Syntactic Priming in German:
Priming of dative and voice alternation using sentence recall

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Hypothesis
We assumed that the structure of a prime sentence exerts an influence on the subsequent production of a target structure. An alteration of the target structure was hypothesised to occur more frequently when the syntactic structures of prime and target sentences were not identical, rather than identical. We hoped to elicit syntactic priming effects for the dative alternation in German, as have been shown before with other paradigms. Apart from that we wanted to find out whether the immediate recall paradigm can be used to show syntactic priming effects for the voice alternation of the dative alternative in English.

Experiment 1: dative alternation

Critical conditions

<table>
<thead>
<tr>
<th>Prime sentence</th>
<th>Target sentence</th>
<th>Combination</th>
</tr>
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<tbody>
<tr>
<td>double object (DO)</td>
<td>DO</td>
<td>identical</td>
</tr>
<tr>
<td>prepositional object (PO)</td>
<td>PO</td>
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<td>PO</td>
<td>identical</td>
</tr>
</tbody>
</table>

Four sentence pairs per prime-target combination.

Results
For the statistical analysis the four conditions were collated into two, ‘identical’ and ‘not identical’. Sign test: subject-specific analysis (N=13) p < 0.01 (one-tailed); item-specific analysis (N=5) p < 0.05 (one-tailed).

Discussion
The outcome corroborates the results of earlier studies on the priming of the dative alternative in English and German (cf. Melinger & Dobel, 2005, who used a different paradigm, however). The sentence recall paradigm appears to be suited to demonstrate syntactic priming effects.

Conclusions
- Experiment 1, testing dative alternation items, provides evidence that the sentence recall method is a valid means for testing structural priming effects in German;
- the results of experiment 2 indicate that active and passive voice can be primed in German and that priming of the voice alternation can be shown using the sentence recall paradigm.

Syntactic priming effects can be explained within a representational framework, like WEAVER++ (Levelt, Meyer, & Roelofs, 1999) with additional assumptions made by Pickering and Branigan (1998) and Hartsuiker, Pickering and Veltkamp (2004).

References

Questions for further research
- Is an experimental separation of functional and positional processing possible? German might pose a suitable research subject, since it allows word order variations that are not possible in English and that let experimenters control the order of arguments independently of their syntactic function;
- why is priming of voice alternation more difficult to show than priming of the dative alternation?