Attention to self-referential stimuli: Can I stop looking at myself?
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Background
- One’s own name has been described as particularly prone to attract attention (Moray, 1959; Wolford & Morrison, 1980)
- This effect is temporary and only appears when enough resources are available (Harris & Pashler, 2004)
- This effect is dependent upon the presentation of the task-irrelevant stimulus within the focus of attention (Gronau et al., 2003)

Questions under investigation
- What about one’s own face?
  - Does it also produce distraction and is this distraction temporary?
  - Is this distraction stronger than that produced by another highly familiar face?
  - Is distraction dependent on the location and task demands?
  - Adaptation of the paradigm used by Harris & Pashler (2004)

Participants
- Recruited by gender-matched pairs
- Each one is the control of the other

Stimuli
- Target items = 0.5 by 0.7°, spaced 4° apart
- Faces = 3.3 by 4.1°

General method
- 2 blocks of 48 trials each:
  - Block 1: 46 unfamiliar distractor faces (DFs)
  - But familiar DF on trials 29 and 39
    (self – classmate or classmate – self)
  - Block 2: 24 unfamiliar and 24 familiar (12 self and 12 classmate) DFs in random order

Procedure
- Time course of a single trial
- DISPLAY:
  - Digit-parity task: Judge whether the 2 digits have the same parity or not while ignoring the face
  - N=48 (but 33 usable)
- The first presentation of each familiar DF slows RTs on the digit-parity task
- Block 2: 24 unfamiliar and 24 familiar (12 self and 12 classmate) DFs in random order

Experiment 1
- DISPLAY:
  - Digit-parity task: Judge whether the 2 digits have the same parity or not while ignoring the face
  - N=48 (but 33 usable)
- The first presentation of each familiar DF slows RTs on the digit-parity task
- When trials of Block 2 are split in 2 halves: Same effect of identity for the 1st half but no more effect for the 2nd half

Experiment 2
- DISPLAY:
  - Same digit-parity task, but the DF face is presented at periphery (randomly on the left or on the right of the digits)
  - N=48 (but 38 usable)
- The first presentations of the familiar DFs has no significant effect on the digit-parity task
- Still no significant effect of the presentation of the familiar DFs in Block 2

Experiment 3
- DISPLAY:
  - The DF is still presented at periphery, but the primary task is easier (shape identity judgment)
  - Distraction if more resources are available?
  - N=54 (but 50 usable)
- Only the first presentation of a familiar DF elicit a weak distraction. Marginal effect of order
- When trials of Block 2 are split in 2 halves: the effect of identity is non-significant for the 1st half but significantly appears in the 2nd half

Conclusion
- One’s own face has some distractive abilities
- BUT only in specific conditions:
  - When it is presented within the focus of attention of an observer engaged in a demanding primary task (but not if presented at periphery)
  - The distraction is temporary and similar to that produced by another familiar face
  - Surprise effect that habituates (see Harris & Pashler, 2004)
  - Some distraction can also occur when the own face is presented at periphery if enough attentional resources are available
  - Attentional shifts as the observer gets used to the task
  - No automatic capture of attention by familiar and important faces

References

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