Laughter growing up
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Introduction

- Laughter in adult dialogue: **pragmatically sophisticated** + mentalising (McGettigan et al., 2013; Lavan et al., 2016)
- Despite the complexities -> early emergence: around **3 months of age** (Nwokah et al., 1994).
- First means to engage in interaction and share attention, first on the self and successively to external targets — signal of early awareness of others’ mental states (**ToM**) (Tomasello, 1995; Camaioni, 1992) correlated with later language development (Carpenter et al., 1998).
- In Autism Spectrum Disorder atypicalities in laughter production (Reddy et al., 2002; Hudenko et al., 2009), perception (Samson et al., 2011) and response to other’s laughter (Reddy et al., 2002).

Data

- **Providence Corpus** (Demuth et al. 2006)
- **Mother-child natural interaction** at home American English
- **Longitudinal corpus study** 4 children (2F, 2M)
- **Multimodal annotation** (ELAN, Brugman et al. 2004)

Annotation

- Mazzocconi et al. 2020’s laughter analysis framework:
  - Laughter = non-verbal social signal having **propositional content** [P(O)]
  - P = a predicate that encodes incongruity or pleasantness,
  - O = the laughable, the laughter argument

Different layers of analysis (similarly to speech):

- **Duration**
  - L, in relation to speech
  - L, in relation to other’s laughter
- **Sensations**
  - Isolated Laughable: Attention, Type, Origin
- **Pragmatics**
  - Function
  - Good Dialogue/act/none

Results

- **Laughter frequency**

Preliminary results: **Laugh may be an early means to identify delays or difficulties in pragmatic development**

Conclusion

- **Laughter behaviour changes over time in child and mother.**
- **Mothers:**
  - laughter in interaction with child ≠ with adults.
  - Laughter behaviour attuned to child cognitive development: Early: urge to respond to every laughter Later: more balanced, children have many other means to communicate
- **Children:**
  - Over time more responsive to mother’s laughter
  - Narrower range of functions in children
  - Gradual emergence of different kinds of pragmatic functions -> in line with what could be expected on the base of phylogenetic data
  - Around 36 months more balanced interaction: increased interest in others’ non-verbal expressions and mental states
  - Increased ability to identify the argument of others’ laughter
  - Increased attention capacities
  - Emergence of self-reputation (Tomasello, 2009) and use of laughter in relation to social incongruity
  - Increase tearing

**References**


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