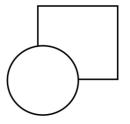
Is Amodal Perception Really Perceptual?

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The dominant view: Amodal perception is perceptual.

- **1.** We *perceive* the occluded features. (Gibson)
- **2.** Occluded features are *perceptually present* to us. (Noë)
- **3.** We represent the occluded features using *mental imagery*. (Nanay)



The 'perception proper' view - Gibson

"Awareness of the room behind my back and the lawn outside my window cannot depend on imagery... I apprehend part of the room as occluded by my head, and part of the lawn as occluded by the edges of the window. And the perception of occlusion, it seems to me, entails the perception of something which is occluded."

"When the information for occlusion of one surface by another is picked up there is no sensation for the occluded surface but it is nevertheless perceived. And the information for the occlusion of one surface by another is picked up by vision." (Gibson 1972)

Problems

- We receive no sensory information/stimulation from the occluded feature.
- Necessary conditions for perception: Sensory stimulation? Causation?
- The occluded feature isn't seen in the same sense in which the non-occluded features are seen. We say the occluded part or feature is 'unseen' after all!
- Being caused by perception doesn't make amodal experience perceptual.

The perceptual presence/access view – Noë

"You experience as **perceptually present** something which is, in fact, hidden from view." (2002: 9) We don't consciously represent the parts of the cat which are occluded. However, the whole cat is perceptually present because we have (and know we have) perceptual **access** to it. "My sense of the presence of the whole cat behind the fence consists precisely in my knowledge, my implicit understanding, that by a movement of the eye or the head or the body I can bring bits of the cat into view that are now hidden." (2002: 10)

Problem One

We know what cats look like....



Someone who doesn't know what cats look like will have a different experience from us.

- But we have the same kind of perceptual access.
- The different experiences are best accounted for by the idea that we do (in some sense) represent the parts of the cat we don't (strictly speaking) see.

Problem Two

Is the cat in the next room perceptually present? 'Yes' conflicts with the phenomenology. 'No' turns on the difference being one of degree, but this conflicts with the phenomenology.

The mental imagery view - Nanay

The cat's occluded tail is represented by mental (visual) imagery.

Two reasons for counting this as a perceptual view:

- Mental imagery is a 'necessary ingredient' of (almost) all perceptual experience.
- The phenomenology of mental imagery is similar to perceptual phenomenology. "Mental imagery refers to all those quasi-sensory or quasi-perceptual experiences of which we are ... consciously aware, and which exist for us in the absence of those stimulus conditions that are known to produce their genuine sensory or perceptual counterparts.." (Nanay quoting Richardson 1969: 2-3)

Paradigmatic case is visualising.

"Having some kind of mental imagery of an apple should be differentiated from imagining that there is an apple in the kitchen, an imagining episode often labeled as propositional imagining. The latter is a propositional attitude, whereas the former is a quasi-perceptual process." (2010: 249)

Problem One - Amodal vs Modal

Neural mechanisms for both are the **same** in early visual processing (Kellman & Shipley 1991), therefore our knowledge about the processing of the Kanizsa triangle can inform our understanding of amodal perception. No activation of retinal cells, but activation in the primary visual cortex corresponding to the sides of the triangle. (Lee & Nguyen 2001) Corballis, Fendrich, Shapley, Gazzaniga (1999) suggest **different** neural mechanisms are involved.

Problem Two - Phenomenology

"The way I represent the cat's tail in the next room and the way I represent the occluded tail of the cat I am looking at are of the same kind: both of them are represented by means of mental imagery. But the perceptual presence in these two cases is likely to be very different." (2010: 251)

"If what it is like to have visual imagery is similar to what it is like to perceive and being aware of occluded parts of perceived objects is having visual imagery, then...what it is like to be aware of the occluded parts of perceived objects is similar to what it is like to perceive those parts that are not occluded." (2010: 252)

Pluralism

The perceptual views aim to give a unified account of amodal completion.

Briscoe has argued that this is a mistake, and has identified two different kinds of amodal completion phenomena: Non-Cognitive (stimulus driven) & Cognitive (top-down).

Perceptual amodal completion

Stimulus-driven. Not influenced by top-down processes (eg. our beliefs). Empirical work suggests that such phenomena are processed perceptually, in early vision: Sugita 1999, Bakin et al. 2000, von der Heydt 2004. The majority of our everyday amodal completion experiences are not stimulus-driven, but rely on our beliefs.

The Existing Cognitive View

We represent occluded features by having beliefs about them.

Problems

- Phenomenology beliefs don't seem like the kind of mental states to account for the phenomenology of amodal completion.
- Amodal completion can be immune to our beliefs.

Amodal completion as intellectual seeming

What are intellectual seemings? They have a belief/judgment-like phenomenology, but they're not beliefs. The intellectual seeming account: Our experience of the cat = A perceptual experience of the visible features of the cat + an intellectual seeming with content like "that's a whole cat".

Benefits!

- Intellectual seemings explain why amodal completion phenomena can be immune to changes in our beliefs.
- Better captures the phenomenology

"Having some kind of mental imagery of an apple should be differentiated from imagining that there is an apple in the kitchen, an imagining episode often labeled as propositional imagining. The latter is a propositional attitude, whereas the former is a quasi-perceptual process." (Nanay)

In fact, a propositional, cognitive state (like an intellectual seeming) *better* captures the phenomenology of everyday amodal completion phenomena. Perceptual phenomenology is too detailed/ fine-grained.

- They explain the difference in phenomenology between modal and amodal completion.
- Explains the difference between the cat behind the fence experience and the cat in the next room experience.

The 'perceptual justification' problem

Amodal completion presents a serious threat to the idea of perceptual justification. (Nanay Forthcoming) Mental imagery doesn't 'track the truth', it's not causally responsive to the environment. If almost all perceptual experiences involve mental imagery, and mental imagery isn't the kind of thing that can justify beliefs about the world, then this presents a problem for the idea of perceptual justification.

On my view our experiential state as a whole comprises perceptual phenomenology of visible features along with an intellectual seeming state. The perceptual phenomenology isn't itself influenced by the intellectual seeming state, so may still be able to serve its epistemic purpose....