Overgeneration of de/the in young children

Comparing different methods and different theories in child Dutch

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Overgeneration of de/the in young children: Comparing different methods and different theories in child Dutch

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Introduction

- Cross-linguistically, children overgenerate definite articles in indefinite contexts;

1. Situation: discourse-initial utterance from one friend to another; no shared beliefs about particular mouse.
   a. Adult:child: 'I have chased the mouse away this morning'
   b. Child: 'I have chased the mouse away this morning'

- The age at which children supposedly stop making this error ranges from 4-10:
  - Schaeffer & Matthewson (2005) (SM) find that monolingual TD English-acquiring children stop overgenerating definite articles around age 4
  - Van Hout, Harrigan & De Villiers (2010) (HHV) report overgeneralization of the until age 5.8
  - Kremer, van Hout & Hollebrandse (2015) (KHH) (using HHV’s methods) find that monolingual TD Dutch-acquiring children overgenerate the definite article de up until age 10.

Background – S&M

<table>
<thead>
<tr>
<th>Context A</th>
<th>Sentence (Referential)</th>
<th>Referent assumed to exist by speaker and hearer</th>
<th>the (definite)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context B</td>
<td>Sentence (Referential)</td>
<td>Referent assumed to exist by speaker only</td>
<td>a (new)</td>
</tr>
<tr>
<td>Context C</td>
<td>Sentence (Referential)</td>
<td>Referent assumed to exist by neither speaker nor hearer</td>
<td>a (new)</td>
</tr>
</tbody>
</table>

Knowledge of speaker/hearer assumptions required → pragmatics.

- Children < 4 lack Concept of Non-Shared Assumptions (CNSA): Speaker and hearer assumptions are independent.

= Overgeneralization of context A to context B

Background – HHV

Optimality Theory

- Two constraints determine article choice:
  - DETERMINED REFERENCE = definite article corresponds to discourse referent with determined reference → Ranked highest
  - AVOID INDEFINITES
  - Children have unranked constraints

Adult tableaux

<table>
<thead>
<tr>
<th></th>
<th>DETERMINED REFERENCE</th>
<th>AVOID INDEFINITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determined referent</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Missing input</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Low-ranked referred</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Child tableaux: unranked constraints

<table>
<thead>
<tr>
<th></th>
<th>DETERMINED REFERENCE</th>
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</table>

(Dotted lines between two constraints indicate that constraints are not yet ranked)

→ the-overuse with non-determined referent

Current study

Attempting to resolve these mixed results, and to obtain insight into Dutch-acquiring children’s article choice development, we applied the methods of two different studies (Schaeffer & Matthewson 2005 (SM) and van Hout, Harrigan & de Villiers 2010 (HHV)) to one group of Dutch-acquiring children (N=62) aged 2-9 and adult controls (N=23).

Method – S&M

Sentence Elicitation Task

Experimenter 1 watches screen with participant, Experimenter 2 sits across, cannot see screen.

<table>
<thead>
<tr>
<th>Definite referential</th>
<th>Indefinite referential</th>
<th>Indefinite non-referential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp 2: And what did Ernie just do?</td>
<td>Part: the mice a/ the mice</td>
<td>Exp 3: Elmo says: Oh, I’m so bored. I don’t know what to do. Oh, I know, I’m going to the kitchen and I’m going to bake something.</td>
</tr>
<tr>
<td>Part: She pushed the a/ the mouse away</td>
<td>Part: He is going to bake a/ the cake</td>
<td></td>
</tr>
</tbody>
</table>

Method – HHV

NP Elicitation Task

Experimenter reads story and asks participant to answer question.

<table>
<thead>
<tr>
<th>Definite unique</th>
<th>Indefinite non-unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp: A rooster and a goat were walking in the meadow. One of the animals fell in a hole and said: “cook-a-doodle-doo”?</td>
<td>Exp: Three cows and a dog were walking over a bridge. One of them fell in the water and said: “Moo”! What was it?</td>
</tr>
<tr>
<td>Part: The rooster! A rooster</td>
<td>Part: A cow! The cow</td>
</tr>
</tbody>
</table>

Results

- Figure 1: Definite referential (SM test)
- Figure 2: Definite unique (HHV test)
- Figure 3: Indefinite referential (SM test)
- Figure 4: Indefinite non-unique (HHV test)
- Figure 5: Indefinite non-referential (SM test)

Discussion & Conclusions

- Different methods lead to different results:
  - Adults score at ceiling in the SM conditions, while only around 70% correct in the HHV conditions;
  - Children score adultlike in the relevant SM indefinite condition from age 4 on, while still overgenerating the definite article at age 9 in the HHV indefinite condition;
  - The results lend support to SM’s hypothesis that children younger than 4 lack the pragmatic CNSA.
  - Overgeneralization of de (‘the’) until age 9 in HHV’s indefinite condition: it is unlikely that children as old as 9 have unranked constraints; this particular indefinite condition does not clearly elicit an indefinite article, as witnessed by the fact that even the adults produce definite articles in this condition at a rate of 18%.

References