The acquisition of sentence ellipsis in Dutch preschoolers

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1. Introduction

Ellipsis is the linguistic phenomenon where meaning is conveyed without form. Linguistic structure is missing, but we do assign meaning to what is not there (i.e. to the ellipsis site). There are different types of ellipsis, varying in the amount of structure that is elided.

**Sluicing** or sentence ellipsis is a type of ellipsis where the sentential portion of a constituent question (a whole TP/IP) is elided, leaving only a wh-remnant, see (1).

(1) Anna can see something, but I don’t know what [...].

Why is it interesting to look at the acquisition of ellipsis?

1. **Learnability problem**: The interpretation of the ellipsis site is very restricted. It is an interesting question to see how and when children have learned this restriction.
2. **Relation to acquisition of anaphora**: Ellipsis is a type of anaphora, where the interpretation of the ellipsis site needs to be recovered from the previous discourse. This type of research thus provides us with another way to look at the acquisition of anaphorapha and to study how children locate the correct antecedent in linguistic discourse.

3. Research questions

1. How do Dutch children interpret anaphora?
2. At what age do Dutch children comprehend sluicing sentences?
3. At what age do Dutch children produce sluicing sentences?

2. Acquisition of ellipsis

Only one study so far looked at the acquisition of sluicing, and found that English 5-year-olds did not accept sluicing sentences in a grammaticality-judgment task, whereas 7-year-olds did. This is not in accordance with results from studies that looked at other types of ellipsis, namely noun phrase and verb phrase ellipsis (NPE/VPE). These studies mostly tested the acquisition of NPE and VPE in English and found that children are already able to comprehend and produce these elliptical structures at quite an early age, and that they are thus capable of discourse integration.4,5

Our research extends the research on the acquisition of ellipsis that has been done so far, by including another type of ellipsis and another language.

3a. Design

**Participants** N=30, average age=5;4, age range=4;8-6;1

**Pretest**

In the pretest we tested simple embedded sentences (2) to make sure all participants were able to interpret the embedded clause within the sluicing sentences. The pretest was also used to familiarize participants with the procedure, since it had the same set-up as the comprehension experiment.

(a) Ik zie niet wie een bloem teken.

**Comprehension experiment**

To test the comprehension of sluicing we developed a picture selection task. A hand puppet said the test sentence and participants were instructed to help the puppet choose the picture that best fitted the sentence.

**Items**

Test items
- 8 sluicing sentences with negation (SluiceNeg)
- 8 sluicing sentences without negation (SluicePos)

**Control items**
- 2 non-elliptical sluicing counterparts with negation (CounterNeg)
- 2 non-elliptical sluicing counterparts without negation (CounterPos)
- 2 non-elliptical regular coordinated sentences with different object (CoordObj)
- 2 non-elliptical regular coordinated sentences with different action (CoordAct)

**Pictures**

Next to the target picture there were three distractor pictures. Picture 2 was included to make sure participants interpreted the whole sentence and not just the first conjunct. Pictures 3 and 4 provided non-adult like interpretations of the sluicing sentence with different, less restricted antecedents for the ellipsis site.

**Production experiment**

We developed an elicitation task in the form of a card game to test the production of sluicing sentences in Dutch. Every item consisted of 3 cards, with a picture on each of them, that were given to the child. The experimenter was not allowed to see the pictures and asked questions about what the child could see on the cards. The answer to the last question elicited a sluicing sentence. The production task had 8 items.

4a. Design

**Participants** N=30, average age=5;4, age range=4;8-6;1

**Pretest**

In the pretest we tested simple embedded sentences (2) to make sure all participants were able to interpret the embedded clause within the sluicing sentences. The pretest was also used to familiarize participants with the procedure, since it had the same set-up as the comprehension experiment.

(a) Ik zie niet wie een bloem teken. I can’t see who is drawing a flower.

**Comprehension experiment**

To test the comprehension of sluicing we developed a picture selection task. A hand puppet said the test sentence and participants were instructed to help the puppet choose the picture that best fitted the sentence.

**Items**

Test items
- 8 sluicing sentences with negation (SluiceNeg)
- 8 sluicing sentences without negation (SluicePos)

**Control items**
- 2 non-elliptical sluicing counterparts with negation (CounterNeg)
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4b. Item comprehension experiment

Test sentence
Iemand tekent een bloem, maar ik zie niet wie.

- Target
- Control
- Different object
- Different action

Questions
1. Is er iemand een boek aan het lezen?

Target answers
Ja, een meester.

2. Is er iemand een plant aan het geven?

Target answers
Ja, een meneer.

3. Is er iemand een boot aan het trekken?

Target answers
Ja, maar ik zie niet wie.

Ja, maar ik zie niet wie.

4c. Item production experiment

Questions
1. Is er iemand gitaar aan het spelen?

Target answers
Ja, een man.

2. Is er iemand een plant water aan het geven?

Target answers
Ja, een meester.

3. Is er iemand een bloem aan het trekken?

Target answers
Ja, maar ik zie niet wie.

4d. Item production experiment

Questions
1. Is er iemand gitaar aan het spelen?

Target answers
Ja, een man.

2. Is er iemand een plant water aan het geven?

Target answers
Ja, een meester.

3. Is er iemand een boek aan het trekken?

Target answers
Ja, maar ik zie niet wie.

4. Is er iemand een boot aan het trekken?

Target answers
Ja, maar ik zie niet wie.

6. Conclusion

Our results show that Dutch children at the age of 5 are fully able to comprehend sluicing sentences in an adult-like way. Furthermore, most children produced a great number of sluicing sentences (63%) and they even preferred to produce sluicing sentences over their full non-elliptical counterparts (13%).

Our results contradict the findings from the only other study on the acquisition of sluicing, which concluded that 5-year-olds do not accept sluicing sentences as grammatical.6

However, our results do align with studies on VP and NP ellipsis, supporting the view that children at the age of five are fully able to reconstruct the antecedent of ellipsis, by integrating the elided phrase in the discourse.4,5

Our sluicing study thus contributes to theories of the acquisition of ellipsis and anaphoricity in general. Additionally, it provides the field of acquisition research with a method that can easily be adapted to test different sluicing varieties with young children in different languages.

References