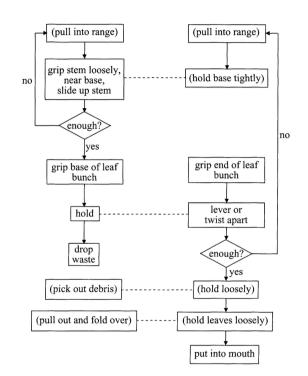
Lecture 08: Social Cognition

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1. Ingredients for a Theory of Behaviour Reading

'a better conception of 'not mindreading' would be more disparate and less dependent on common sense than the current conception of behaviour reading' (Heyes 2015, p. 322)

Our primary concern here with behaviour reading is as a potential basis for abilities to track others' mental states without representing them. But behaviour reading is plausibly important in other ways. In mindreaders, behaviour reading is thought to be useful or even necessary for identifying intentions and other mental states (Newtson et al. 1977, p. 861; Baldwin et al. 2001, p. 708). Behaviour reading may also matter for efficiently representing events (Kurby & Zacks 2008), identifing the likely effects of actions (Byrne 1999), predicting when an event likely to be of interest will occur (Swallow & Zacks 2008, p. 121), and learning through observation how to do things (Byrne 2003). And of course a special case of pure behaviour reading, 'speech perception', underpins communication by language in humans.



'great apes [are] able to acquire complex and elaborate local traditions of food acquisition, some of them involving tool use' (Byrne 2003, p 513)

'The current study tested the hypothesis that a non-human primate species could detect abstract, non-adjacent dependencies in acoustic stimuli, even when dependencies occurred over an arbitrary variable number of intervening sounds ... Squirrel monkeys consistently recognized and generalized the pattern ABnA at different levels, showing sensitivity to arbitrary-distance dependencies' (Ravignani et al. 2013;

see also Sonnweber et al. 2015).

2. Radical Interpretation Reprise

Marr (1982, p. 22ff) distinguishes:

- computational description—What is the thing for and how does it achieve this?
- representations and algorithms—How are the inputs and outputs represented, and how is the transformation accomplished?
- hardware implementation—How are the representations and algorithms physically realised?

3. Davidson's Theory of Radical Interpretation

(E) At time t, Ayesha comes to hold S true because p

(G) Ayesha comes to hold S true because p

(G) Ayesha comes to hold S true because p

(T) S is true if and only if p

'The important limitation is that [the radical interpreter] doesn't know in detail the contents of any of the propositional attitudes of the person to be interpreted: she doesn't know what he intends, believes, wants or means by what he says.' (Davidson 1994, p.)

4. Objections to Davidson's Theory of Radical Interpretation

- (1) A dilemma about The Evidence: actions or joint displacements
- (2) Indeterminacy of reference

'It makes no sense, on this approach, to complain that a theory comes up with the right truth conditions time after time, but has the logical form (or deep structure) wrong. We should take the same view of reference.' (Davidson 1984, p. 223)

- (3) No account of social cognition when the targets are wordless agents.
- (4) No account of non-propositional mental phenomena, such as the unfolding of emotions.
- (5) A dilemma about The Evidence: actions or joint displacements

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