

03: Do Humans Perceive Others' Feelings?

s.butterfill@warwick.ac.uk

What evidence might bear on whether '[w]e sometimes see aspects of each others' mental lives, and thereby come to have non-inferential knowledge of them' McNeill 2012, p. 573?

1. Categorical Perception & Emotion

There is a way of categorising static pictures of faces and other stimuli according to which emotion someone might think they are expressing: some faces are happy, others fearful, and so on. From five months of age, or possibly much earlier (Field et al. 1982), through to adulthood, humans are better at distinguishing faces when they differ with respect to these categories than when they do not (Etcoff & Magee 1992; Gelder et al. 1997; Bornstein & Arterberry 2003; Kotsoni et al. 2001; Cheal & Rutherford 2011; Hoonhorst et al. 2011).

The patterns of discrimination do not appear to be an artefact of linguistic labels (Sauter et al. 2011; see also Laukka 2005, p. 291), nor of the particular choices subjects in these experiments are presented with (Bimler & Kirkland 2001; Fujimura et al. 2011). Nor are the patterns of discrimination due to narrowly visual features of the stimuli used (Sato & Yoshikawa 2009).

'at a mean latency of 140 ms) the N170 showed both amplitude and latency modulation differentially with emotional expressions. ... [BUT] Whether this is due presently to low-level stimulus factors or to the use of emotional faces is still to be determined' (Batty & Taylor 2003, p. 616).

2. The Objects of Categorical Perception

The same facial configuration can express intense joy or intense anguish depending on the posture of the body it is attached to; and humans cannot accurately determine emotions from spontaneously occurring (as opposed to acted out) facial configurations (Motley & Camden 1988; Aviezer et al. 2008, 2012).

Aviezer et al's puzzle: Given that facial configurations are not diagnostic of emotion, why are they categorised by perceptual processes?

'emotions are episodic modes of evaluative engagement with the social and practical world' (Parkinson 2008, p. 1512).

3. Speech Perception

Articulatory Gesture: In speaking we produce an overlapping sequence of articulatory gestures, which are motor actions involving coordinated movements of the lips, tongue, velum and larynx. These gestures are the units in terms of which we plan utterances (Browman & Gold-

stein 1992; Goldstein et al. 2003).

A phenomenon called "duplex" perception suggests that speech and auditory processing are distinct (Liberman et al. 1981).

Some hold that the things categorised in categorical perception of speech are not sounds or movements (say) but rather these outcomes—the very outcomes in terms of which speech actions are represented motorically (Liberman & Whalen 2000; see also Browman & Goldstein 1992).

4. Emotion vs Speech

Wild conjecture: the things categorical perception is supposed to categorise, the 'expressions of emotion', are actions of a certain type, and these are categorised by which outcomes they are directed to.

The wild conjecture implies that:

- the things categorised in categorical perception of expressions of emotion are events rather than configurations or anything static;
- these events are not mere physiological reactions (as we might intuitively take blushing to be) but things like frowning and smiling, whose performance involves motor expertise; and
- these events are perceptually categorised

by the outcomes to which they are directed.

5. Questions

1. What does evidence for categorical perception of expressions of emotion tell us about whether we sometimes perceive aspects of others' mental lives?
2. If emotions are perceived, what model of the emotions captures them from the point of view of the perceiver?
3. How do speech and action perception relate to perceptual encounters with expressions of emotion?

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