Syntactic Priming Across Constructions: Light Verbs

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Introduction

• **Challenge:** modeling the relationship between storage and computation of multiword expressions in the mental lexicon
• **Neither fully compositional, nor fully idiomatic:** Light Verb Constructions (LVCs).

Light Verb Constructions: Same syntactic structure, different semantic structure from Non-Light Constructions

### Hypothesis 1:
Each LVC is stored as a unique construction [1] with fully specified syntactic and semantic structures → no shared structures between light and non-light constructions

### Hypothesis 2:
LVCs have same syntax as non-light, but lexical features on verb make it “light” when combined with an abstract noun [2; 3] → shared syntax, only semantic roles differ!

### Predictions in Structural Priming

**Hypothesis 1:**
no shared structures
→ less priming for light

**Hypothesis 2:**
shared syntax
→ equal amount of priming

Method: Structural Production Priming

Structural priming = tendency to recreate a recently uttered structure in different words, largely tapping syntactic structures [5, 6, 7, but see 8]

Making use of the dative alternation: Double-Object (DO) or Prepositional Object (PO) forms of a sentence are largely the same in meaning (e.g., *Jan gives Elsa a rose* ≠ *Jan gives a rose to Elsa*).

**Primes:**
- Within-subjects factor: DO or PO sentence forms
- Between-subjects factor: light or nonlight prime sentences

**Targets:**
- Always non-light events involving an Agent, Patient or Recipient, and Theme
- Same across prime conditions

### Results

**DEPENDENT VARIABLE:** percentage of DO structures produced on target trials, out of all DO and PO constructions.

<table>
<thead>
<tr>
<th>% of produced DO target forms</th>
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<tbody>
<tr>
<td>Light Primes</td>
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<tr>
<td>Nonlight Primes</td>
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**Main Effect of prime type (DO or PO)**
(F(1,54)=30.18, p=.000)

**Main Effects for both Light sentences (F(1,54)=14.14, p=.000) and Nonlight sentences (F(1,54)=8.37, p=.005)**

**No effect between sentence type and prime type (F(1,54)=.57, p=.451).**

### Conclusions

- **Light and Non-Light Constructions prime non-light targets equally**
  → complete overlap of structure that is sensitive to priming
  → to the extent that production priming reflects surface syntax [5, 6, 7]: light and non-light constructions share syntactic structure
  → in line with previous research showing that structural priming can even be observed across fully idiomatic expressions [9]

- **Future research:**
  - Syntax: fully crossed design with non-light and light primes → reconfirmation of hypothesis
  - Semantics: event representations in light verb constructions

### References