

Hi Henrike,

Many thanks for the papers, these are very interesting! I hope it's ok to ask some questions. Really there're only two: to what extent do you think infants are using reasoning to interpret others as opposed to being driven by constraints, and what is engagement/kennen?

In 'Infants Determine Others' Focus of Attention by Pragmatics and Exclusion' you suggest that infants have mutual exclusivity and whole object biases (pp. 419-20) and you relate these ideas to Markman (e.g. p. 427). As I read Markman, she proposes such biases as an \*alternative\* to what she calls "social-pragmatic reasoning" (e.g. Markman et al (2003) p. 272). Her idea seems to be that although it looks as if children are intelligent interpreters, much of their apparent intelligence can be explained by constraints on their capacities which may arise from limitations on their cognitive capacities rather than any insight into the pragmatics of social interaction. So the whole object bias might be explained, for example, by supposing that younger infants only understand engagement as a relation to a whole object rather than by supposing that infants appropriately assume that adults mainly talk to them about objects. Do you think of the biases as constraints like Markman or as appropriate assumptions? It seems to me that you mainly explain infants' performance by reference to intelligent interpretation rather than non-rational constraints—your infants are "puzzled by the strange behaviour of the experimenter ... and they were trying to make sense of it" (p. 425) and they assume that "when the adult reacted excitedly toward an object she was familiar with, there must be a reason" (p. 426). Are you arguing that infants determine what others attend to using a mix of intelligent interpretation and non-rational constraints, or do you think it's all intelligent interpretation and that Markson's constraints are actually plausible assumptions infants make in

trying to make sense of other people rather than limitations on their cognitive capacities?

I'm really interested in your idea that infants keep track of which objects other people have engaged with. How do you think infants understand this notion of engagement (/kennen)? For example, do they think that engagement essentially involves perception? You suggest that 14-month-olds only track what adults engage with in joint attention because adult's perceptions are especially salient to infants in joint attention (p. 23, "the simplest generalisation ..."; p. 24 "more salient in contrast to one's own"), but are you sure that they understand that engagement involves perception? Could they fail to understand that adults can be engaged with objects even though they themselves are not engaged—maybe because they initially understand engagement as something shared and only later realise that others can engage with objects individually?

For infants, how is seeing an object related to engaging with it? Is engagement something distinct from seeing, so that one consequence of seeing an object is that you may become engaged with it; or is seeing one type of engagement, so that to see an object just is to become engaged with it?

I also wonder how adults think about engagement, assuming they need a notion like this for interpreting other people. Do adults have essentially the same notion of engagement as infants use? Is adults' notion of engagement something like Russell's notion of acquaintance, i.e. a relation to an object that (1) explains how it is possible for us to think about that object and (2) consists in attending to an object we are experiencing or remembering?

I also wonder what infants think of engagement as a relation to: do people engage with objects or with objects-at-locations? Do infants think of engagement as a relation to an object-at-a-time (so that if the object changes form, prior engagement with it doesn't

automatically guarantee engagement with it in its present form)? You mention that it's puzzling why it takes so long to pass false belief tasks given everything infants understand at around 18 months. This seems especially pressing if infants can think about engagement as a relation to an object-at-a-location, because so many standard false belief tasks don't obviously require anything more than this (there's no apparent need for propositions, you just have to know Maxi last engaged with his chocolate-in-the-cupboard). Why do you think these tasks are so hard? And in particular why is infants performance on the Call & Tomasello nonverbal false belief task correlated with their performance on verbal false belief tasks?

I'm sorry this email turned out to be so many questions. The general issue I'm trying to get at is how to think about infants' understanding of mind and action. On one reading, infants and adults ask the same questions about action and engage in the same interpretative projects, it's just that infants have fewer concepts (e.g. propositional attitudes), less knowledge (e.g. they know that covering the eyes prevents seeing but not that covering the eyes only prevents seeing for as long as the eyes are actually covered) and are less good at noticing cues (e.g. they don't generally attend to what adults are looking at). At the other extreme, someone might attempt to explain what infants can do primarily by appeal to constraints, biases and fixed rules without supposing that they reason about engagement; on this view, they aren't engaged in any kind of interpretative project and the concepts they use are probably completely different from adults'. My sympathies (as a dataless philosopher) are more with the view of infants as intelligent interpreters, but I do wonder if infants ask the same questions as adults and engage in the same kind of interpretative projects. Maybe it's not just the concepts but also the projects that differ. For example, some adult thinking about the mind involves why questions whose answers involve causal explanations which are reason-giving justifications; maybe infants' questions about

minds and actions are more geared towards identifying generalisations and making predictions about what will happen and less concerned with why questions involving causation and justification.

Anyway, I really like your papers and will keep thinking and look forward to seeing you in Leipzig.

Best,  
Steve