

The English dative alternation: Evidence from first language acquisition

Daniel Bürkle

Introduction

The **dative alternation** (Wasow 2002):

- (1) *Rick gave Kate a coffee.*
- (2) *Rick gave a coffee to Kate.*

Bresnan et al. (2007) argue that the choice between these two constructions is driven by ordering principles operating on the two objects, such as:

animate before inanimate
definite before indefinite
short before long
⋮

For many dative alternation sentences, this theory predicts one construction to be preferred:

- (1') *Rick gave [Kate] [a grande skim latte].*
animate before inanimate
definite before indefinite
shorter before longer

- (2') *Rick gave [a grande skim latte] to [Kate].*
inanimate before animate
indefinite before definite
longer before shorter

Acquisitional studies (de Marneffe et al. 2012, Bürkle 2011) failed to find effects of animacy on the dative alternation in children's speech, but they point out that this may be a shortcoming of their corpus-based approach.

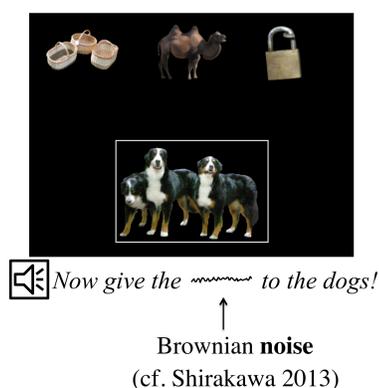
Therefore, an experimental study is necessary to determine whether there is an **effect of animacy** on children's dative alternation choices.

References

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- Bürkle, D. (2011). *Weight effects in the acquisition of English*. Master's thesis, Universität Konstanz.
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Method

- interactive **visual world** paradigm on **touchscreen**
- **eye-tracking** (Tobii X120)
- four blocks (2 constructions × 2 positions of noise)



Participants

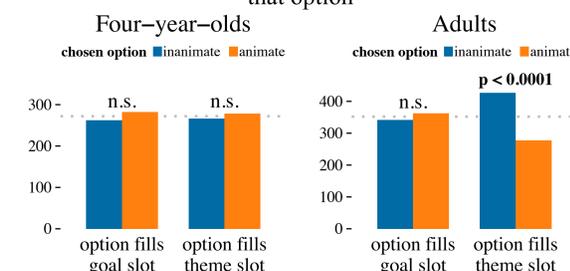
- Adults ($N = 20$)
- Four-year-olds ($N = 18$, ongoing)

Data

- choice out of three options (e.g. *baskets/camel/lock*)
- touchscreen input
- eye gaze

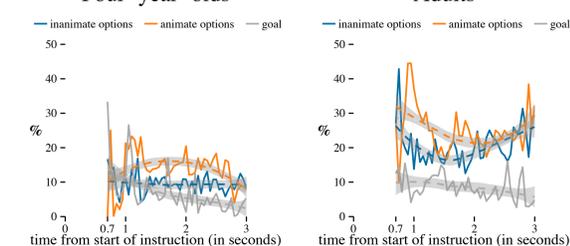
Results

Fig. 1: Animacy of chosen option, by thematic role of that option



Adult participants chose **more inanimates** than animates when the **theme** of *give* was masked with noise in the instruction, regardless of the order of the two objects (*Now give the [noise] to the dogs!* or *Now give the dogs the [noise]*). Four-year-olds' choices did **not** reflect this preference.

Fig. 2: Images looked at (theme-gapped blocks)



Early in trials where the theme was masked (1.0–1.3s), **both** adults and four-year-olds **looked at animates more**. Growth curve analysis (Mirman et al. 2008) shows this to be significant.

Later in the same trials, this attraction towards animates **declined** for four-year-olds, and the **attraction towards inanimates grew** for adults.

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Conclusions

This task effectively showed **that there is an effect of animacy for adult speakers**. However, this effect is not in line with what the literature predicts: It is not the position of the object that interacts with its animacy, but rather its **thematic role**. Adult speakers are sensitive to *give* prototypically taking an animate goal and an inanimate theme (cf. Gropen et al. 1989).

Four-year-olds did not show this sensitivity to the same extent. This suggests that, even though the gaze of adults and children is attracted by pictures of animates, sensitivity to animacy has not developed to adult-like levels yet by age four.

➤ The experiment is currently being conducted with **eight-year-old** participants, who would be further along any developmental path and are therefore predicted to show more adult-like behavior.

➤ A controlled and balanced **sentence repetition experiment** is ongoing. It tests for difficulties or repairs when repeating *give* sentences that violate the prototypical animacy preferences for themes and goals (3) or the ordering preferences predicted in existing theories (4).

- (3) *Mom gave [the children] to [the sofa].*

animate before inanimate
animate theme and inanimate goal

- (4) *Anne gave [the glass] to [Ben].*

inanimate before animate
inanimate theme and animate goal

Strong experimental support for the theory of Bresnan et al. (2007) would come from the latter type of sentence showing the same pattern of disfluencies or repairs as the former.

de Marneffe, M., Grimm, S., Arnon, I., Kirby, S., & Bresnan, J. (2012). A statistical model of the grammatical choices in child production of dative sentences. *Language and Cognitive Processes*, 27(1), 25–61.

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Shirakawa, M. (2013). Experimental study of morphological case marking knowledge in Japanese-English bilingual children in Christchurch, New Zealand. Master's thesis, University of Canterbury.

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