# Comments on Gauker’s *Word and Image*

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Chris Gauker has written a bold and interesting book about concepts and imagistic thought. There is a great deal of material in it that will contribute in fundamental ways to how we think about these topics. In this comment, though, I will focus on a longstanding disagreement with Gauker. He thinks, in a rather more radical way than most proponents of this thesis, that perceptual experience is non-conceptual. I disagree.

In the book, Gauker argues for two related theses. The first is that concepts such as *dog* and *chair* cannot be extracted from perceptual experience—he argues that philosophers such as Locke and Jesse Prinz fail in their attempts to show that these concepts are grounded in perception. The claim here is that kinds that are capable of different perceptual presentations cannot be grounded in images. Dogs and chairs come in different shapes, sizes, and colours and are viewed in different conditions; there is no finite set of perceptual looks or appearances that defines *dog*, and in such a case, perceptual states cannot, by themselves, function as reasons for believing that something is a dog or a chair. I’ll call this the NOT DOG thesis, to remind you of a key example.

The second main thesis that I want to contest is stated on page 1. It draws a stark contrast between conceptual thought and perceptual experience

Concepts may be defined as the building blocks of judgements . . . conceptual thought involves the classification of things as belonging to kinds . . . In contrast, *perceptual experience, and imagistic thought more generally, draw no functional boundaries between one kind of thing and another kind*. Imagistic thinking rests, instead, on an ability to track things through space, on an understanding of how one event can lead to another, and on a non-conceptual capacity to recognize that an object *x* is more like an object *y* than like an object *z*. *Concepts cannot be extracted from perceptual experience*. (Emphasis added.)

In short, the claim is that perceptual images are non-conceptual. Further to the point, “concepts cannot be extracted from perceptual experience.”

This is a stronger thesis than the first. Of course, if *no* concept can be extracted from perceptual experience, then *dog* and *chair* cannot be. But what about *green*, which has a standard perceptual presentation? Is this a concept that can be extracted from perceptual experience? Gauker thinks not. According to him, “spoken” language (as opposed to just the language of thought) is needed for *any* conceptual thought, even thought involving the concept *green*. The claim is that no judgement can be grounded on perceptual experience alone, not even the judgement that something is green. I’ll call this the NOT GREEN thesis.

Gauker’s arguments for these two theses are somewhat independent. Chapter 1, about the “Lockean theory,” is mainly about the weaker NOT DOG thesis. Chapter 2, about the “Kantian theory” addresses the stronger NOT GREEN thesis. These theories are presented as two different approaches to the same question, namely that of extracting concepts from perceptual images. But Kant raises issues about the structure of perception itself—he asks how the mind extracts percepts from “the manifold given in intuition”. These questions have no place in the Lockean framework, which takes a perceptual idea to be nothing more than a trace that the world leaves on the conscious mind. The NOT GREEN thesis has evident urgency in Kant’s framework: *green* isn’t an idea that is simply caused in us by certain objects, but something that results from a concept-involving process within ourselves.

Can a determinate idea or some bounded set of determinate ideas define a concept? Can I recognize something as a dog because of some relationship that its appearance bears to such a small set of ideas? Gauker’s NOT DOG thesis rests on a negative answer. I would like to ask two questions about his approach. In posing these questions, I’ll stay within what Gauker identifies as the Lockean framework, but I believe that they have wider application.

My first question concerns imagistic thinking in all creatures, including animals. Consider Locke’s idea of a swan: “white Colour, long Neck, red Beak, black Legs, and whole Feet, and all these of a certain size, . . . etc.” Gauker objects:

That a word describes a component of his mental picture of a particular swan . . . does not imply that the word signifies a simple, general component of his idea of swans-in-general. (23)

Gauker accuses Locke here of an elementary error, call it the error of misplaced generality. A word describes an image; ‘swan’ describes an image of a swan. So (Gauker says) Locke takes the image to have the same generality as the phrase. Now, I have no opinion about whether Locke actually made this error. As we shall see shortly, Berkeley accuses Locke of treating images as abstract generalities, but this is not the same as imputing the generality of words to images that the words describe.

Let us in any case concede that any imagistic combination of simple ideas is *determinate* in certain ways*.* An image of a swan represents that swan as having a certain determinate colour, for example. Then the question is whether an image can, notwithstanding its determinacy, represent something determinable—can it represent a *kind*. Can an image of a determinately coloured swan represent swans of different colours?

Given how this question is framed, let us begin by stipulating that images are determinate with respect to the colour of the thing that is represented in the image. (This is actually not true: since images may be ambiguous about the colour of the illumination, they may also be ambiguous about the colour of the thing that is being imaged. But let’s ignore this.) Let us concede further that all Lockean concepts are images. Framed in this way, the problem is not“How can we make an image determinable?” but rather, “How can an image of a determinately coloured thing stand for a concept of an indeterminately coloured thing?” Put in this way, using an image to signify a class can only consist in indifference to certain aspects of a determinate idea. For example, the image of a determinately coloured swan can stand for swans in general only if we are indifferent to variations in colour. Locke seems to know this. According to him, creatures form the general idea of *Man* when “they leave out of the complex *Idea* they had of *Peter* and *James*, *Mary* and *Jane*, that which is particular to each, and retain only what is common to them all” (quoted by Gauker, 29). Berkeley and Gauker take Locke to be positing an idea that is not determinate in the way that images of Peter and Mary are. This is clearly not the only way we can understand the operation of selective retention.

We can take a Humean line on this? Suppose I am sitting in my office waiting for a “man” to come and fix my computer at 10 am. I may form an image of John coming to fix my computer at 10 am, but frame my expectation in such a way that I count it as satisfied even if Mary shows up at 10 am, but not if John himself shows up at 10:30. In other words, I may have different ways of entertaining the same particular idea. When I have an appointment with Mary, I entertain the idea of her in such a way that my expectation is not met if Peter comes to see me; when I simply expect some person to show up, I may entertain an idea of her as representing a whole class. Gauker expresses a part of this idea (which he opposes) with perfect clarity: “an idea of Lassie may come to represent all collie dogs, or all dogs, or all mammals . . . [the idea] is the medium by which the mind thinks general thoughts pertaining to the whole class” (29). Thinking a general thought by means of an idea of a particular thing is constituted by indifference to certain particularities in the image.

Imagistic thinking must be the conscious medium of thought in animals. Here is a picture of my now deceased dog, Beethoven. To me, it was clear that he was communicating to me that he wanted me to put some food in his bowl. He might be imagining, say, lamb, and his image may have it symmetrically distributed in this bowl. However, he would have been just as satisfied if he got beef piled up on the left. Let’s call this the “indifference within a class” requirement. To the extent that Beethoven’s thought satisfied this requirement, he was representing and communicating his desire conceptually.

## Macintosh HD:Users:mohanmatthen:Pictures:Photos Aug 2009:Previews:2012:09:09:20120909-213540:FQWmlKxXSwiXD62lenq2OQ:DSCF0388.jpg

Figure 1: Beethoven says, "Feed me."

I should say that there is more than one way of formulating the indifference within a class requirement. Above, I express it in terms of *outcome*. My idea of Mary expresses a class C if my *reaction* to situations that I express by means of this idea is indifferent within that class. I may for example resolve to be polite to everybody. Maybe I image this in terms of my behaviour relative to Mary. But the behaviour that is guided by the idea is indifferent within the class of persons. The requirement might also be expressed causally. It might be that my present use of my idea of Mary is indifferent within the class of humans because it was caused by a bunch of representative humans.

Following Hume, I propose that when we think about triangles in general, we visualize a determinate triangle, but are indifferent when a triangle of a different shape is substituted. (We ought to note, however, that there is a difference between determinacy of an *image* and determinacy of the thing it presents to us. The lines in an image that represent the sides of a triangle may be equal, but since the image might be indeterminate as to the angle of viewing, it may be unclear whether the lines thus imaged are equal or unequal. Moreover, the size of the triangle represented by the image may be similarly unclear.)We single out one particular feature of the image as the one to which we are *not* indifferent. Does this proposal beg the question? Is this singling out of one particular feature an implicitly linguistic action (i.e., linguistic relative to a “spoken” language)? No, because my dog Beethoven was capable of performing it. It is certainly possible to argue that a language of thought is necessary for this operation to work. It is possible to argue that Beethoven’s action proves that he possessed a language of thought. (Fodor does argue this in chapter 1 of *The Language of Thought*.) What we *cannot* argue is that Beethoven needed a *spoken* language in the background of the communicative act recorded in Figure 1. He didn’t possess such a language.

Gauker would, if I understand him correctly, object to the indifference-within-a-class requirement, because he doesn’t think I could provide him an account of exactly what one should count as irrelevant and what relevant. “How much should we leave out?” he asks. “Why does the mind try to find what Peter and James, Mary and Jane have in common rather than just what Peter, James, and Mary (but not Jane) have in common?” The answer to this question is that I don’t know. As Hume urged, abstraction is a psychological process. When we see enough, we come to disregard certain facts about Peter when we use our idea of him to represent humankind. This is all that I can say.

My second question about the Lockean theory concerns *humans*. Why can *we* not have mixed representations, consisting partly of images and partly of logical or other operators? Gauker asks, for example, “How can Locke account for the distinction between judging that *all gold is yellow* and judging merely that *some gold is yellow*?” And he says that such problems can only be addressed if we “acknowledge that ideas used as predicates must have *argument places*.” Again, this is not precisely correct. An animal may be strongly conditioned to expect that something of kind K belongs to kind J, or only weakly conditioned. This might correspond to the difference between thinking that most or all Ks are J and thinking that only a few Ks are J. But again, let’s concede the point: to differentiate between universally quantified and existentially quantified statements, we need language. So it may be that only language users can make the distinction between *all* and *some*, and between transitive relations and their converse. But this does not suffice to establish the NOT DOG thesis. It might be that humans are capable of making such distinctions only in virtue of language, whether it be a spoken language or a special language of thought. It may still be true that images cannot be dispensed with. It could be, in other words, that *both* images and language are needed for certain logically complex concepts. This is my question: why can’t a *mixed image* define a concept?

Let’s move on to the stronger NOT GREEN claim, namely that *no* concept can be extracted from perception. It is my view that concepts are components of perceptual content and extractable therefrom. In my 2005 book, *Seeing, Doing, and Knowing* (Oxford University Press), I argued for what I called the Sensory Classification Thesis, “Sensory systems classify; they assign distal stimuli (i.e., external sensed objects) to classes.” Though I agree with Gauker that perceptual content is bound up with similarity relations, I don’t think that this precludes perceptual classes or “kinds.” My position is thus radically at odds with that which Gauker articulates above, and I want to explore why we are at odds.

To motivate the thesis that images can have conceptual content, I’ll start with an observation made by Orhan Pamuk in his novel *My Name is Red.*

The Venetian virtuoso had made the nobleman’s picture in such a way that you would immediately know which particular nobleman it was. If you’d never seen that man, if they told you to pick him out of a crowd of a thousand others, you’d be able to select the correct man with the help of that portrait . . . If your face were depicted in this fashion only once, no one would ever be able to forget you . . . Those who had never seen you alive, even years after your death, could come face-to-face with you as if you were standing before them. (Knopf 2001, 36)

Pamuk’s point presupposes that pictures express types. To put it in a way relevant to the present discussion, pictures present a certain look. The Turkish miniaturists, who painted human beings schematically, presented looks that many men could possess. They marvelled that the look of a human painted by a Venetian master could be so detailed that you could “select the correct man with the help of that portrait,” “pick him out of a crowd of a thousand others.” Antonello da Messina’s *Portrait of a Young Gentleman*,Figure 2, presents a look that *could* be true of more than one person, though it is so detailed that you would normally recognize an individual by it, whereas the contemporaneous Ottoman representation, *Portrait of a Painter*, Figure 3, presents a type that hundreds of men might instantiate.



Figure ***Portrait of a Young Gentleman*** Antonello da Messina (Antonello di Giovanni di Michele de Antonio) Oil on panel, 1474 12 5/8 x 10 11/16 inches (32.1 x 27.1 cm) Philadelphia Museum of Art: John G. Johnson Collection, 1917



Figure 3: "Portrait of a Painter," Freer Gallery of Art, Smithsonian lnstitution, Washington, D.C.: Purchase, F1932.28

The claim that I am making is this: the class of things that possesses an imagistically presented look constitutes the *extension* of that image. To wit:

Many men have the look that is presented in a Turkish portrait.

Only one man has the look presented in a Venetian portrait.

In Frege’s system, *concepts* have extension. Imagistically presented looks have extension. In Frege’s system, then, images present concepts.

I don’t want to claim that taken by itself, a picture is a “judgement.” My claim is rather that a picture, or more generally an image, is a building block of a judgement (which is how Gauker characterizes concepts). Each presents a look, a visual appearance, but neither attributes the look *to* any object. Neither, taken by itself, conveys the message that so and so looked that way, or even that *some*body did. Neither says when or where the look was encountered, or even that it was *ever* encountered (as opposed to simply imagined). In the case of pictures, this shortcoming cannot be remedied imagistically. It’s all very well to say that Figure 3 beautifully conveys the bodily attitude of a painter at work. But it’s *you* that is making this judgement; it is you that recognizes the type of bodily attitude that is portrayed there as typical of a painter painting. The painting doesn’t convey its own accuracy; it doesn’t assert anything. You need something else here: a memory or a recognitional capacity to make a judgement out of the image. You can use words too: for instance a caption like “a nobleman”, or “a painter,” or a name. This would be a mixed image.

In the context of perceptual experience, a mental image *does* (by contrast with a picture) assert a proposition. No caption is necessary. Perceptual experience presents an image: features in perceiver-relative locations. Such an image is a representation of a way the world could be. In itself an image is not a judgement, because like a picture, it does not tell you *where*, or *when*,or *who*. It is, as it were, unasserted, or unattributed. The same image can be not only experienced, but also recalled or merely imagined. Each of these attitudes carries different force. But perceptual experience conveys something more than the mere image. It carries what I have elsewhere called the *feeling of presence*, the extra-imagistic (but non-verbal) “feeling” that the presented image is true of the situation *here* (i.e., that it locates things and features relative to the perceiver) and *now.* Similarly, imagistic recollection carries a *feeling of pastness*, the non-verbal and extra-imagistic feeling that the image was once a perceptual experience.

My claim, therefore, is precisely that the images given can function as “building blocks of judgements,” and furthermore, that since each image expresses something that is in principle attributable to more than one thing and more than one situation, it expresses a *type*. It is, of course a sensory type, and it may or may not correspond to a word, but it is still a type.

Aside from being attributable to a person (“This is an image of a young Venetian gentleman, says the caption of Figure 2) and to a situation (“This is an image of the situation here and now,” a perceptual experience purports), images have little, if any, combinatorial potential. There are no images of negations and disjunctions, none of quantified propositions, none even of spatially disjoined conjunctions (at least not if you disbar the use of non-imagistic components, such as arrows and links). I can’t see why this tells against sensory types. Images express logically simple types; perceptual experience expresses that a certain image depicts the here and now situation. Logically complex types and propositions can only be expressed by mixed images.

Gauker argues that images cannot be the sorts of concepts that words express, but I am not persuaded. Why can’t I label the look? For example, pointing at a picture by a Venetian master: *The look of young gentleman*. Now, it’s true that this would not normally be taken to refer just to the look that Antonello presents. I say that somebody has that look, but I wouldn’t necessarily mean *exactly* that look, from *exactly* that point of view. But this doesn’t seem relevant. It’s still a type of look, and it’s derived from perceptual experience of the picture. I’ll return briefly to this question in a moment.

Before I do that, let me say a word about similarity spaces. All basic perceptual features—colour, shape, pitch, flavour, smell, etc.—are presented as arrayed in proprietary similarity spaces. These similarity spaces result from how sensory information is gathered and processed, and they are an essential aspect of how perceptual systems represent features. For example, colour is represented as a three-dimensional hue-saturation-brightness space; colour similarity is a distance measure in this space that more or less supervenes on certain wavelength related properties. Colours are convex regions in this space. One could say, therefore, that colour similarity as well as colour itself are mediated properties of objects: they are properties of objects in virtue of the reflectance or luminance these objects possess. To rephrase: objects are presented as coloured in virtue of being placed within a location in this space, and they are placed in a particular region in virtue of the visual system’s take on their reflectance or luminance or transmittance. The same sort of thing can be said about other sensory properties.

What puzzles me is that Gauker agrees with the first part of what I say—that perceptual experience is structured by sensory similarity spaces—but disagrees with the second part, namely that contiguous convex regions within such spaces are sensory *concepts*. In the previous section, I suggested we might even adopt a Locken conception of concepts such as *car* or *container*. But setting such concepts aside, why could we not at least adopt a Lockean conception of concepts such as *green*? Here’s Berlin and Kaye’s mapping of the basic colour terms in Munsell colour space:



Figure 4: The Basic Colours. From Mohan Matthen, *Seeing, Doing, and Knowing* Oxford University Press 2005. Adapted by permission of Paul Kay.

Notoriously, there is quite a bit of fuzziness around the boundaries of these concepts, but it nonetheless makes sense to me to say that objects are classified as green if they are placed in the (more or less convex) green region of the above space. And it also makes sense to me to say that the English word ‘green’ corresponds quite closely to that region.

Now, returning to complex looks, such as that presented by a Venetian master, they are not, as one might think, explicable in terms of overall similarity. First, there are perceptual concepts, such as those of faces, places, inanimate objects, voices, and emotion. These are not processes that assess “overall similarity,” which is, I take it, a weighted total of all sensory features in the relevant modalities. Rather, they depend on a proprietary weighting of *relevant* features. You recognize faces despite the addition of scars, spectacles and beards, the subtraction of long hair, and changes of colour; you recognize them also in pictures. This reflects a proprietary similarity space that computes a weighted product of lower level sensory features. This explains what I said before: that I recognize Gauker, for example, as *not* resembling the subject of Figure 2.

It is important to reiterate that the perceptual spaces generated by these feature detectors—i.e., detectors for features such as faces, places, voices, and so on—are not merely sub-spaces of overall perceptual space. Each space is purpose built for the classification, differentiation, and identification of different kinds of objects. As such, the contiguous convex regions of these spaces constitute evolution’s take of relevant similarities in these domains. Why are these not concepts?

Finally, there are learned looks. I recognize the look of Turkish miniatures and of Gothic cathedrals and the sound of Brahms and of an Indian or a South African speaking English. This is a product of learning: both perceptual learning (in which I learn to make finer and more relevant distinctions within an area of perception) and conceptual learning (in which I learn about these kinds of things). Again, I don’t do this by computing overall similarity, but by a process that takes relevant points of similarity into account. Two faces may be similar *as faces* but dissimilar *as object shapes* and the reverse might be true of two objects. Similarly two voices may be similar in that they are singing the same tune; they maybe dissimilar in that they are singing different words. Though the perception of tunes and words may be perceptual, rather than intellectual, the criteria of sameness and similarity are different.

A sensory image is, minimally, a representation of a spatial layout of sensory features. Christopher Peacocke, for example, conceptualizes it as “scenario content,” which presents sensory features in egocentrically located places. Austen Clark has a similar notion. I have argued that sensory features are normally attributed to objects, not just put into places. But let’s not argue about this.

Thus conceived, a sensory image has much in common with a retinal image, which is a two-dimensional matrix for colours and brightness values. This led centuries of philosophers and psychologists to identify the two. According to a tradition that was prominent for hundreds of years, the visual image of which we are aware is almost exactly the same as the retinal image (though some noticed that there are two retinal images, and that these somehow joined to give us depth perception). This conception is restricted to vision, of course, and it needs to be generalized to accommodate the other senses. This is not straightforward, but the issues that concern me here can be articulated with just vision in mind. The important point is that philosophers have traditionally been inclined to think that perceptual content is similar in form to that which is available at the sensory receptors.

Sticking with vision, however, there are major differences between retinal and sensory images, the similarity of spatial structure notwithstanding. I just mentioned depth. Objects seem to us to be arrayed in three dimensions, and this cannot be replicated in a two-dimensional array. But there are less obvious, and possibly more profound differences.

Consider colour. It is true that both the retinal image and the conscious sensory image are (*inter alia*) dot-matrix arrays of colour and brightness. (This is the “colour mosaic” view as David Lewis called it in an early paper.) But the colours in the two images are different. The colours in the retinal array are receptor cell-activation levels that measure total electromagnetic energy within certain visible wavebands. The colours in the conscious sensory image are triplets that consist of values in the blue-yellow, red-green, and white-black axes. Sensory colours are processed from retinal colours, and encoded in the form of these triplets. The sensory colours are quite different from retinal colours. To call a wavelength ‘blue’ means nothing more than that light of this wavelength looks blue to us. That *blue* is found in a certain visual field-location is the visual system’s proprietary encoding of a physical reality, and there is no simple translation from this encoding back to the physical state of the retina or the distal environment.

Sensory colours are categories created by the human visual system; they are products of opponent processing. Now, opponent processing is usually presented as an optimal way to extract information from a class of overlapping broadband receptors, and certainly this is a correct way to understand their function. What is less often emphasized in philosophical accounts is that the output of opponent processing wears the indelible marks of this process. The blue/yellow, red/green components of hue, for example, are sensory marks of simple additive/subtractive operations on these outputs. Colours as we experience them are equivalence classes of the external causes of retinal colours—metameric equivalences, as they are sometimes called—classes within which the colour vision system is unable to differentiate. There is no translation from wavelength/intensity space to opponent colour/brightness space *except in terms of peculiarities of the information-processing system* in human colour vision. Much the same sort of thing is true of all the other sense features.

In vision, the sensory image is, moreover, segmented into objects. This “discovery” was the major contribution of the Gestalt school of psychologists, who showed by many ingenious experiments that the conscious sensory image is composed of a three dimensional array of objects, some of which occlude others, some of which are sensed as moving, and so on. This object parsing too is completely absent in the retinal image, which is just a pixel matrix. The awareness of objects too is available to us only because of visual processing.

We have, then, a picture like this:

Retinal array

**(The manifold)**

Objects and properties given in perceptual awareness.

**(Intuition)**

Sub-personal processing.

**(Synthesis)**

The model of perceptual awareness that I have just outlined runs remarkably parallel to the Kantian theory as interpreted by Gauker:

An intuition is Kant’s word for perceptual, or imagistic, representation of a particular object or event . . . *intuition* is the product of what Kant calls *synthesis*. Synthesis is an operation that the mind performs on *the manifold given in intuition*. One can think of this manifold as the sensory building blocks of a mental image. One might get the impression that it consists of flecks of color, snippets of sound, and other sensations, but it might be better to deny that we have any conception of the manifold at all. We cannot assume that Kant thought of the manifold given in intuition as something we are conscious of as such. (50-51)

The retinal array would correspond to Kant’s manifold; as I have emphasized, we are not aware of this, or of any simulacrum, in perceptual consciousness (though traditionally it was thought perceptual consciousness corresponded to it quite closely). And beyond the receptors, sub-personal processing plays the role of synthesis. Finally, many what we might call structural features of perceptual representation are the result of how receptoral data are processed.

Of course, there are major differences between Kant’s approach and the contemporary model I outlined above. For one thing, he probably would not have been happy with the idea that the manifold was a publicly observable item, as the retinal image is. Rather, he would have held that it is not observable at all: as Gauker says, it is for him known only as a “theoretical posit.” For another thing, it is not clear what he would have thought of the idea that synthesis is performed sub-personally. But I take it that this is because the distinction between personal and sub-personal has no comfortable place in his scheme of thing. Likely, he thought that synthesis was part of the personal power of perception. However that might be, he would certainly have agreed that synthesis is innate, automatic, and necessary for perception. And this agrees very well with our present conception.

Actually, the Kantian structure corresponds closely to what I said earlier about contemporary sub-personal processing. Start with the manifold. Kant is clearly aware that worldly objects and events are not proper materials for consciousness. For a subject to be conscious *of* something, of a moving object for instance, the information received from that object has to be put into a format that is appropriate for consciousness. This formatting is the business of the brain—or of the mind, if you lived in the 18th century—retinal patterns are no more the stuff of perceptual consciousness than external objects. Thus, the Kantian manifold is no more constituted by “flecks of colour” or “snippets of sound” (as Gauker puts it) than it is by epistemically remote noumena. Indeed, it is inappropriate to think of the manifold in terms of *sensation*. It is wholly inaccessible to consciousness until it has been subjected to the operations of synthesis—in modern terms, data processing and formatting.

Perceptual similarity spaces and space itself (as well as time) are also the results of perceptual processing, and Kant was aware of this fact about space and time. The same can be said about the organization of the perceptual field into objects and the perception of things as causally connected. These structural facts are reflected in a prioricities. Consider for example the fact that nothing is both bluish and yellowish, or the fact that blue is not a mixture of turquoise and purple, but that turquoise is bluish and greenish. As Wittgenstein noted (with excited amazement) these are not empirically discovered facts about colour; rather they are a priori, and implicit in the very possibility of human colour experience.

According to Gauker, we cannot be Kantians today. Why not? As far as I can see, he has three reasons. The first has to do with an aspect of Kant’s philosophy that I have not mentioned. Kant thought that since we experience things in our own terms, we have no idea what things are like “in themselves.” This dictum has a strong version. Bluntly put, this amounts to saying that what we experience is our representation of what we experience. A weaker version is that we cannot know objects except as they are perceptually represented. Either way, the view is mistaken. As far as I can see, it identifies the *object* of experience with the *content* of experience. I want to put this aspect of Kant’s philosophy aside. It is irrelevant to my present purposes. It is a consequence that Kant wrongly draws from his deeply insightful and prophetic ideas about synthesis.

Gauker’s second objection has to do with how specifically Kant’s concepts are meant to apply.

The principle of causality cannot mean that for every event we *will in fact* find its cause or even that we would if we tried; we know by experience that that is just not right. It might mean (and this is how I have taken him) that we must always judge that a cause *exists*, whether we can find it or not. But is hard to see that the conformity of the world to *this* principle exacts any consequences for experience; our experience might be just the same whether we judge this to be so or not. (56)

Now, I don’t know exactly how to interpret Kant on this point, but here’s what I think has been established (e.g., by Michotte and by various developmental psychologists) about perception. We *experience* things as causally connected, and by this I mean that we experience particular things as causally connected to other things that we experience. (It’s worth saying, by the way, it’s not a matter of “finding” that A causes B, as Gauker puts it, but of experiencing A and B as cause and effect.) I fully agree with Gauker that not *every* event we experience is so linked to another event we experience, Perceptual processing links various events together and presents them as linked. But it may leave certain events outside the causal net. Kant may have thought this to be impossible, but I don’t think he was forced to such a position. He could have said that we experience causally isolated events as anomalous ephemeral singularities. Or he could have said that perceiving something as causally connected is tantamount to experiencing it as an event involving a material object. So when we seem to perceive causally isolated events, we perceive them as not involving material objects. Perhaps we need to supplement Kant’s notion of the a priori to accommodate the inexplicable or weird. But I don’t think we should reject it out of hand.

Finally, Gauker objects (in an echo of Gareth Evans) that we don’t need concepts in order to see:

He is not merely saying that without the concept *baseball* one could not perceive a baseball *as* a baseball. He is saying that without the concept *whiteness*, I could not perceive baseball’s whiteness. Without the concept *stitch*, I could not see the baseball’s stitches. If I had the concepts *red stitching* and *white leather* but not the concept *baseball*, then I could see the red stitching and white leather but I still could not see the baseball *at all*. (57)

According to Gauker, Kant holds that we cannot see the baseball because we lack the concept *baseball.* But obviously we do see the baseball. So Kant must be wrong.

I find this criticism misguided in at least three fundamental ways.

The first problem is that Gauker does not here distinguish between being sensitive to objects of a certain kind and having a perceptual experience of these objects as belonging to that kind. Gauker insists that I can see red stitching without possessing the concept *red stitching*. But what does it mean to “see” red stitching? It could be that the visual system is peculiarly adapted to red stitches. For this reason, it might be that I visually respond to red stitches even though I lack the concept *red stitch*. This would betoken a special perceptual ability that does not reflect on the character of perceptual content itself. For it could be that I visually respond to red stitches without perceptually representing them as red stitches. It could nevertheless be true that certain forms of perceptual recognition and learning can occur only if I possess the concept. Kant might be right with regard to these more complex capacities.

The second problem is that Gauker does not distinguish between *perceptual* and *discursive* concept possession. Let’s say that discursive concept possession is that which allows me to make certain judgements and inferences. Suppose that I completely lack any such ability with respect to red stitching. It still could be that I perceptually grasp the feature: by this I mean that it may be that I am able to distinguish by means of action situations in which the feature is present from those in which it is absent. For example, a bird can be trained to peck at a ball that has red stitching, but not at a ball that does not. In such a case, should we say that the bird has *perceptual* grasp of red stitching?

It might seem that my argument in the preceding paragraph makes a simple mistake. The fact that the bird pecks at red stitched balls but not other balls does *not* mean that it has any kind of grasp of the concept *red stitch*. All it shows is that it grasps the *look* of red stitches. But this brings us to the third of Gauker’s errors in the above quoted paragraph. He does not distinguish the *admissible contents* of perception from other more convolved concepts. He says, for example, that according to Kant, I couldn’t see baseballs if I lacked the concept *baseball*. But Kant might not want to deny that I see the objects: I could see them *as* globes, and see the red stitching as a pattern of red dashes on the surface of that globe. *Baseball* is not a concept I possess merely in virtue of having form perception; *globe* is such a concept. So though Kant might have said that that without the concept *whiteness*, I could not perceive baseball’s whiteness, he might also have allowed that possessing the concept *whiteness* is just a matter of being able to see.

Working backwards through what I take to be the three errors, here is a position that I take to be quite viable. There is, first, a limited number of features available to vision. Second, an organism has perceptual grasp of these features insofar as it is able to *think* or *reason* differently in situations where (as it seems) the feature is present. And finally, it has the ability to entertain visual content with respect to these features even though it lacks the discursive ability to speak about them. That’s what Kant should have said. It makes a good framework for his insights in a contemporary setting.

Gauker also attacks the Kantian approach from a different point of view. He starts with an assumption that sounds quite innocuous: “that wherever there is conceptual content, there is the possibility of expressing that concept in words.” For instance, imagine the taste of a lemon (a particular lemon, even): now introduce a word: ‘schmemony’ to capture just that taste. And there you have it. I can now say of something else that I taste: “That is schmemony.” I may be wrong about this; I may be epistemically unjustified in asserting such a thing since gustatory memory is inexact. But nothing prevents me from asserting it, or (for that matter) experiencing it.

This sounds like a proof that perception *is* conceptual, but Gauker disagrees. Suppose you are looking at something and it looks a certain shape to you, but you can’t tell how it looks from behind. Or suppose it looks a certain shade of red to you, but you don’t know exactly what the illumination conditions are. Then you don’t know exactly what colour it looks. So vision does not reveal maximally determinate shapes or colours. So should we say that it reveals indeterminate shapes or colours? No, he says, because “Reflection on my perceptual representation does not reveal any particular level of generality that is *the* level of generality at which I should find the predicates that express the conceptual content of my perception” (62).

I don’t understand this. I have argued in section I that images can express Fregean concepts. They express ways the world could be. This is shown by the fact that I could ask not only whether a particular image correctly describes *this* room, but also whether it is true of the room next door. Secondly, it seems clear that images can be applied to particular things. (‘Schmemony’ is re-assertible too, though it derived from a particular lemon.) *Perceptual* experience asserts of an image that it describes the situation here and now; *recollective* experience asserts of an image that it describes a situation from a certain point of view, in the past. These considerations are somewhat sketchy, but show that images contain concepts and can be used to express propositions.

Now, suppose that a particular experience does not express a maximally determinate colour, but only some range of colours as they seem in some range of illumination. For example, it might be that a certain paper looks red, but exactly what shade of red is visually unclear because it isn’t clear what colour and brightness the ambient light is. So what’s wrong with introducing a word for this range of colours and attendant conditions of illumination: ‘schmed’ perhaps? Does this word express exactly the right level of generality? If any word can, it does—by stipulation. What is the argument that this will not do?

In conclusion, Chris Gauker’s book presents many challenging considerations about perception and images. In particular, he presents several novel arguments to show that perceptual images are non-conceptual. I do not think that these arguments succeed. But I am in a minority on this point.