution of imagination to perception is preconceptual.[4] It is convenient to present this in the form of an interpretation, reconstruction and defence of Kant's thinking; but my interest is in the philosophical issues themselves rather than the scholarly exegesis of Kant, a task for which I lack some necessary skills. In the end I am much more concerned that the views which I ascribe to Kant be illuminating than that they be his.

Let me begin with two *caveats* about my position.

First, I use the term 'concept' in the same way as Kant to refer to *possible constituents of judgments*. Concept-possession thus understood involves sophisticated intellectual skills which are, to the best of our knowledge, restricted to human beings (although apes, for example, may approximate some of them). Kant especially emphasizes self-consciousness, including the capacity for apperceptive awareness which makes it possible 'for the "I think" to accompany ... my representations' (B131). The power of judgment, and thus possession of concepts, also involves a disposition to seek reasons (which are appreciated as reasons) for or against a proposition, as well as a degree of freedom to accept it, reject it or withhold judgment on it – which is what entitles us to hold agents responsible for their judgments. Concepts, in short, belong to what Sellars describes as 'the space of reasons' (Sellars 1963: 169, see also McDowell 1994: 4–5). The power of judgment also involves the cognitive capacities which underlie our grasp of sophisticated logical operations like negation, quantification and necessitation, and which apparently presuppose the possession of a public language. In line with this, I will take it for granted that concepts are always linguistically expressible. This use of the term 'concept' is not of course the only legitimate one, and there is also another much more latitudinarian sense of the word in terms of which, for example, the discriminating capacities involved in a cat's perception of its environment qualify as concepts.[5] For our purposes it is useful to refer to such non-intellectual mental capacities as 'proto-concepts'. I would like to stress that I think that the operation of imagination in perception is inseparable from the exercise of proto-concepts so understood, and nothing in this article should be taken to gainsay this.

Second, when I say that the most basic contribution of imagination to perception is preconceptual I do not mean that imagination cannot *also* come into perceptual situations at a conceptual level. More specifically, full-blown perceptual judgments involve a significant conceptual element which is not present in mere perception as such, and I certainly do not deny that imagination comes into perceptual judgments at the conceptual level as well as at the preconceptual level with which I am concerned in this article . I explore the nature of perceptual judgments and the connections between sensibility and understanding in such judgments in Pendlebury 1996, which also pursues a number of issues relevant to those touched on in the previous paragraph.

With these admonitions in the background, let me emphasize how significant it is that Kant's footnote on imagination in perception is attached to the Deduction in A, where he is most strongly inclined to distinguish imagination from both sensibility and understanding, and to treat it as a separate faculty or 'subjective source of knowledge' (A115). The three faculties in the Deduction in A are sensibility, imagination (the power of synthesis) and apperception. Kant associates sensibility with receptivity and imagination and apperception with spontaneity. As this suggests, he sees sensibility as passive in the sense that its operations are due largely to external factors, and imagination and apperception as active in the parallel sense that their operations are due largely to internal factors.[6] Understanding is construed as 'the unity of apperception in relation to the synthesis of imagination' (A119). Imagination as a separate factor tends to drop out of the picture in the Deduction in B, where its role is largely absorbed by understanding (but not completely – see B151–152).

It is clear that imagination is viewed as preconceptual and non-intellectual in A, where it has the important function of 'mediating' between sensibility and understanding, and that it is only when it is so viewed that it satisfies Kant's famous description of it as 'a blind but indispensible function of the soul, without which we would have no knowledge whatsoever, but of which we are scarcely ever conscious' (A78 = B103). This is, I believe, a dramatic way of emphasizing that imaginative syntheses, or at any rate the most basic imaginative syntheses, are not

subject to rational control or apperceptive consciousness, both of which are hallmarks of Kantian concepts of the understanding (see above). Thus circumstantial evidence strongly suggests that Kant had 'blind' imagination in mind when he claimed that imagination is an ingredient of perception.

Before turning to some details which support and make sense of this reading, I want to reply to two preliminary objections.

Objection 1: When Kant says in the Introduction to the Transcendental Logic that 'intuitions without concepts are blind' (A51 = B76), he must mean that sensory intuitions involve concepts without which they would not be sensory awarenesses, but merely bare, non-representational sensations.[7] This clearly implies that concepts are involved in perception anyway. *Reply*: I do not think that this is a correct reading of Kant's dictum, which is embedded in the middle of a paragraph where he takes pains to insist on the separability of sensibility and understanding, and to explain that we '*make* our intuitions intelligible' by 'bring[ing] them *under* concepts' (A51 = B76, my emphasis), which is a far cry from their being conceptual in their own right. The dictum is therefore best taken as a way of stressing the straightforward claim to which it is implicitly attached, namely, that 'without understanding no object would be thought' (A51 = B76), and of drawing attention to the connected point that intuition is blind in the same sense as preconceptual imagination. For the fact is that intuition in its own right need not involve rational control or apperceptive consciousness, but this in no way compromises its status as representational.[8]

Objection 2: Kant's 'official' position does not provide an adequate place for preconceptual imagination, for imagination is not recognized as a separate faculty in the architectonic of the *Critique of Pure Reason* as a whole,[9] and it is also largely unacknowledged in the B Deduction, which must reflect his more considered view. *Reply*: For reasons of which I hope to provide an inkling in the rest of this article, I see Kant's recognition of preconceptual synthetic imagination as a major intellectual breakthrough,[10] albeit one which remains largely unabsorbed. Kant's use of the notion of imagination was so revolutionary that it is possible that he did not fully appreciate its significance himself, and his readers' capacity to come to grips with it may have been so severely limited that he could not give it the spotlight it deserved. It is also plausible that their response to the Deduction in A, where imagination had its best showing, was so uncomprehending that Kant felt compelled to re-allocate most of its lines to a less shady character, namely, understanding. It is even possible that he came to see it as irrelevant to the epistemological concerns of the *Critique of Pure Reason*, but it remains essential to the Analytic of the Beautiful in the *Critique of Judgment* (see Posy 1991: 38–41). In any case, it is clear that Kant deserves credit for the idea of preconceptual imagination, and there is no reason why we should not milk it for all it is worth.

Strawson identifies two main functions for imagination in perception, functions to which he thinks both Hume and Kant are committed:

> By both philosophers imagination is conceived as a connecting or uniting power which operates in two dimensions. In one dimension ... it connects perceptions of different objects of the same kind; in the other dimension ... it connects different perceptions of the same object of a given kind. It is the instrument of our perceptual appreciation both of kind-identity and of individual-identity, both of concept-identity and object-identity (Strawson 1970: 33).

It is noteworthy that the two recognitional capacities which Strawson here ascribes to imagination are relatively sophisticated; that in the way in which he describes them it is quite plausible that they involve the application of concepts; and that these recognitional capacities presuppose perceptions which do not involve the types of 'connections' (or Kantian syntheses) on which the capacities themselves presumably depend. As Strawson notes, Hume's view is that these presupposed perceptions do not depend upon imagination at all. Strawson is much more cagey about Kant's position. He allows that

> The Kantian synthesis ... is something necessarily involved in, a necessary condition of, actual occurrent reportable perceptions having the character they do have (Strawson 1970: 42).

But what he appears to mean by this is simply that the characters of perceptions presupposed by syntheses like the two he considers are deeply affected by those syntheses, and he does not explicitly recognize that for Kant the existence of perceptions as perceptions depends upon synthesis. For what is definitive of Kant's view is that imagination is partly constitutive of all perceptions whatever.

This ought to be evident from Kant's footnote, which is worth quoting in full:

> Psychologists have hitherto failed to realise that imagination is a necessary ingredient of perception itself. This is due partly to the fact that the faculty has been limited to reproduction, partly to the belief that the senses not only supply impressions but also combine them so as to generate images of objects. For that purpose something more than mere receptivity of the senses is undoubtedly required, namely, a function for the synthesis of them (A120, fn.).

This makes it clear that Kant thinks that imagination comes into perception at a far more basic level than Strawson recognizes. For Kant's position here is simply that all perception requires images,[11] which are not given by sensibility but result from the combination of sense impressions by imaginative synthesis. Thus, according to Kant, what we could describe as *image-generating syntheses* are involved in all perception. Taken as a phenomenological thesis this is, it will become evident, questionable. I will, however, be proposing an alternative interpretation on which the claim is, I believe, plausible.

We should certainly not reject it on the basis of present-day concerns about the nature and ontological status of mental imagery, which are not germane to Kant's problematic. For our purposes Kant's commitment to images can reasonably be regarded simply as a way of recognizing that a subject cannot perceive without having a perceptual experience, for example, an aural experience of a soft, low-pitched hum, an olfactory experience of chocolate ice cream, or a visual experience of a rich and intricate woodland scene. Kant referred to perceptual experiences as 'intuitions', and I will follow suit.[12] Talk about perceptual images, along with talk about visual and other perceptual fields, is to be understood merely as a convenient way of getting at various features of intuitions without any commitment to the reification of their characters or contents. To come to terms with Kant we must also grant that intuitions somehow involve sense impressions, which are affective sensations of the kind usually caused by our sense organs. Their ultimate natures are not, however, important.

We can now reformulate the position advanced in Kant's footnote as the view that all perceptual intuitions are constituted out

of sense impressions by image-generating syntheses. Let us refer to this as 'Kant's thesis'.

It is important to see that we cannot come to appreciate the reasonableness of Kant's thesis by means of a phenomenological investigation. Our focus of awareness in perceptual experience is on worldly situations – such as a squirrel's jumping through the entangled branches of a gnarled and convoluted crab-apple tree in a woodland clearing – and it is situations like this which are phenomenologically given. Kant's 'givens' of sensibility are not intuitions but impressions. These are not phenomenologically given, and the synthetic process which constitutes them as intuitions is not one of which we could be phenomenologically aware. As Peter Krausser puts it,

> The phenomenologically given is [itself] constituted through and by the synthetic processing of [sense impressions,] ... [which] are 'given for' the syntheses, i.e. to be processed by them (Krausser 1976: 190, n.2).

The case for Kant's thesis must therefore be based on theoretical considerations arising from reflection and analysis.

His argument for the thesis in the body of the Deduction in A is that every intuition 'contains a manifold' of impressions, and

> since ... [these] occur in the mind separately and singly, a combination of them, such as they cannot have in sense itself, is demanded. There must therefore exist in us an active faculty for the synthesis of this manifold ... [– which] ... has to bring the manifold ... into the form of an image... (A120).

It is not clear to me that Kant gives a decisive argument for the 'manifoldness' of every intuition, or for his tacit assumption that a single sense impression cannot be an image. The problem of doing so may, moreover, be aggravated by a claim which he repeats several times in the *Critique*, namely, that a subject's impressions are distinct only if they occur at distinct times – that '... [impressions] contained in a single moment ... can never be anything but absolute unity' (A99, Kant's italics removed). If this holds (on what I take to be the most natural reading), then either instantaneous intuitions are impossible or they require no synthesis.

It seems to me, however, that there can be no harm in allowing (if only for the sake of the argument) that an instantaneous slice of an intuition may itself qualify as an intuition, or in recognizing the possibility of a number of distinct sense impressions overlapping at an instant of time. But it still does not follow that every intuition 'contains a manifold'. However, it is not crucial to an appreciation of Kant's thesis that we insist that this holds without exception. Far more important is that we understand why typical, everyday intuitions involve a manifold of impressions, and how this is connected with the need for image-generating syntheses.

It cannot be disputed that most of our intuitions involve complexities of character, content and structure – complexities which are most richly abundant in the intricate plenitude of ordinary visual experience. Furthermore, distinct intuitions can and do overlap or fail to overlap with respect to such features, and they resemble and differ from one another in various degrees and respects of which we are often only tacitly aware. One very simple way to account for these facts is by treating sense impressions as *sub-intuitive* building blocks for our intuitions. This approach is encouraged by the possibility of associating these impressions loosely with the stimuli on which our intuitions normally depend.

It ought to be clear that no mere aggregation of sense impressions amounts to an intuition, and that even the totality of impressions of a single sense modality in one subject at one time do not do so. For (even if we set aside the possibility of rogue sensations which resist combination with the others),[13] no such totality of, say, visual impressions adds up to a highly structured intuition which – in virtue of all the detailed characteristics of the visual field, as well as gestalt features such as the relations of figure and ground which it instantiates – has the capacity to represent a rich and complex worldly scene. The need for combination and integration is especially obvious if for the moment we think of impressions as mental correlates of minimal proximal stimulations of the sensory nerve endings.[14]

However, the combination and integration of sense impressions into intuitions is certainly not something which the subject knowingly *does* (either with or without the help of concepts). It is, rather, something which merely occurs in the subject, automatically and involuntarily. And it can – and usually does – occur without judgment, without reasoning, without apperceptive awareness, without either a real or a felt need for justification, and without the subject's being able to articulate the intricate details of what is going on in language. The process, which is that of image-generating synthesis, is clearly one which falls outside the space of reasons. In terms of the Kantian notion of a concept which I have outlined above, it is, therefore, preconceptual.

This still leaves us with the problem of accommodating a possibility which I have not ruled out, namely, that of an intuition which involves only a single sense impression.[15] What I want to say here is that the mere occurrence of an impression cannot amount to an intuition, since an impression in its own right is nothing but a bare, non-representational sensation. Although it is no doubt represent*ed* at some dim level of awareness, it is not in itself a represent*er* – which any intuition must be. Just as a sound counts as a meaningful word only by playing an appropriate role within a language, so an impression qualifies as representational – that is, as an intuition – only by playing an appropriate role in the psychology of the subject. It must, in other words, have some of the most basic effects on the subject's mental and behavioural dispositions which are characteristic of intuitions in general. Greater specificity is not necessary here, but Kant's talk of impressions being 'taken up' and 'apprehended' by consciousness is suggestive, as is Young's (1988: 143) thought that the operation of imagination involves a kind of preconceptual 'interpretation' of impressions (which is perhaps best construed as involving the exercise of proto-concepts).

Let us describe an impression which plays an appropriate psychological role as one which is *engaged* by the mind. This allows me to suggest that we can solve the problem of an intuition consisting of a single impression by treating that impression's *being engaged* by the mind as a case of image-generating synthesis. The idea of a synthesis which applies to just one thing may be paradoxical, but, like Bertrand Russell's (1956: 199) description of properties as 'monadic relations', it has some point. For, any intuition involving a manifold of impressions must *also* have been engaged by the mind, and *its* engagement can reasonably be viewed as something arising from and inseparably connected with the processes of combination and integration involved in the image-generating synthesis on which its unity depends. In the case of a single-impression intuition, if there is any such thing, the need for combination and integration falls away, so the only job left for the relevant preconceptual processes is that of engagement. Describing the processes as 'synthesis' in both the manifold and the single-impression case is simply a useful way to emphasize this important common function.

Although there is room for much more discussion of these

issues, I hope I may now be permitted to assume that it is possible by invoking sense impressions and image-generating syntheses to accommodate much of the sensuous character of intuitions as well as a central feature of their intentionality, namely, the fact that they represent objects. But as suggested earlier, there is much more than this to their intentional contents, for they do not represent merely bare objects, but whole situations. In other words, they represent objects as having properties and standing in relations to one another. This holds, I insist, even for preconceptual experience involving only animal expectations and protoconcepts. For we cannot hope to explain the behaviour of, for example, a cat stalking a bird without supposing that the cat (which clearly has no concepts in the Kantian sense) has intuitions which represent the bird as being at a certain distance, following a certain path, moving at a certain speed, and so on. (I borrow this example from Rosenberg 1986: 26–27.)

The above features of the intentional contents of intuitions cannot be fully explained on the basis of their component impressions and the image-generating syntheses of which they are the products. At least two further general conditions must be satisfied. First, there must be appropriate correlations between world-ly properties (which I shall henceforth use as shorthand for '1-place properties, relations and situation-types') and the intuitions which represent those properties. Second, an intuition which represents a given property must belong to an appropriate similarity class of intuitions such that all members of that class represent that property.

The first of these conditions is in effect a realist requirement of reference. Kant, I believe, had little, if anything, to say about this condition as specified, and Kantian imagination is not directly implicated by it. However, my picture would be incomplete without some recognition of it. A feature or aspect of an intuition cannot, it seems to me, represent a property unless it is normally caused by the property, and, in addition, it is normally apt to give rise to changes in the subject's mental and behavioural dispositions which are appropriate to the presence of the property or it otherwise has the potential to evince some form of responsiveness to it. I am not putting this forward as a reductive definition of property representation, but only as a pair of central facts about it which any complete account, whether externalist or internalist, must accommodate.

Our second general condition is an equivalence condition in terms of which a particular intuition – and I stress that I am now talking about a *token* intuition had by a particular subject at a particular time – cannot represent a given property without somehow being *grouped* with other actual and possible intuitions which also represent the same property. For example, a certain aural experience which I had when first typing these words represented a quality of sound like that produced by a small fan in a computer, and it could not have done so unless other relevantly similar experiences represented the same sound. This is fairly obvious, and it is also implied by the aforementioned link between the normal causes and effects of features of intuitions and properties they represent, which makes sense only if the features concerned are not restricted to particular intuitions.

To return to the issue of imagination in perception, what I want to suggest in connection with the equivalence condition is that the groupings of intuitions which we are considering are products of preconceptual syntheses, and that the most basic property representational aspects of the contents of intuitions depend upon these *equivalence-generating syntheses*, as we may now describe them.[16] I develop the case for this position in a paper on Kant's Schematism (Pendlebury 1995), where I treat the most basic empirical schemata, such as the those of *triangle* and *green*, as products of such syntheses.[17]

In terms of my present apparatus, the crux of the argument in that paper is that what we may think of as the 'internal properties' of intuitions – namely, those which arise from their constituent impressions as combined by the relevant image-generating syntheses – determine (in the mathematical sense) countless similarity classes, many of which do not coincide with properties represented in intuition. The psychologically real groupings of in-tuitions associated with these properties are accordingly not internal to the intuitions themselves.[18] They must, therefore, be constituted by associative mental processes, in particular those on which the most primitive aspects of the subject's 'quality space' (Quine 1969: 123–128) depend. It is these preconscious processes which I am identifying as equivalence-generating syntheses.

The intuitive contents connected with these syntheses do not come close to the sophisticated recognitional capacities which Strawson associates with imagination. In fact these contents include only properties which can, so to speak, be wholly present in the world during the time-frame of an intuition which represents them, for example, colours, shapes, spatial relations and surface textures. I am, however, committed to the view that much richer properties are also represented in the preconceptual contents of intuitions. We must grant that these include some kind-properties and identity-properties, which come into play in the most primitive forms of Strawson's two recognitional capacities, as well as positive and negative 'affordances' like the property of being food, fire, a predator or a potential mate; for we cannot otherwise hope to explain animal behaviour or the biological function of perception. The representation of such properties involves complex expectations and associations, and thus presupposes a scale of interanimation between intuitions greatly exceeding what is required for mere equivalence groupings.

Consider the perceptual representation of spatio-temporal continuants, for example, squirrels. An equivalence-generating synthesis is involved here, but on its own this accounts only for the representation of what we could call squirrel-likeness, which, like redness or circularity, does not require continuity. In order for squirrels, as opposed to squirrel-like things, to be represented, the relevant equivalence class of actual and possible intuitions must also be segmented into sub-groups in such a way that the intuitions belonging to a common sub-group could be described as intuitions of the *same* squirrel. This involves what we could describe as *identificatory syntheses*, which are imaginative but principled *unifications* of groups of intuitions within the relevant equivalence class. For one cannot perceive something as a squirrel without being disposed at some level to treat the intuition concerned as a manifestation of a continuant which could also appear through other intuitions. And this is largely a matter of animal expectation which involves the intuition's being connected with other actual and possible squirrel-like intuitions in such a way that it becomes part of a coherent system of past, present and anticipated future intuitions which collectively represent a single, persisting squirrel.

The two main types of synthesis involved in the perceptual representation of types of continuants are clearly connected with the two recognitional capacities which Strawson associates with imagination,[19] but I have been concerned with primitive versions of those capacities which are possessed by animals without concepts as well as by human beings. The associated contents are not products of what Kant would have called 'mere receptivity', and that is why it is necessary to appeal to preconceptual imagination to explain them.

The ideas I have been advancing on the role of imagination in perception have epistemological as well as psychological significance. In particular, they make an important contribution to a Kantian reply to what is often described as 'Humean skepticism',[20] for they explain how continuity and – as I have argued (Pendlebury 1995: 793–794) – causal relations are, after all, represented in experience, and are in that sense given to consciousness. A 'Humean skeptic' might be tempted to reply that even for the Kantian such contents are not simply found, but are 'put there' by means of imaginative synthesis. This would be a telling point within the context of an empiricism in terms of which the operations of imagination in perception presuppose primitive perceptual contents, like properties of colour and shape, which *are* 'simply found' in experience – or, in other words, are Given (with a capital 'G') by mere receptivity. But according to the Kantian position I have adumbrated, there are *no* perceptual contents which enjoy that privileged status, and even the perceptual representation of greenness and triangularity depends upon imagination. Thus there is no asymmetry with respect to Givenness between traditional sensory qualities and relations on the one hand and continuity and causation on the other, and ascriptions of the former to reality are no less subject to the evaluation of reason than ascriptions of the latter. Our inability to extract continuity and causation from sequences of traditional sensory qualities and relations is therefore no embarrassment.[21]

Let me conclude by responding briefly to one possible challenge, namely, that what I have done is taken some ideas about 'predoxastic processing' from Cognitive Science, diluted and distorted them, and projected them anachronistically onto Kant. My reply is that any such appearance is probably due to the fact that it was difficult to appreciate Kant's insights into the nature and importance of preconceptual imagination prior to current intellectual trends which are connected with advances in cognitive studies, but that Kant was in fact a significant precursor of these developments. It is in any case salutary to go back to Kant to be exposed to depths unplumbed by recent work, especially with regard to the nature of judgment and reason and their intricate connections with sense and imagination in reflective knowledge – for we cannot hope to understand *human* minds without coming to grips with these further issues.[22]

Notes

1. I follow the standard practice of referring to the first edition of the *Critique of Pure Reason* as 'A' and the second edition as 'B'. All quotations are from the translation by Norman Kemp Smith (Kant, 1933).
2. This article contains, among other things, some worthwhile reflections on something I do not consider, namely, the question of why Kantian imagination is rightly so called. Young 1988 is an insightful paper which is also useful on this issue.
3. A similar position is also taken by Carl Posy (1991: 28-31) with respect to the *Critique of Pure Reason*, which in his view lacks the apparatus to do justice to the possibility of imagination which is not guided by concepts (personal communication). Posy, however, insists on Kant's recognition of preconceptual imagination in the *Critique of Judgment* (Posy 1991: 38–41).
4. This is a significant point of agreement with Young (1988) and I shall not repeat the arguments and textual evidence which he offers in support of the point. My position is, however, more radical than Young's, for I think that imagination contributes to the contents of perception, which is something he denies (Young 1988: 164).
5. This is the notion in question in, for example, Bradshaw 1992.
6. Perhaps this way of explaining the difference between receptivity and spontaneity sits better with realism than with Kant's transcendental idealism. Transcendental idealism is not, however, salient to the central issues with which I am concerned in this article, and I prefer to work from the perspective of a modest commonsense realism.
7. This sort of interpretation is endorsed by McDowell (1994: 9 – which should be read in conjunction with the remarks on the blindness of intuition on pp. 52–55).
8. For further textual support of the view that Kant does not think that intuitions in their own right involve concepts, consider, for example, his claim that 'intuition stands in no need whatsoever of the functions of thought' (A90–91 = B123), and that 'That representation which can be given prior to all thought is entitled intuition' (B132). At A89–90 = B122–123 (reiterating and expanding on A19 = B33) Kant also insists that sensibility without understanding presents us with objects 'as appearances'. As I understand it, this qualification is not meant to take back the claim that sensibility presents us with objects, but merely to suggest that it does not present them as *objective* – that is, as objects of objective knowledge.
9. The question of why imagination is not recognized in the architectonic of the *Critique* is raised by Young (1988: 147). His answer is that only objective sources of knowledge require such recognition, and that Kant regards imagination as a subjective source of knowledge (Young 1988: 164). This is unsatisfactory, for exactly the same holds of sensibility and apperception (see A115).
10. In saying this I do not wish to downplay the centrality of full-blown human understanding in Kant, or to diminish the remarkable advance which he brought about in our grasp of its nature, but only to draw attention to an important further contribution to philosophy.
11. Kant says 'images *of objects*'(my emphasis), which may tempt one to think that he is after all concerned with objectivity, continuity and classification, but this suggestion is undermined by the explicit assumption that such images arise from the mere combination of impressions. The phrase 'of objects' is concerned merely with intentional objects ('as appearances') in the above context, and it is, strictly speaking, redundant.
12. Kant also allowed for 'pure' (*a priori*) intuitions of space and time, and for the possibility of intellectual intuitions (in the case of a purely noumenal intelligence). These applications of the term 'intuition' may be set aside for the purposes of this article .
13. Perhaps the best examples of the sorts of sensations that I have in mind here would be so-called 'auras', like the impressions of indefinite floating white flakes which often accompany migraine.
14. I make this point as an aid to understanding without any commitment to the identification mooted, for I would like the substance of my account of the role of imagination in perception to be compatible with a variety of possible views on what sense impressions are.
15. It is in fact unclear what this hypothetical possibility amounts to, for it does not seem necessary for impressions to be determinately numerable. I allow the possibility because my task might otherwise appear too easy, and because it provides the opportunity for making an important point.
16. I do not, incidentally, wish to suggest that the different forms of synthesis mentioned in this article are separable in reality. For my puroses it is enough if they are merely notionally distinct.
17. Pendlebury 1995 does not, however, accommodate image-generating syntheses (although it does allude to them on p. 795, fn.15).

18. This is significantly at odds with Posy 1984: 25.
19. These types of synthesis also correspond to the two types of 'perceptual groupings' which Posy (1984: 24) identifies as 'property-classes' and 'object-classes' of perceptions.
20. I want to leave open the question of whether Hume was, as Kant thought, committed to the extreme empiricist scepticism to which this phrase is usually applied. Baier (1991), for example, suggests otherwise.
21. The considerations presented in this paragraph may of course be taken to support a total epistemic skepticism rather than the commonsense fallibilism which I am inclined to favour, but it is not possible to pursue this issue here.
22. Versions of this article were presented to the Philosophy Colloquium at Dartmouth College and the Conference of North Carolina Philosophical Society, Charlotte, in February 1996. For useful comments and criticisms I am grateful to my audiences on those occasions, an anonymous referee for this journal, and especially Carl Posy (who raised more issues than time and space allowed me to accommodate in my final revision). I am also pleased to make the following obligatory statement: The financial assistance of the Centre for Science Development is hereby acknowledged. Opinions expressed in this article and conclusions arrived at are those of the author and are not necessarily to be attributed to the Centre for Science Development.

Bibliography

Baier, A.C. 1991. *A progress of sentiments: reflections on Hume's Treatise*. Cambridge, Mass.: Harvard Univ. Pr.

Bradshaw, D.E. 1992. The nature of concepts. *Philosophical papers* **21**: 1–20.

Kant, I. 1933. *Critique of pure reason* (trans. N. Kemp Smith). London: Macmillan.

Krausser, P. 1976. Kant's schematism and the problem of pattern recognition. *Synthese*, **33**: 175–192.

McDowell, J. 1994. *Mind and world*. Cambridge, Mass.: Harvard Univ. Pr.

Pendlebury, M. 1995. Making sense of Kant's Schematism. *Philosophy and Phenomenological Research*, **55**: 777–797.

Pendlebury, M. 1996. Sensibility and understanding in perceptual judgments. In preparation.

Posy, C.J. 1984. Transcendental idealism and causality: an interpretation of Kant's Second Analogy, in W. Harper & R. Meerboote (Eds), *Kant on causality, freedom and objectivity* (pp. 20–41). Minneapolis: University of Minnesota Press.

Posy, C.J. 1991. Imagination and judgment in the critical philosophy, in R. Meerboote (Ed.), *Kant's aesthetics*, Vol.1 of the North American Kant Society Studies in Philosophy (pp. 27–48). Atascadero: Ridgeview.

Quine, W.V.O. 1969. Natural kinds, in W.V.O. Quine, *Ontological relativity and other essays* (pp. 114–138). New York: Columbia Univ. Pr.

Rosenberg, J.F. 1986. *The thinking self*. Philadelphia: Temple Univ. Pr.

Russell, B. 1956. The philosophy of logical atomism, in B. Russell, *Logic and knowledge: Essays 1901–1950* (pp. 177–279). London: Macmillan.

Sellars, W. 1963. Empiricism and the philosophy of mind, in W. Sellars, *Science, perception and reality* (pp.127–196). London: Routledge.

Strawson, P.F. 1970. Imagination and perception, in L. Foster & J.W. Swanson (Eds), *Experience and theory* (pp. 32–54). Amherst: University of Massachusetts Press.

Young, J.M. 1988. Kant's view of imagination. *Kant-studien*, **79**: 140–164.