



Consciousness First? Attention First?

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Some Issues

Q1: Is there consciousness without attention?

Q2: Is there attention without consciousness?

Q3: What is the structure of attention?

Q4: What's the causal/explanatory priority
between consciousness, attention, thought?

Q1: Is There Consciousness Without Attention

- Sparse View: There is no consciousness without attention
 - One experiences X only if one attends to X.
 - Brian? Matt? Bill?
 - Abundant View: There is consciousness without attention
 - One can experience X without attending to X.
 - Declan, John, Ned, Chris?
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The Basic Worry

- It's not easy to see how first-person *or* third-person data can settle the debate.
 - Primary first-person data come via introspection, but introspection proceeds via attention.
 - Primary third-person data come via verbal report, but verbal report proceeds via attention.
 - These yield data about consciousness within attention, but are silent about consciousness outside attention?
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What's the Issue?

- Party 1: Attention is diffuse and graded and there is no consciousness outside attention.
 - Party 2: Attention is focused and discrete and there is consciousness outside attention.
 - Do these parties have a nonverbal dispute?
 - That requires a common notion of attention
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What's the Notion of Attention?

- What's the common concept of attention here? [cf. Declan]
 - A functional notion?
 - Selection of information
 - Enhancement of processing
 - A phenomenological notion?
 - Foreground/background
 - Phenomenal salience
 - Might all of these be graded? If so, what is the relevant grade for attention (simpliciter)?
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Framing the Debate

- Framing the sparse/abundant debate requires either
 - (i) A very clear common notion of attention
 - E.g. a certain standard of selection/enhancement
 - Q: Is there is a canonical notion here?
 - (ii) Dropping the term “attention”
 - E.g. are we conscious of more than n objects?
 - Are we conscious of the cross in IB experiment?
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Q2: Is There Attention without Consciousness?

- Can there be attention to X without consciousness of X?
 - Yes?
 - Matt: Attention affects nonconscious processing
 - Brian: Attention eliminates consciousness
 - No?
 - Declan: Attention is a mode of consciousness
 - John: Consciousness is basis for attentional selection
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Spatial Attention vs Object Attention

- Is there a common concept of attention here?
 - One distinction: attention to location vs attention to object.
 - Matt: Spatial attention enhances nonconscious processing of object
 - Attention to object's location, processing of object, no consciousness of object
 - Brian: Object attention removes object consciousness
 - First: attention to object, consciousness of object
 - Second: attention to location, no consciousness of object
 - At no time: attention to X without consciousness of X?
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Object Attention vs Object Consciousness

- Q: Is there attention to the unconsciously perceived object in Matt's case (or Kentridge's case).
 - Yes: There is enhanced processing of the object.
 - No: Object isn't phenomenologically salient.
 - Another potential verbal dispute, involving phenomenological and functional conceptions of attention.
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Access Attention and Phenomenal Attention

- One terminological proposal: distinguish access attention and phenomenal attention?
 - Access attention: Selection of information for enhanced processing
 - Phenomenal attention: Phenomenal salience, foregrounding
 - Suspicion: Access attention is key notion for psychologists, phenomenal attention for philosophers.
 - More than one notion of access attention
 - Weak access attention: Any degree of enhanced processing of object
 - Strong access attention: Fancy access: report, reflection, ...
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Q3: What is the Structure of Attention?

- What are the contents of attention? More generally, what is the structure of an attentional state?
 - Representationalist:
 - Relation to a representational content, perhaps under a mode
 - Relationist:
 - Relation to objects and properties, perhaps under a mode
 - N.B. the issue is one about phenomenal attention, and its relation to nonattentive phenomenal states
 - Presupposes abundant view, or at least graded view of attention?
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Problems for R&R

- Ned: Representationalist/relationist can't handle nonselective effects of attention, e.g. in changing properties perceived.
 - Four sorts of response:
 - Properties illusorily perceived (outside attention?)
 - Coarse-grained properties perceived (outside attention)
 - Different modes relating subject to same objects/properties/contents
 - Attention itself involved in properties/content perceived
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Five Hypotheses

These responses correspond to four hypotheses about the nature of attentive vs nonattentive states

- Shift in content: Different precise contents/properties
 - Grain of content: Fine-grained vs coarse-grained contents/properties
 - Mode of representation: Different modes of representational or perception (different attitudes, different relations)
 - Special contents: Attention or salience is part of the contents/properties represented/perceived.
- Also a fifth hypotheses:
- Quale: attention is a nonrepresentational/nonrelational quale.
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How to Decide?

- Q: How can we decide between these five hypotheses?
 - Ned: Attentional shift is phenomenologically like contrast shift.
 - Contrast shift is shift in precise property perceived/represented
 - So shifted content view is the only r/r option (and has other problems)
 - Response: Is attention shift phenomenologically just like contrast shift? Can other views (e.g. coarse-grained content) accommodate partial similarity?
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Attention in Content

- Attention/salience in content [Johan]:
 - E.g. one perceives/represents that object is salient
 - One perceivess/represents that object is attended
 - Incompatble with reductive representationalism?
 - Compatible with nonreductive representationalism?
 - Same for relationism?
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Attention in Mode

- Attention in mode/relation [Chris, Declan, John]
 - E.g. one attentively perceives object
 - One attentively represents content
 - Incompatible with pure representationalism
 - Compatible with impure representationalism
 - Same for relationism?
 - Q: How many ways/modes can one allow while still retaining spirit of representationalism/relationism?
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Attention as Quale

- There's a nonrepresentational/nonrelational "raw feel" of attention [Ned?]
 - Q: How does this view accommodate the sense that attention is always attention *to* something?
 - Alternative: Attention as representational/relational mode, but not to be cashed out in terms of properties/truth-conditions?
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Q4a: Causal Priority

- Q: Which is causally prior: consciousness or attention [i.e. the process of attentive selection]?
 - Consciousness first: Consciousness precedes selection
 - Consciousness is basis of selection
 - Attentive consciousness is result of selection
 - Consciousness is abundant
 - Attention first: Selection precedes consciousness
 - Nonconscious representation is basis of selection
 - Consciousness is result of selection
 - Consciousness is sparse
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Arguments for C-First

- Phenomenologically: Seems we're aware of more than we selectively access
 - But: refrigerator light
 - Functionally: Selection for consciousness requires consciousness of basis for selection
 - But: why can't nonconscious info guide selection
 - Theoretically: This provides a nice functional role for consciousness
 - But: A-first view has functional role in reasoning/reflection...
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Arguments for A-First

- Theoretically: Gives consciousness a more significant functional role?
 - Parsimony: We know there is preconscious representation and attentive representation: why introduce a third level?
 - Empirically: Inattentional blindness, change blindness
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Inattentional/Change Blindness

- IB: Subjects don't notice unattended stimuli
 - CB: Subjects can't detect changes outside attention

 - Inattentional unconsciousness [A-First]:
 - Unnoticed stimuli aren't conscious

 - Inattentional amnesia [C-First]:
 - Unattended stimuli aren't remembered
 - Inattentional agnosia [C-First]:
 - Unattended stimuli aren't deeply processed.
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Inattentional Inattention

- My view: Both “inattentional blindness” and “inattentional amnesia” are tendentious characterizations. A more neutral characterization might be:
 - *Inattentional inattention*: An unattended stimulus (surprisingly) fails to capture attention.
 - I.e. the phenomena is most clearly a failure not of experience, nor of memory, but of attention capture.
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From Inattentional Inattention to Inattentional Blindness?

- Q: How can one infer the absence of experience from the absence of attention capture?
 - 1. By assuming that experience requires attention? But then the reasoning presupposes the A-First view and cannot support it.
 - 2. By assuming that where there is experience, it will capture attention? But on any plausible version of the C-First view this will be false.
 - 3. By assuming that sufficiently salient/surprising experienced stimuli will capture attention? Perhaps the lesson of “inattentional blindness” is that this is false.
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Where Does Consciousness Fit In?

- Eric: Any plausible empirical model will have pre-selection and post-selection representations.
 - Then both sparse and abundant theorists can endorse the model, placing consciousness in different places.
 - Different *interpretations* of the model
 - E.g. Boolean map theory:
 - Huang/Pashler place consciousness post-selection
 - John places consciousness pre-selection
 - How can we choose?
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Q4b: Explanatory Priority

- Chris: Which has explanatory priority:
 - (i) attention to objects
 - (ii) (demonstrative) thought about objects.
 - Can extend question to
 - (iii) consciousness (i.e. conscious perception) of objects
 - Likewise a question about diachronic/developmental causal priority.
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Consciousness, Attention, Thought

- John's model: [C-First]
 - Consciousness -> attention -> thought
 - Chris's model: [T-First]
 - Thought -> consciousness -> attention
 - Alternative Chris Model
 - Consciousness of properties -> attention to properties
-> thought about properties -> thought about objects
-> consciousness of objects -> attention to objects.
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Objects or Properties

- If one is C-First or A-First: What is more basic:
 - O-First: Consciousness/attention to objects?
 - P-First: Consciousness/attention to properties?
 - P-first: Treisman, Chris?
 - E.g. Consciousness of properties, attention binds these into conscious attention to objects
 - O-first: Pylyshyn, Brian?
 - Consciousness/attention to objects has a certain priority?
 - Pluralism: John, Declan?
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C-First Story

- Natural C-First View: [common to John, Chris, Declan, Ned, me?]
 - Consciousness provides our basic acquaintance with certain properties/objects
 - Which grounds attention to those properties/objects
 - Which grounds thought about those properties/objects
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A-First Story

- Of course there's an A-First version of this story
 - Nonconscious perception provides our basic representation with certain properties/objects
 - Which grounds acquaintance/attention to those properties/objects
 - Which grounds thought about those properties/objects.
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Empirical Worries

- Empirical considerations for A-First?
 - Brian: Attention affects consciousness
 - Matt: Attention affects nonconscious processing
 - But: C-First is a personal-level story (epistemological?)
 - It's compatible with a reverse causal direction at the subpersonal level
 - Brian: attention [to location] removing consciousness [of object]
 - Matt: attention [to location] enhancing nonconscious processing [of objects]
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Three Levels or Four?

- Any other way to empirically distinguish C-First and A-First?
Perhaps...
 - C-First has four levels: nonconscious perception, conscious perception, attention, thought
 - A-First has three levels: nonconscious perception, conscious perception, thought
 - Maybe empirical considerations could favor the hypothesis that there are three or four levels here?
 - E.g. Different sorts of representation, different functional roles?
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Do We Need A Fourth Level?

- Suspicion: At first psychologists don't think there's a separate fourth level of representation [or fourth functional role] for conscious perception here
 - Three levels are all we need: so collapse consciousness and attention
 - Alleged work for consciousness can be done by nonconscious representation
 - Q: Are there empirical (nonphenomenological) arguments for a separate level here?
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Conclusion

- First-person view:
 - Consciousness is first
 - Third-person view:
 - Attention is first
 - Who wins?
 - Stay tuned
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