

Lecture 09

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1. Pointing: Reference and Context

The *block-slab* model of infant pointing (compare Wittgenstein 1953, §2): (a) the activity occurs in a fixed context (e.g. building) and (b) there is a fixed thing to be done in response to a point.

Comprehending pointing is not just a matter of locking onto the thing pointed to; it also involves some sensitivity to context (see Liebal et al. 2009).

1.1. Pointing: referent and context

‘Already by age 14 months, then, infants interpret communication cooperatively, from a shared rather than an egocentric perspective’ (Liebal et al. 2009, p. 269).

‘The fact that infants rely on shared experience even to interpret others’ nonverbal pointing gestures suggests that this ability is not specific to language but rather reflects a more general social-cognitive, pragmatic understanding of human cooperative communication’ (Liebal et al. 2009, p. 270).

2. A Puzzle about Pointing

‘infant pointing is best understood—on many levels and in many ways—as depending on uniquely human skills and motivations for cooperation and shared intentionality, which enable such things as joint intentions and joint attention in truly collaborative interactions with others (Bratman, 1992; Searle, 1995).’ (Tomasello et al. 2007, p. 706)

‘to understand pointing, the subject needs to understand more than the individual goal-directed behaviour. She needs to understand that by pointing towards a location, the other attempts to communicate to her where a desired object is located’ (Moll & Tomasello 2007, p. 6).

2.1. pointing vs linguistic communication

‘the most fundamental aspects of language that make it such a uniquely powerful form of human cognition and communication—joint attention, reference via perspectives, reference to absent entities, cooperative motives to help and to share, and other embodiments of shared intentionality—are already present in the humble act of infant pointing.’ (Tomasello et al. 2007, p. 719)

‘cooperative communication does not depend on language, [...] language depends on it.’ (Tomasello et al. 2007, p. 720)

‘Pointing may [...] represent a key transition,

both phylogenetically and ontogenetically, from nonlinguistic to linguistic forms of human communication.’ (Tomasello et al. 2007, p. 720)

3. What is a communicative action?

The confederate means something in pointing at the left box if she intends:

1. that you open the left box;
2. that you recognize that she intends (1), that you open the left box; and
3. that your recognition that she intends (1) will be among your reasons for opening the left box.

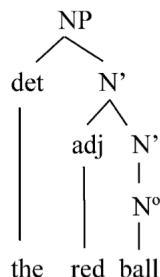
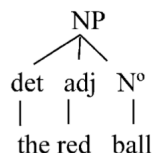
An inconsistent tetrad

1. 11- or 12-month-old infants produce and understand declarative pointing gestures.
2. Producing or understanding pointing gestures involves understanding communicative actions.
3. A communicative action is an action done with an intention to provide someone with evidence of an intention with the further intention of thereby fulfilling that intention.
4. Pointing facilitates the developmental emergence of sophisticated cognitive abilities including mindreading

4. Syntax / Innateness

Is the syntactic structure of 'the red ball' (a) flat or (b) hierachical?

a. Flat structure hypothesis b. Nested structure hypothesis



from Lidz et al. 2003

1. 'red ball' is a constituent on (b) but not on (a)
2. anaphoric pronouns can only refer to constituents
3. In the sentence 'I'll play with this red ball and you can play with that one.', the word 'one' is an anaphoric pronoun that refers to 'red ball' (not just ball). (Lidz et al. 2003; Lidz & Waxman 2004).

'The assumption in the preferential looking task is that infants prefer to look at an image that matches the linguistic stimulus, if one is available' (Lidz et al. 2003).

4.1. Poverty of stimulus arguments

How do poverty of stimulus arguments work? See Pullum & Scholz (2002).

1. Human infants acquire X.
2. To acquire X by data-driven learning you'd need this Crucial Evidence.
3. But infants lack this Crucial Evidence for X.
4. So human infants do not acquire X by data-driven learning.
5. But all acquisition is either data-driven or innately-primed learning.
6. So human infants acquire X by innately-primed learning .

'the APS [argument from the poverty of stimulus] still awaits even a single good supporting example' (Pullum & Scholz 2002, p. 47)

References

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