Invitation to submit to: ***Consciousness and Cognition***

Non-Visual Consciousness and Visual Images in Blindsight

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Abstract
In a recent response paper to Brogaard (2011a), Morten Overgaard and Thor Grünbaum argue that my case for the claim that blindsight subjects are not visually conscious of the stimuli they correctly identify rests on a mistaken necessary criterion for determining whether a conscious experience is visual and non-visual. Here I elaborate on the earlier argument while conceding that the question of whether blindsight subjects are visually conscious of the visual stimuli they correctly identify largely is an empirical question. I conclude by sketching a method for testing whether blindsight subjects have visual consciousness of stimuli presented to them in their blind field.

In their response paper to Brogaard (2011a), Morten Overgaard and Thor Grünbaum argue that my case for the claim that subjects with blindsight, a kind of residual vision found in individuals who have suffered damage to striate cortex, rests on a mistaken necessary criterion for determining whether a conscious experience is visual and non-visual (Overgaard and Grünbaum 2011). Here I argue that my proposed condition is a necessary condition for determining whether a conscious experience is visual or non-visual. I argue further that it remains a possibility that blindsight subjects have both visual and non-visual consciousness associated with a visual stimulus presented to them in their blind field. I conclude by proposing a method for testing whether blindsight subjects have visual consciousness of stimuli presented to them in their blind field.

Overgaard et al. (2008) asked blindsight subject GR to use The Perceptual Awareness Scale (PAS) to evaluate the clarity of stimuli presented to her in her blind field. PAS is a four-point scale containing the following classifications: (CI) ‘‘clear image’’ (‘‘I know what was shown’’), (ACI) ‘‘almost clear image’’ (‘‘I think I know what was shown’’) (WG) ‘‘weak glimpse’’ (‘‘something was there but I don’t know what’’), and (NS) ‘‘not seen’’ (Ramsøy and Overgaard, 2004; Christensen, et al. 2006; Overgaard, et al., 2006). GR was instructed about the meaning of the scale points before assessing the clarity of the stimuli. The researchers found that GR’s accuracy correlated with reported visual clarity of the stimulus.

In Brogaard (2011a) I argued that there is theoretical evidence against the claim that blindsight subjects, including GR, are visually conscious of stimuli they correctly identify. The argument proceeded as follows. At least some blindsight subjects report having conscious experiences of stimuli presented to them in their blind field (Stoerig and Barth 2001; Beckers and Zeki, 1995; Barbur, Ruddock & Waterfield, 1980; Weiskrantz, Cowey & Hodinott-Hill, 2002; Weiskrantz, Warrington, Sanders & Marshall, 1974). Sincerely reporting that one has a conscious experience that represents a stimulus is sufficient for

having a conscious experience representing that stimulus (Brogaard 2011a, Brogaard 2011b).[1] However, an experience that represents a visually processed stimulus need not itself be visual. When asked to identify aspects of stimuli in their blind field, blindsight subjects report that they are merely guessing (Weiskrantz, Warrington, Sanders & Marshall, 1974). Guesses are associated with consciousness but not visual consciousness.

I argued further that when a blindsight subject reports that she has a clear image of a stimulus, she may simply be reporting on the conscious character associated with her guess, in which case she does not have visual consciousness in her blind field.

In their response paper Overgaard and Grünbaum argue that my argument rests on a mistaken necessary criterion for determining whether a conscious experience is visual or non-visual, viz. the criterion that visual and non-visual experiences have different causes. Overgaard and Grünbaum hold that this criterion must be incorrect, because a visual stimulus is the cause both of normal visual experiences and episodes of guessing in blindsight subjects. Since we cannot determine the modality of a conscious experience on the basis of its cause, we are forced to take subjective reports about the modality of conscious experience at face value.

However, while Overgaard and Grünbaum are correct in saying that the visual stimulus is a cause of both kinds of conscious experience, different mechanisms no doubt underlie guesses and seeings. So guesses and seeings have different proximate causes. Having different proximate causes thus remains a necessary criterion for two conscious experiences to be modally distinct.

It is still an open question whether both visual and cognitive, amodal consciousness are associated with the stimuli GR correctly identifies. GR was prepared to label many of the visual stimuli presented to her in her blind field as ‘clear images.’ (Overgaard, et al., 2008) However, as reported by Bondurant, et al. (2011), subjects asked to report on their visual images do not always do so. When subjects are asked to choose the photo in a collage of photos that best represents an image in their mind formed on the basis of a previously seen photo, they choose a photo they believe is identical to the original. Their chosen photo is very different from the image they report having when asked to introspect. When not asked to introspect they apparently base their judgments on belief and guesswork.

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[1] I don’t want to say that sincerely reporting that one is conscious is necessarily sufficient for being conscious, as I don’t want to rule out the possibility that access consciousness and phenomenal consciousness come apart (on the distinction between access consciousness and phenomenal consciousness, see Block 1995, 2007).

These observations suggest that in order to determine whether GR and other blindsight subjects have visual conscious experience in their blind field, we need to ensure that the subjects appreciate the distinction between a visual image and how the thing seen presents itself to them (e.g., in their thoughts). One interesting question is whether blindsight subjects will say that they have visual images in their blind field once they understand this distinction. If blindsight subjects report having visual images in their blind field, that is a strong indicator that they have visual consciousness in their blind field. If they report not having visual images in their blind field, then 'clear image' is likely a description of the thought they have when they make a guess about the stimulus in their blind field.

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