Parents’ Verbal Interaction Style and Children’s Vocabulary Development

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Aim

- **Compare linguistic input** by parents of
  - children with **low vocabulary scores** (p 0-25)
  - children scoring in **the average range** (p 50-65) on the Swedish version of the MacArthur CDI at 1;6 (SECDI-Berglund & Eriksson, 2000)
- 5 children in each group
- Participants matched according to gender and background characteristics
SECDI Vocabulary Trajectories

![Graph showing vocabulary trajectories over age in months. The graph plots the number of words against age in months, with two lines representing different percentiles: P 50-65 and P 0-25.](image-url)
Recordings and transcriptions

• Audio recordings of parent–child interaction
• Four different everyday situations: snack/meal, (un)dressing, story time and playtime
• Two sets of recordings at 1;6 and 1;7
• Transcriptions of parents’ child-directed utterances from 5 min. of each recording
• Total of 6 hours and 40 minutes in CHAT format
Analysis

- **Quantity**
  - Number of utterances, morphemes, words (tokens)
  - MLU

- **Diversity**
  - Number of different words (types)

- **Interactive feedback behaviors**
  - Imitations, commentaries, expansions and affirmations

- **Use of questions**
Results

- Large individual variation, outlier in p 0-25 group
- Parents in p 50-65 group used:
  - Significantly greater number of utterances
  - w/o outlier, significantly greater number of morphemes, word tokens and word types
  - Significantly more imitations, commentaries and affirmations
  - More questions overall, more yes/no questions, including auxiliary-fronted yes/no questions
- Parents in p 0-25 group:
  - Asked proportionally more questions in relation to no. of utterances, more wh-questions
  - Had larger MLU
Next steps

- Morphosyntactic Analysis
  - No MOR grammar for Swedish
  - 100 random utterances per family coded manually for first study
  - Developed preliminary coding suggestions for Swedish (on CHILDES website)
  - Collaborate with partners in NorPhLex to create Norwegian and Swedish MOR grammars
  - Write a method article on developing MOR grammar

- Word frequency analysis, statistical analysis of different intervention cohorts in SPRINT
Morphosyntactic Coding

• %MOR tier for every main tier
• Each word is classified according to word class (sub-category)
• Word in basic form, followed by endings

Example 1
*TXT: nu: ska vi se!
%MOR: adv:tem|nu aux|ska pro|vi v|se!
adv:tem = temporal adverb
aux = auxiliary verb
pro = pronoun
v = verb

Example 2
*TXT: var det gott Anna?
%MOR: v:cop|vara&PAST pro|det
   adj|god&T n:prop|Anna?
  
v:cop|vara&PAST = copular verb in past
  adj|god&T = adjective inflection neuter

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Morphosyntactic coding, examples

• *TXT: ta ut napp-en så man hö(r) va(d) du säg-e(r) gumma-n.
  %MOR: v|ta&IMP ptrl|ut n|napp-DEF conj:coo|så pro:indef|man v|höra-PRES pro:rel|vad pro|du v|säga&PRES co:voc|gumma-DEF.

• *TXT: (j)a(g) lägg-er tillbaks den så ka(n) vi stänga låda-n.
  %MOR: pro|jag v|lägga&PRES adv:loc|tillbaks pro|den conj:coo|så aux|kan pro|vi v|stänga n|låda-DEF.

• *TXT: oj vilken jätte+sked åh!
  %MOR: int|oj adv:int|vilken n|+adv:int|jätte+n|sked co|åh!
At ADYLOC 2011 Paris: Variation in First and Second Language Acquisition: Comparative Perspectives

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http://sprint.ling.su.se