

Perceiving dyads as perceptual units - CEU

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Introduction

- People are very sensitive to observed gaze direction
- Direct eye gaze is attention capturing [1] and lacksquarefacilitates emotional processing [2,3]
- Gaze can also be meaningful in observed relationships
- Two bodies oriented towards each other are processed faster than those oriented back-to-back, but only when upright [4]
- Engagement leads to perceptual grouping of dyads

WHERE AND HOW PEOPLE LOOK IN **RELATION TO EACH OTHER CAN CONVEY MEANINGFUL SOCIAL** INFORMATION





- Can this effect be obtained with faces?
- Does facial expression of emotion play a role in dyadic perceptual grouping?



Methods

Design

- Within-subjects:
 - Relationship: Engaged vs. Disengaged \bullet
 - Orientation: Upright vs. Inverted \bullet
- Between-subjects:
 - Emotion: Angry vs. Neutral vs. Happy
- 2AFC: Are faces looking TOWARDS or AWAY from each other?

Participants & Stimuli

- N=48; 15 male; M_{age}=24 [18-35yr]; 16 per emotion
- 8 faces from KDEF stimulus set (4/4 male/female) [5]
- Pairs all same-gender

Results



ENGAGED

DISENGAGED















RTs:

- Significant main effect of orientation (F(1,45)=26.77, p<.001) and relationship (F(1,45)=6.44, p=.015).
- Significant orientation x relationship interaction (F(1,45)=9.55, p=.003)
- Significant orientation x relationship x emotion interaction (F(2,45)=7.71, p=.001)

Discussion

- Disengaged dyads do not show the same inversion effect \bullet as engaged dyads
- Suggests social engagement is important for perceptual \bullet grouping of dyads as perceptual units
- Disengagement only inhibits inversion effect for neutral \bullet and smiling dyads

- Vddt 0.90 0.85 Engaged Disengaged Relationship Orientation Upright Inverted
- Accuracy: • Significant main effect of orientation (F(1,45)=10.53, p=.002).
- Significant orientation x relationship interaction (F(1,45)=6.44, p=.015)
- No other significant main effects or interactions

*corrected *tuncorrected*

Procedure



- Extends previous findings showing social engagement affects perceptual grouping [4]
- Processing of dyads as perceptual units appears to be \bullet sensitive to wider social context

References

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