Do we perceive natural kind properties?

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I respond to three arguments aimed at establishing that natural kind properties occur in the experiential content of visual experience: the argument from phenomenal difference, the argument from mandatory seeing, and the argument from associative agnosia. I conclude with a simple argument against the view that natural kind properties occur in the experiential content of visual experience.

1 High-level properties

There are lots of properties which human beings cannot visually detect. As a matter of necessity, (normal) human beings cannot visually detect a range of sensory lowlevel properties detectable by other sense modalities. I cannot visually detect the coldness of ice cream, the sweetness of strawberries, the softness of your skin, or the pitch of your voice. And, as a matter of contingent fact, (normal) human beings cannot visually detect low-level properties instantiated exclusively by very large objects, very small objects and objects very far away. Assuming that no other object on earth is shaped just like Utah, we could not visually detect the shape of Utah prior to the invention of modern technology.

Which properties can we consciously visually detect? It is fairly widely agreed that we can visually detect low-level properties instantiated in our environment, such as colors and shapes, and intermediate-level properties such as *being on top of that* and *being to my right*. But the question of what else besides low-level and intermediate-level properties can and cannot be consciously visually detected has been the subject of fierce debate. Though the debate has focused mostly on kind

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properties, the range of high-level properties that are candidates to be consciously visually detectable is extensive. It includes natural kind properties (e.g. *being an Elm*), artificial kind properties (e.g. *being a cork screw*), mental state properties (e.g. *being sad*), aesthetic properties (e.g. *being gloomy*), moral properties (e.g. *being a virtuous agent*), personal taste properties (e.g. *being attractive*), and some events (e.g. *being the car accident that occurred this afternoon*). In this paper I will focus on natural kind properties. I will defend the following thesis:

Kind Thesis (KT)

Normal human beings cannot visually detect (high-level) natural kind properties at the phenomenally conscious level but can detect them only at a phenomenally unconscious (non-experiential) level.

I begin by responding to three arguments against KT: the argument from phenomenal contrast, the argument from mandatory seeing, and the argument from associative agnosia.

2 Arguments against KT

One prominent argument against KT is the argument from phenomenal contrast. The argument is due to Susanna Siegel (2005), and it runs as follows.

Let E1 be a visual experience of someone who has the ability to recognize elm trees (**expert**) and who is looking at an elm tree, and let E2 be the visual experience of someone who does not have the ability to recognize elm trees (**novice**) and who is looking at the same tree in the same viewing conditions. The expert finds the tree familiar, the novice does not. So there is a difference in the overall phenomenal character of their experiences.

The argument can now be articulated as follows:

The Argument from Phenomenal Difference

(1) The overall phenomenology of which the phenomenology of E1 is a part differs from the overall phenomenology of which the phenomenology of E2 is a part (*familiarity effects*).

(2) If the overall phenomenology of which the phenomenology of E1 is a part differs from the overall phenomenology of which the phenomenology of E2 is a part, then there is a phenomenological difference between E1 and E2 (*cognitive penetration*).

(3) If there is a phenomenological difference between E1 and E2, then E1 and E2 differ in content (*representationalism*).

(4) If there is a difference in content between E1 and E2, it is a difference with respect to K-properties represented in E1 and E2.

Despite the initial appeal of the argument, I think there are four plausible ways to question its soundness. One is to deny that differences in the phenomenal character of E_1 and E_2 (the familiarity effects) require differences in experiential content.

Familiarity may be like blurriness or salience in this respect. Plausibly when I have a blurry experience, I do not represent the world as blurry. Blurriness may simply be a phenomenal property that does not correspond to any representational property. Likewise, if I attend to a particular object, it needn't be the case that I represent the object as attended to or as salient. Salience may be a phenomenal property that does not correspond to any representational property. Plausibly familiarity effects are akin to the blurriness of blurry experiences or the salience of objects visually attended to.

A second, closely related, reply is that familiarity effects correspond to ways of representing the content. If one is an impure representationalist (Chalmers 2004), one might hold that to have a blurry experience is to represent a certain content blurrily and to visually attend to an object is to represent a certain content of one's visual experience saliently. Similarly, one could hold that to have a visual familiarity effect just is to visually represent a certain content familiarly.

A third reply, which I think is the second most plausible, is to deny that recognizing an object requires representing the object as being of a certain kind. Perhaps to have a familiar visual experience of an object just is to have an experience that attributes familiarity to the object. Say that *an object is familiar just in case one has had experiences of objects with the same superficial properties.* We can then grant that familiarity effects make a difference to the experiential content of perceptual experience without positing perceived natural kind properties.

A fourth reply, which I think is the most plausible, is to deny that familiarity effects make a difference to the experiential content of perceptual experience but grant that it makes a difference to states of seemings. My perceptual experience may represent 17 people in the seminar room even it doesn't visually seem to me that there are (exactly) 17 people in the seminar room. So perceptual states and states of seemings are different kinds of mental states. One can now say that while the expert and the novice have perceptual experiences with the same experiential content, they are in different states of seemings concerning the tree. The overall difference in phenomenology between the expert and the novice stems from a difference in the phenomenology of the two distinct states of seeming. To the expert, the tree visually seems to be an Elm, it visually seems familiar and it visually seems different from the nearly identical neighboring tree which is not an Elm. To the novice, the tree just seems to be a tree, it doesn't seem familiar and it seems exactly similar to the neighboring tree. So the overall phenomenology of the expert and novice's experiences are going to be different, even though the content of their perceptual experience is exactly the same.

A second argument against KT is the argument from mandatory seeing. Tim Bayne articulates a version of it as follows:

"Object recognition is *mandatory*: one cannot help but see an object as a stethoscope, a pipe, or a cigarette lighter. The experience of an object in such terms resists doxastic penetration, and such resistance is a mark of perception" (Bayne 2009)

Though initially convincing, it is not entirely clear what the argument is. Here is one possibility. Let K be a particular natural kind (e.g. an elm) or artificial kind (e.g. a cigarette lighter).

The Argument for Mandatory Seeing 1

(1) If kind properties occur only in belief content but not in the content of normal human visual experience, then it is not the case that sometimes we cannot help but see K as a K

- (2) When we see K, we sometimes cannot help but see it as a K.
- (3) Hence, kind properties do not occur only in belief content but occur also in the content of normal human visual experience.

This argument, as it stands, is problematic. It begs the question, as it assumes that we cannot help but *see* K *as a* K on some occasions. Also, it is not an argument against KT, as the conclusion is consistent with kind properties occurring in the non-experiential (unconscious) content of visual processing but not in the experiential content, in which case there is no doxastic penetration.

Let's attempt a second reconstruction. Let 's takes o to be a K' mean 's has a visual experience with an experiential content that attributes being a K to o, or s judges that o is a K'. We can then formulate a new version of the argument as follows:

The Argument from Mandatory Seeing 2

(1) If kind properties occur only in belief content but not in the experiential content of normal human visual processing, then it is not the case that we sometimes cannot help but take Ks to be Ks

(2) We sometimes cannot help but take Ks to be Ks

(3) Hence, kind properties do not occur only in belief content but occur also in experiential content.

But this argument too is problematic. Admittedly, it's better than the first version. But there is a similar reply. (1) is questionable. The mandatory-ness may be a result of a kind of unconscious representation. That is: kind properties could occur in the non-experiential content, in which case there is no doxastic penetration.

A third argument against KT is the argument from associative agnosia. Associative agnosia is a disorder in which early stage perceptual processing is intact but high-level perceptual processing is impaired. Associative agnosia patients have lesions to the parts of the posterior cerebral artery supplying blood to the temporal lobe and to parts of the visual cortex but have no lesions to areas of the parts of the brain involved in cognitive processing (the prefrontal cortex, parts of the limbic system (hippocampus) and the basal ganglia). So, they have sensations and cognitive processing but no ability to recognize kinds. This suggests that kind recognition is not a form of cognitive processing but is a form of perceptual processing.

Furthermore, patients with associative agnosia who fail to recognize an object visually can form beliefs about the category of the object when given the information. For example, when looking at a pipe, an agnosia patient can tell you about the pipe's parts when told that he is looking at a pipe. But if the questioner asks 'suppose I told

you, this is not really a pipe, what would you say?', the agnosia patient usually replies 'I would take your word for it. Perhaps it is not really a pipe'. In cases of tactile and auditory object recognition, on the other hand, visual agnosia patients are less reluctant to give up on their judgment that the object is an object of a certain kind. These considerations can be put in the form of an argument as follows (Bayne 2009):

The Argument from Associative Agnosia

(1) If kind properties occurred only in belief content in normal individuals, there would be no difference in belief retention between agnosia patients and normal individuals.

(2) There is a difference in belief retention between agnosia patients and normal individuals.

(3) Hence, kind properties do not occur only in belief content.

My reply to this is simple. The conclusion is consistent with KT. If kind properties occur in the *non-experiential* content of visual processing in normal individuals but not in agnosia patients, then that could account for differences in belief retention. There is a further worry if the argument is construed as an argument against KT. Because natural kinds are harder to detect than artificial kinds, normal individuals are relatively quick to give up their beliefs concerning natural kinds. So, it is unlikely that there will be a similar difference in belief retention between agnosia patients and normal individuals with respect to natural kinds.

In short: when construed as general arguments against KT, the three arguments just considered are unsound. I will now present a simple argument in favor of KT.

3 A simple argument in favor of KT

My argument for the KT thesis rests on the Property Supervenience Thesis:

Property Supervenience Thesis (PST)

If S has an experience E with phenomenology C, and S is phenomenally conscious of P in virtue of having E, then necessarily, if someone has an experience with phenomenology C, then they are phenomenally conscious of P in virtue of having that experience.

One argument in favor of PST runs as follows: there could be a first human being H who is phenomenally conscious (aware) of P in virtue of having an illusory experience E as of something being P. The fact that H is phenomenally conscious of P in virtue of having E depends only on C. Yet whether someone is phenomenally conscious of a property does not depend on whether the experience is veridical, or whether there is an evolutionary history. So, in all cases in which someone has an experience with phenomenology C, they are phenomenally conscious of P in virtue of having that experience. So, PST is true.

Given PST we can offer the following argument in favor of KT, restricted to external natural kind properties (e.g., *having tiger DNA*):

The Argument from PST

(1) The property supervenience principle is true.

(2) If one can be phenomenally conscious of an external natural kind property in virtue of having a visual experience, then the property supervenience principle is false.

(3) Hence, it is not the case that one can be phenomenally conscious of an external natural kind property in virtue of having a visual experience.

The controversial premise is (2). The argument for (2) runs as follows:

Argument for (2)

Suppose I am conscious of an external natural kind property N_1 in virtue of having a visual experience with phenomenology C.

It is plausible that there is a natural kind property N_2 which would have given rise to an experience with phenomenology C, had I been looking at an object that had N_2 .

e.g. let N_1 and N_2 be two distinct sub-species of tiger or species of grass properties, or let N_1 be *being a tiger* and N_2 *being a cleverly painted lion* or *being a liger* (a cross between tiger and lion).

So it is not the case that if I have an experience E with phenomenology C, and I am phenomenally conscious of N_1 in virtue of having E, then necessarily, if someone has an experience with phenomenology C, then they are phenomenally conscious of N_1 in virtue of having that experience.

So, the supervenience principle is false.

Informally: It is plausible that experiences of natural kinds are not experiences with a distinctive external natural kind phenomenology. They are experiences with a very coarse-grained phenomenology. An experience might be one with a tiger-like phenomenology but not one that is distinctive to *having tiger DNA*. So, it is not the case that in all cases in which one has a tiger experience one is phenomenally conscious of, say, *having tiger DNA* but not *having liger DNA*. But it is not the case that tiger experiences make one phenomenally conscious of both properties. So, tiger experiences do not make one phenomenally conscious of *having tiger DNA*.

We haven't ruled out that there are internal phenomenally accessible counterparts of external natural kind properties—call them 'pure qualitative properties'—in the experiential content of visual experience. However, I am not sure what could possibly count as a pure qualitative natural kind property. Here is one possibility: Some tiger species have a distinct look (cat-like appearance, yellowish fur, stripes). Perhaps this look (i.e. this conglomeration of low-level and intermediate-level properties) is a pure qualitative tiger property.

However, *if* the look of a tiger is an example of a pure qualitative natural kind property (which is far from an uncontroversial assumption), then pure qualitative natural kind properties just *are* conglomerations of low-level and intermediate-level properties. Hence, they are not really high-level properties and hence not really natural kind properties of the sort we are interested in here. Hence, KT trivializes.

An objection here arises. Some properties do not generate twin-earth cases (see Chalmers 2006) but also aren't low-level properties, for instance, *being conscious*, *being a friend*, *being a philosopher*. Some of these are plausibly natural kind properties. As they do not generate twin-earth cases, they are natural candidates to be pure qualitative natural kind properties.

One way to respond to this objection would be to argue that these properties are not natural kind properties. For instance, one might require that natural kind properties be permanent properties. One possible reply then is to say that being conscious is a natural property but not a natural kind property. It lacks permanence. The same goes for *being a friend, being a philosopher,* and other properties that don't generate twin-earth cases but also aren't low-level properties.

However, the problem with this reply is that permanence is not obviously a requirement for a property to be natural kind property. For example, one might argue that *being ice*, *being a butterfly*, and *being potentially conscious* are natural kind properties despite the fact that they are not permanent. A further problem is that KT is significantly less interesting if it applies only to twin-earthable natural kind properties.

In favor of consciousness being detectable in others it may be said that perhaps we have a grip on what it is to be conscious from our own case, a pure concept of consciousness by means of which we can represent consciousness in others.

I don't think it is a simple matter to settle this question. It is plausible that one can acquire a concept non-visually and then use it in vision, with distinctively visual phenomenology. Molyneux famously wrote to John Locke to ask whether a blind person who has learned to distinguish sphere and cube via touch can distinguish these objects by sight, if acquiring sight. His question raised fierce debate that lasted for centuries. The debate concerns the question of whether we have just one range of concepts (abilities to recognize or discriminate) that we apply indifferently regardless of sense modality (or regardless of faculty, e.g. perception vs. introspection) or whether our concepts are tied specifically to specific modalities and faculties. Molyneux's question has not yet been answered. Vision may not be cognitively penetrable by concepts acquired non-sensorily. So, the pure concept of self-consciousness (non-sensorily acquired) need not be one that being conscious can be presented under in general. You may have no phenomenal grip on what it is to be conscious for me. It is plausible that in order for me to apply my concept of consciousness which I required through introspection or acquaintance, it must be apparent to me that consciousness in others and in me constitutes a single aspect of the world.

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