Parental sign input to Deaf children of Deaf parents: Vocabulary and syntax

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BACKGROUND

- Large literature shows relationships between parental language measures and children’s spoken language development
- Not every aspect of language shows specific relationships
- Measures of input quality relate to child vocabulary skill at different points in development, even with SES and quantity of input controlled
  - 2nd year: quantity
  - 3rd year: diversity
  - 4th year: decontextualized language
- Mothers may be sensitive to the child’s growing linguistic competence, though relations between input and child’s level is complex

What about potential relationships between input and sign language development?
- Child-directed signing exhibits modifications of sign size, space
- No systematic over time in Type-Token Ratio of mother’s NGT input to deaf children
- Little increase in MLU over time for NGT signers

PARTICIPANTS

- 3 Deaf children with at least one Deaf parent
- Acquiring American Sign Language from birth

METHOD

- Spontaneous signing during play, reading, or family meals
- Transcribed following SLAAAH guidelines, using Signbank
- First 100 words (NDW) / 100 utterances (IPSyn)
- Only child-directed utterances analyzed
- Coded by 2 independent coders. Point-by-point reliability:
  - 96% (92-100%) for child-directed utterances
  - 83% (70-94%) for utterance breaks & glosses
  - 87% (81-90%) for ASL-IPSyn
  - 98% (95-100%) for MLU in words (MLUw)

RESULTS

- Not yet enough observations from Jil for correlations
- Child Vocab & Grammar Development
  - Only IPSyn is significantly correlated with age
    - Aby: r = .87, p < .001
    - Ned: r = .71, p = .021
- Maternal Input & Child Language Development
  - Only significant relationship is between Aby’s IPSyn scores and her mother’s
    - r = .64, p = .047
- Specific syntactic forms on IPSyn typically appear in mother’s speech before the child’s
- Structures observed in children first -> sampling error?

DISCUSSION

- Mothers typically use a wider variety of signs and sentence types, as well as longer utterances than children
- Little evidence mothers systematically alter their productions based on the language skills of the child in this age range (1:0-4:0)
- Individual differences between mothers
  - Aby’s mother uses a wider variety of constructions as child ages/matures
  - Ned’s mother uses a wide variety of constructions from the youngest age
- MLU may not be a good measure of language development for signing children in this age range
- Slow-developing MLU may be similar to Cantonese-style languages
- Only small increases in child MLU observed in other sign languages
- Highly dependent on utterance boundaries, our least-reliable coding
- NDW shows more development, but seems to plateau
- Also observed in monolingual English children
- ASL-IPSyn is most sensitive measure of language development
- Order of acquisition data presented @ BUCLD 2017

FUTURE RESEARCH

- Additional sessions & additional children
- Other measures of language development
- Mean Length of Utterance in Morphemes
- Phonological development
- Measures of interaction
- Comparison with adult-directed signing

Selected References


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