

Phil 490: *Consciousness and the Self*
Handout [16]

Jesse Prinz: *Mental Pointing* — Phenomenal Knowledge Without Concepts

Professor JeeLoo Liu

§ Main Goals of this Paper:

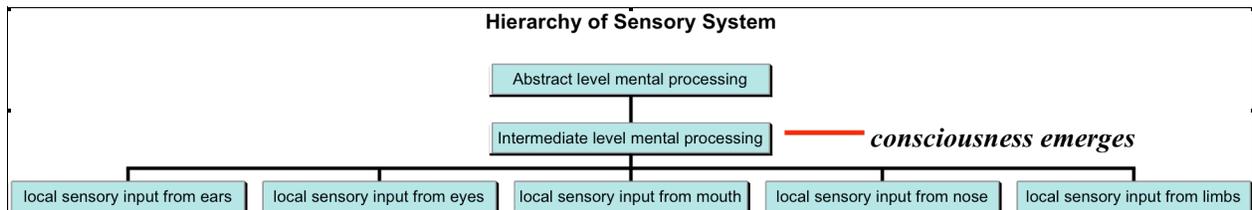
1. To present an account of phenomenal knowledge that does not depend on phenomenal concepts (concepts that represent phenomenal states in a special, intrinsically phenomenal, way.)
2. To argue that we have *no* phenomenal concepts.
3. To give an account that appeals to *mental pointing*, a process that I explain in terms of phenomenal *demonstratives* (*dthat*; *pthat*).

Thinking about phenomenal knowledge can shed light on the relationship between consciousness, attention and memory. This paper has a philosophical agenda and an empirical agenda.

§ The AIR Theory of Consciousness — Phenomenal states are *attended intermediate-level representations* (AIRs)

Main Theses:

1. All consciousness is perceptual, which is to say that consciousness attends only representations in sensory systems.
2. Consciousness arises only at an intermediate stage of perceptual processing.



3. Activity in the neural correlates of intermediate-level areas correlates with conscious experience, and cells in these areas have contents that agree with experience.
4. In subliminal perception, there is activation throughout the perceptual hierarchy without any corresponding experience. Therefore consciousness requires not mere intermediate-level activation, but activation of a particular kind.
5. I am persuaded that consciousness arises when and only when we are paying attention. All the following phenomena suggest that attention is necessary for consciousness.

[inattentional blindness]

___ Many subjects fail to notice the unexpected stimulus under these conditions, even though the stimulus would be readily perceived under conditions that were less attentionally demanding.

[attentional blink]

___ In these studies subjects are presented with a sequence of stimuli and are asked to look for two target stimuli in the sequence; if the second target appears shortly after the first, many subjects fail to perceive it, because the first target has temporarily consumed their attention.

[visual neglect]

___ In this disorder, brain injuries in structures that control attention result in blindness for part of the visual field.

6. Conclusion: Phenomenal states are attended intermediate-level representations, or AIRs.

*** How AIR differs from HOT**

___ I think higher-order thought theories erroneously assume that we have representations as finely detailed as the features available to us in consciousness.

___ On AIR, there is no meta-representation. My claim about metarepresentation is that we cannot represent our phenomenal states using representations that have the same precise detail.

§ Attention and Working Memory

Empirical data:

If a stimulus is very briefly displayed (e.g. 16 milliseconds) and followed by a mask, it will not be seen at all. Subjects will have no idea that something was presented. If there are some trials in a study in which a stimulus is presented for 16 milliseconds, and others in which a blank screen is presented, subjects will be at chance in guessing whether a stimulus was presented, even though 16 milliseconds is long enough for priming to take place (e.g. Dehaene et al., 1998). But now suppose the stimulus is presented for a longer duration, say 50 milliseconds. Then, depending on the stimulus, subjects may know that something was flashed but they won't know what it was. In other words, as we approach the threshold for conscious recognition in priming studies, subjects report a phenomenal experience, but they cannot describe it.

[attention]:

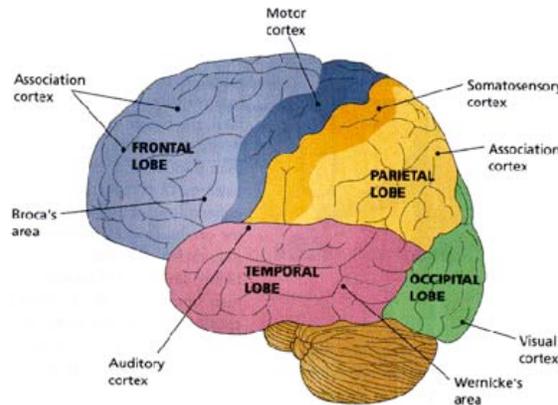
___ attention is a process that allows information to flow from perceptual systems to systems involved in working memory.

___ Anatomically, attention is associated with structures in parietal cortex.

[working memory]:

___ Working memory is actually an umbrella term for a number of different capacities: the capacity to retain information, to transform perceptual states imaginatively, to select behavioral responses and to carry out various executive responses, such as object tracking, comparison and verbal reporting.

___ Anatomically, working memory is associated with lateral frontal cortex.



Intermediate-level visual perception is located in temporal cortex.

*** from Attention to Memory:**

- (i) Working memory seems to automatically store the gist of an image, even when details are lost.
- (ii) We can, by act of control, focus on any given detail of a display and retain it from one moment to the next, but this takes effort, and we don't know antecedently what feature to focus on.
- (iii) But, while searching for the change, the majority of details in a display are not retained, even though they can be plainly seen.
- (iv) This suggests a difference between two kinds of processes: **attention without retention** and **attention with retention**.
- (v) There is good reason to think that working memory cannot encode perceptual states at the same level of resolution at which they are consciously experienced. This suggests that working memory stores colour (and other visual features) in a code that abstracts away from their precise details.
- (vi) Indeed, there is evidence from cognitive neuroscience that working memory actually uses high-level perceptual representations rather than its own proprietary codes.
- (vii) On my view, that happens when high-level representations are used to generate intermediate-level representations through efferent connections in the perceptual hierarchy. This story explains why mental images are often vague or imprecise.
- (viii) First of all, attention functions like a spotlight, illuminating some proper subset of the perceived features, objects and locations. These are the things that are consciously experienced.
- (ix) Then, working memory systems select from this subset. We can compare that selection process to an artist's schematic sketch of the objects on display. The sketch is not a faithful copy, but merely a rough approximation of items in the

spotlight. The sketch is also selective, leaving out many things, and transient: the artist will discard most sketches immediately, placing only a few into long-term storage.

In summary, there are at least three ways we can be related to our phenomenal states.

- (1) **We can experience them (or have them),**
- (2) **we can categorize them (have knowledge of them), or**
- (3) **we can point to them.**

§ Phenomenal Knowledge

___ I equate consciousness with phenomenality (see Block, 2002). To be conscious is to feel like something, or to have 'phenomenal qualities'.

___ Phenomenal knowledge is knowing what a state feels like.

___ I will try to suggest that phenomenal knowledge is, in some respects, extremely limited.

Phenomenal knowledge relies on categorization of phenomenal states, and categorization needs concepts.

* Concepts — high-level perceptual representations

___ First, concepts can be activated by the organism that possesses them, rather than being activated only by an external stimulus.

___ Second, concepts must be capable of being used to re-identify the things that they represent.

___ We must be able to re-deploy a concept on different occasions to keep track of things. It follows that concepts must be representations that we can store in memory.

[Argument 1]:

1. Knowing is a transitive relation. It is a relation we bear to something. When we talk about knowing something, we imply that there is both an object of our knowledge and an epistemic relation to that object.
2. Experience of a phenomenal state does not have any object (one simply experiences it).
3. Therefore, merely having the experience itself does not qualify as knowledge of what it's like.

[Argument 2]

1. Knowing what an experience is like is a matter of categorizing the experience and thus requires concepts.
2. (i) Concepts used to categorize phenomenal states are not necessary for phenomenal knowledge (one can have a guava experience without the guava concept).
3. (ii) Application of such concepts is not sufficient for phenomenal knowledge either, since concepts used in phenomenal categorization can also be applied unconsciously.

4. Therefore, not all phenomenal experiences constitute phenomenal knowledge.

Eating a guava fruit — Suppose you have never eaten guava before, but now, at this moment, have a first taste of guava in the form of a sauce on the fish you ordered. You can't identify the flavor you are tasting, and you might not recognize it if you tasted it again, but it might be true of you that you know what guava is like, nevertheless.



[Argument 3]:

1. High-level perceptual representations abstract away from many features of perception and, as a result, the intermediate-level representations that they generate in imagery are correspondingly inexact.
2. It is difficult to imagine a specific shade of blue, for example. What we get in imagery is an unstable, ephemeral and pale counterpart of the kind of blues we experience in perception. If you imagine blue and then try to match your image precisely to a colour chip, you will find it difficult or impossible. The range of blues we can point to in experience outstrips those we can imagine.
3. In sum, the stored records used to generate images do not qualify as phenomenal concepts, and in any case they also cannot be used to fully explain phenomenal knowledge.
4. Therefore, most phenomenal experiences do not constitute phenomenal knowledge.

For these reasons, I do not think that the concepts we use in perceptual classification are the best candidates for explaining phenomenal knowledge. That leaves us with one more candidate: mental pointing. Predictably, I think that mental pointing is the key.

§ Mental Pointing

___ It seems that while we are having a phenomenal state, we can mentally point to it.

___ It seems that we are somehow able to point inwardly to an experience.

* The mechanism for mental pointing:

___ Top-down selective attention is attention that occurs under the control of object representations or spatial maps. I think this process captures the phenomenology of mental pointing very well.

___ Mental pointing serves to direct attention, and attention gives rise to consciousness.

§ 'dthat[]' & 'pthat[]'

Kaplan: Demonstrative 'dthat[]'

___ If you say ‘that’ while pointing, for example, the direction of your finger serves as the demonstration. Or one might refer to ‘that man’ in a room full of women, and the word ‘man’ will serve to make the man salient in that context, and the word ‘that’ will refer to him. Kaplan uses the schema ‘dthat[]’ to represent the structure of a demonstrative use of the word that, where the brackets get filled in by a demonstration.

Prinz: Phenomenal Demonstrative ‘pthat[]’

___ Mental pointers can be regarded as phenomenal demonstratives. They refer to the conscious perceptual states that are made salient by a mental demonstration. If the analysis I’ve offered is right, a mental demonstration is a high-level perceptual representation of a representation of a region in space.

___ A phenomenal demonstrative has the structure ‘pthat[]’ where the brackets are filled in by a mental demonstration.

___ I don’t think it’s helpful to think of phenomenal demonstratives as mental words — symbols in a language of thought — much less as images (e.g. an image of a pointing finger).

___ It’s better to think of them as control structures — they are things that have causal control over things. Phenomenal demonstratives use representations of objects in space to direct focal attention on a perceived scene. They are individuated by their causal powers.

___ Phenomenal demonstratives do not refer by fully describing what they represent. They refer by directing attention.

___ Phenomenal demonstratives are the source of phenomenal knowledge, but they represent our phenomenal states without fully describing them.

§ Why there are no phenomenal concepts

___ Phenomenal concept is a concept that both represents phenomenal qualities and cannot be possessed without having those phenomenal qualities.

___ I think no such concepts exist.

___ I would encourage consciousness researchers to drop the term ‘phenomenal concept’ on the grounds that it gives a misleading impression of the way we represent our phenomenal states.

[Argument]: phenomenal demonstratives ≠ phenomenal concepts

1. Concepts are mental entities that can be generated by an organism to reidentify things.
2. To qualify as a concept, a mental representation must be capable of being stored.
3. Phenomenal demonstratives cannot be stored in the way that matters — they cannot be stored in a content-preserving way.
4. Therefore, phenomenal demonstratives cannot qualify as concepts of phenomenal qualities.

I conclude that we have no phenomenal concepts. I see no way to store a representation that represents a specific phenomenal quality in a way that depends on the experience of that quality.