INTERPRETATION OF ANAPHORIC PERSONAL AND DEMONSTRATIVE PRONOUNS

An experiment with German 5-year-olds

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1. Adult's interpretation preferences of anaphoric pronouns

- **Personal pronouns** (PERS) preferably refer to an antecedent that is sentence-first, subject and topic.

- **Demonstrative pronouns** (DEM) preferably refer to an antecedent that is sentence-final, object and non-topic.

  (for an overview, Bader & Portele, 2019)

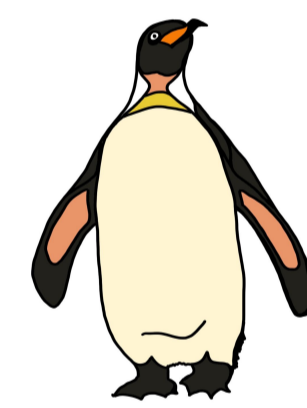## 2. Children's development in pronoun interpretation

- **3-year-olds**:
  - tend to interpret PERS and DEM similarly, which indicates a default-based organization of pronoun resolution in which a pronoun symbolizes nothing more than co-reference in general (Bittner & Kühnast, 2012)
- **5-year-olds**:
  - resolve DEM still at chance level
  - link PERS to the most salient antecedent (animate subject), which indicates a systematic specification of this pronoun type (Bittner & Kühnast, 2012)
- **10-year-olds**:
  - interpret PERS adult-like, whereas the interpretation of DEM still seems to be challenging (Bryant & Noschka, 2015)

How do German 5-year-olds interpret anaphoric PERS and DEM in contexts of referential ambiguity?
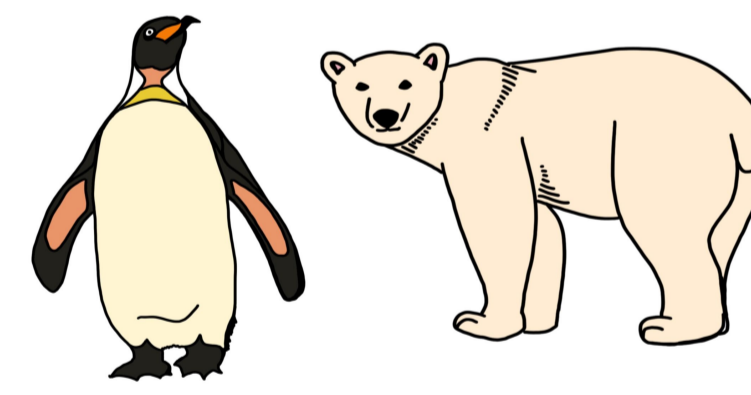
3. Method

- Comprehension experiment (sentence picture matching task) with 14 monolingual German 5-year-olds (7 female, 7 male).

- The children were asked to put certain objects (e.g., *fish*) on one of two potential referents (e.g., *penguin* or *ice bear*) right after listening to a sentence starting either with a PERS or a DEM.

- The referents have been manipulated regarding the functional distribution of PERS and DEM. The 1st antecedent (*penguin*) was an ideal candidate for a PERS (subject, sentence-initial, topic), whereas the 2nd antecedent (*ice bear*) is preferably referred to with a DEM (object, sentence-final, non-topic).

- 24 items were used consisting of 12 filler items and 12 test items starting either with a PERS (condition 1) or a DEM (condition 2).

Example of a test item (including both conditions)

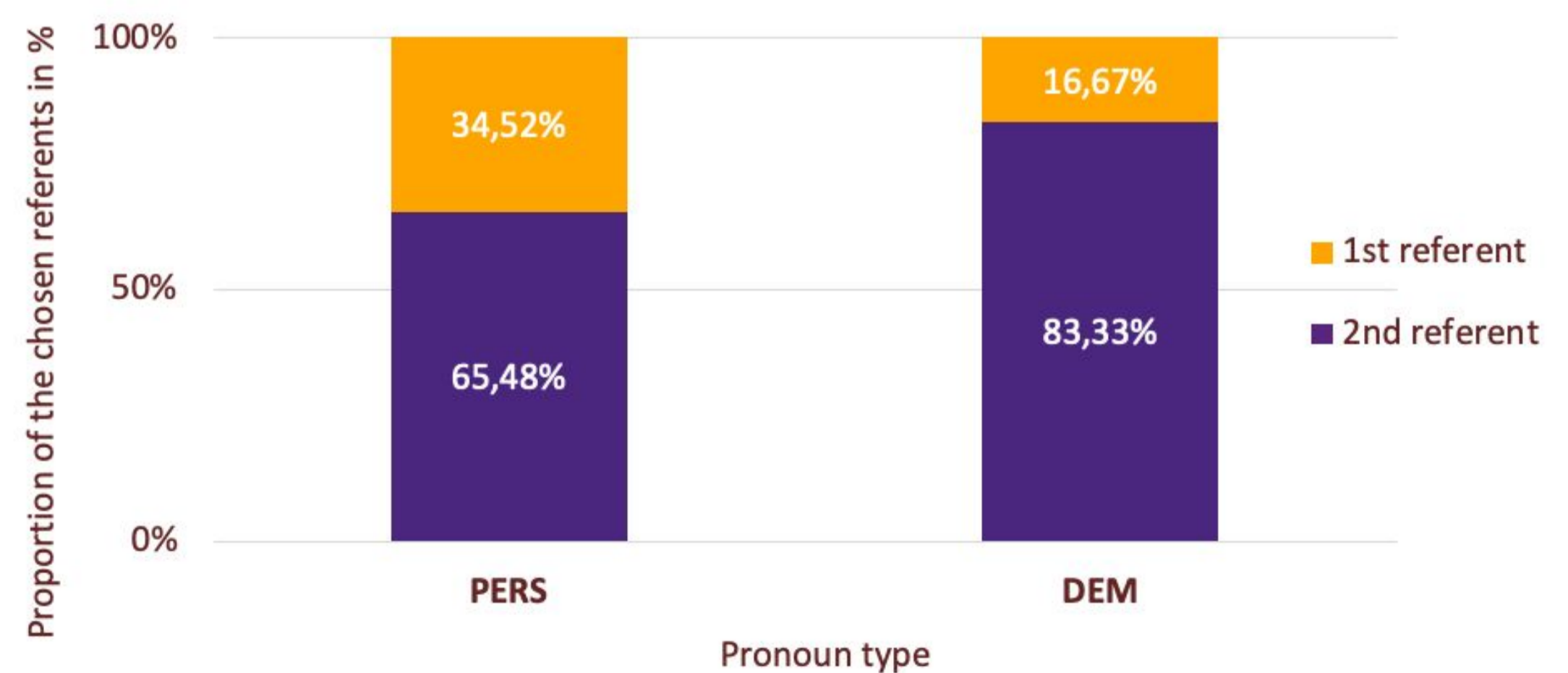a. *Das ist der Pinguin.*
'This is the penguin.'

b. *Der Pinguin$_1$ mag den Eisbären$_2$.*
'The penguin likes the ice bear.'

c. *Er$_1$/Der$_2$ frisst den rohen Fisch.*
'Which/That eats the raw fish.'

4. Main results

- The participants tend to link PERS to the 2nd referent, which is the sentence-final object and non-topic. ($T = 62$, $p = .067$, $r = -.489$)

- Regarding DEM the children showed a significant preference for the 2nd referent. ($T = 78$, $p = .002$, $r = -.835$)

- Overall, large inter-individual differences were found.

Proportion of the chosen referents in %

Pronoun type	1st referent	2nd referent
PERS	34,52%	65,48%
DEM	16,67%	83,33%

5. Discussion

The significant preference for the 2nd antecedent in condition 2 (DEM) may be understood as a development towards adult-like interpretation. But regarding PERS the children seem to face difficulties. This could result from children assuming there is no functional specification for PERS and therefore considering both referents to be suitable. About half of the children (57.14%) did not differentiate between pronoun types in their interpretation behavior which indicates that the acquisition of the anaphoric load of the pronouns is still not completed at the age of 5.

References:
Bader, M., & Portele, Y. (2019). The interpretation of German personal pronouns and d-pronouns. *Zeitschrift für Sprachwissenschaft*, 38, 155–190.
Bittner, D., & Kühnast, M. (2012). Comprehension of intersentential pronouns in child German and child Bulgarian. *First Language*, 32, 176–204.
Bryant, D., & Noschka, N. (2015). Personal- und Demonstrativpronomen im Sprachverstehensprozess. Untersuchungen zum Erwerb funktionaler Anapherndistribution bei DaM, DaF und DaZ. In H. Klages und G. Pagonis (Ed.), *Linguistisch fundierte Sprachförderung und Sprachdidaktik. Grundlagen, Konzepte, Desiderate* (p. 71–98). Berlin: De Gruyter.