Dutch children’s acquisition of morpho-phonological alternations in plural formation

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RESULTS: Part A

ABSTRACT

In Dutch, word final neutralization of voicing causes an alternation between singulars and plurals: e.g. one [bet] ‘bed’ ~ two [beden] ‘beds’. Dutch-learning children were tested on their production of /t/ and /d/ in different morphological contexts. Children tended to produce /d/ as [t] in bi-morphemic words (e.g. [betten] ‘beds’), whereas they correctly produced /t/ in mono-morphemic words (e.g. [knight] ‘knight’). Children were also more accurate at positing singulars for novel plurals with /t/ (e.g. slatten) than for novel plurals with /d/ (e.g. slaadden). This finding suggests that 3 yr-olds have not yet learned about the phonotactics of voicing neutralization in relation to morpho-phonological alternations.

RESULTS: Part A

Figure 1: Production of /t/ and /d/ in bi-morphemic vs. mono-morphemic words

An ANOVA revealed a main effect of voicing (responses were more accurate for words with /t/), a main effect of morphology (responses were more accurate in mono-morphemic words), and a significant interaction between voicing and morphology. There was no effect of age.

Error Analysis

- 74% (20 out of 27) of errors comprised children’s producing /d/ as [t] (e.g. /beden/ ‘beds’ was produced as [beten]).

PART A

- Do young children learning Dutch correctly produce voicing in non-alternating versus alternating contexts?

METHOD

Subjects

- Eighteen 30-32 month-old Dutch-learning children.
- Eighteen 42-44 month-old Dutch-learning children.

Stimuli

- 4 bi-morphemic words with /t/: petten ‘penn’/’capp’
- 4 bi-morphemic words with /d/: bedden ‘bedden’/’beds’
- 4 mono-morphemic words with /t/: water ‘wetten’
- 4 mono-morphemic words with /d/: ridder ‘riddre’ ‘rider’

Procedure

- Picture-naming task: Children were presented with pictures of familiar objects using PowerPoint.

CONCLUSIONS

- Dutch-learning children fail to reliably produce voicing in alternating contexts (Part A).
- Dutch-learning children are better at producing singulars when given non-words with intervocalic /t/ (non-alternating) than non-words with intervocalic /d/ (Part B).

- These results suggest that children have not yet fully acquired knowledge of voicing neutralization or morpho-phonological voicing alternations, even at a very late stage (44 months).

- We find no support for the claim that early knowledge of phonotactics may aid the acquisition of alternations.

REFERENCES


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