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REGULATIONS ON USE

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Background

The field manuals were originally intended as working documents for internal use only. They were supplemented by verbal instructions and additional guidelines in many cases. If you have questions about using the materials, or comments on the viability in various field situations, feel free to get in touch with the authors.

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Directing attention and pointing in infants: a cross-cultural approach

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Recent research (Liszkowski, Carpenter, Henning, Striano, Tomasello, submitted) suggests that 12-month-old infants in German cultural settings have the motive of sharing their attention to and interest in various events with a social interlocutor. To do so, these preverbal infants predominantly use the pointing gesture (in this case the extended arm with or without extended index finger) as a means to direct another person's attention. At the MPI for Evolutionary Anthropology we systematically investigate different types of motives underlying infants' pointing. The occurrence of a protodeclarative (as opposed to protoimperative) motive is of particular interest because it requires an understanding of the recipient's psychological states, such as attention and interest, that can be directed and accessed. However, we do not know what role pointing gestures themselves play in the emergence of such early understanding of another's psychological states.

Through an examination of cross-cultural data, we hope to arrive at a better understanding of the role of attention-directing gestures in initiating joint attention to distal events, and in the acquisition of early social cognitive understanding. Note that this project is closely related to the Ethnography of Pointing questionnaire (Wilkins, Kita, Enfield, MPI L&C Group Field Manual 2001: pp. 121-130). We refer here to pointing in a broad sense according to their definition, although the emphasis here is specifically on attention-directing gestures involving interaction between infants and social partners (e.g. caregivers, peers, siblings). Relevant questions are:

1. Which means do members of a particular culture use to direct another person's attention (e.g., body gestures like lip-, arm-, head-, finger pointing; vocalising, eye gaze)?

2. How frequently and under which circumstances do infant social partners (i.e. caregivers, peers, siblings) use these attention-directing gestures for the infant?

3. Do infants of such cultures direct others' attention (and if so at which age)? By which means do they do so? How do the social partners react?

Below is an example of a coding scheme with relevant categories for recording observations. Observations should focus on settings where interaction with the infant is possible. Videotaping is not necessary (although it would be helpful for later analysis if you want to study these gestures in detail). It is advisable to have enough copies of the coding scheme with you so that each gestural event receives its own coding sheet. Where multiple interlocutors are present, use of names or other descriptive devices may be necessary in order to differentiate participants in the interaction. Wherever possible, please use the comment fields to elaborate on your observations. Please note that the age range is not exclusive. While pointing interaction involving 9-15 month-olds is of primary interest here, data involving older children (e.g. 2-4 years) is also relevant.

Coding scheme for gestural interaction between infants and social partners

1. Date: _____ Time: _____ Setting: ____

2. Sender (Gesturer): Infant / Social partner Name: _____ Age: ____ Gender: _____

3. People involved (peers, parents, siblings,...):_____

Gesture form	Pointing shape ¹	Vocalising	Eye C point	ther:		Comment	
Additional signals toward same Referent?						-	
Sender's gaze direction (specify person/object to which gaze is directed) Assumed addressee							
(researcher's hype Referent (which object/eve evoked the gesture	nt						
Gesture function (researcher's hypothesis)	Imperative (requesting action of Addressee)	Declarative (shares attention between Referent and Sender) Self-centered (no intended Addressee)		intended			
Reaction to gesture (how do interlocutor(s) respond?)	Joint Attention (shared attention between Referent and Sender)	Object (attend to Referent bu not to Sender)	Sender (attend sender not to Refere	l to but	Ignore (Addressee attends neither to Sender nor to Referent)	Gives object	
Who reacts? (If multiple interlocutors)							
Any shift of Sender's attention based on reaction?							
Other observation or comments	IS						

¹<u>L</u>= Lip point; <u>Head</u>= Head point; <u>H</u>= Hand point [palm up / side / down]; <u>F</u> = Finger point [index / middle / ring / little]; <u>T</u>= Thumb point; <u>E</u>= Extended arm (state also with F;FH;T).

Orientation to the coding sceme:

Feel free to add any category you think might be related to the overall question.

- 1. Please always state the duration of your observation period and the context (setting) in which it occurred.
- 2. Circle which interlocutor (infant or other) produces the attention-directing gesture. If an infant directs another infant's attention, circle 'infant' and indicate addressee in row 3 & 4. Please always note the infants' ages as precisely as possible, especially where they (as opposed to a sibling or cargiver, for example) are producing the pointing gesture.
- 3. State who is taking part in the setting of your observation and for each participant, give a grade of familiarity to the sender/pointer (e.g., parents, siblings, friends, neighbours, strangers). If one or more interlocutors are more closely involved in the interaction with the infant than others, set these primary participants apart with brackets.
- 4. Row 2: If you judge that a Sender has used repeated signals vis-à-vis the same referent within a single gestural episode, please indicate the number of times each type of signal was used.
- 5. Row 3: State the direction of gaze that accompanied the gesture (during and/or after), in particular when the gaze is directed toward an Addressee/ interlocutor.
- 6. Row 6: For example, Imperative indicates request for an object; Declarative directs attention (e.g. points at bird in sky); Self-centered gesture involves no indication that another interlocutor is considered (e.g. child does not look at an Addressee).
- 7. Row 8: After an interlocutor reacts, the sender's follow-up attentional behaviour may be based on this reaction. Please state what the follow-up behavior is, especially if it involves any attentional shift (e.g., looking at another Addressee or Referent).

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