

# Language-specific and language-independent serialisation patterns for framesetters, topics, and predicates

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## THE NATURAL ORDER OF INFORMATION

- Many studies have shown language-independent preferences for the serialisation of thematic roles (Goldin-Meadow et al., 2008; Futrell et al., 2015; Hall, Mayberry, & Ferreria, 2013; Hall, Ferreira, & Mayberry, 2014; Langus & Nespor, 2010, et al.)  
**→ Do such preferences extend to information structure?**  
 → relative order of framesetters and topics with respect to their predication.
- Background:**  
 While topics specify the entity under which a proposition is to be stored, framesetters provide specifications – typically time or place – restricting the domain in which the proposition is valid.
- Prediction:** Topics and Framesetters will be preferred in initial position, before the predication itself, regardless of language-specific word orders.

### ENGLISH WORD ORDER:

- strict SVO language
- Topic > Verb > Framesetter

### GERMAN WORD ORDER:

- SVO in declaratives
- Topic > Verb > Framesetter

### TURKISH WORD ORDER:

- SOV language
- Topic > Framesetter > Verb

## TWO STUDIES: COMPARING LINGUISTIC AND SEMI-VERBAL ORDERING PREFERENCES

### ACT-OUT STUDY

- Framed as communication game
- 20 short stories in comic strip, invisible to confederate:
  - Topics: same central actor across a story
  - Framesetters: clocks
- Task: act out 3rd picture of comic strip (intransitive action executed by the topic) semi-/nonverbally, with 'playmobil' figurines, wooden clocks, and printed verbs.
- Subjects:
  - monolingual English, N=34
  - monolingual German, N=35
  - monolingual Turkish, N=30
- Prediction: Topics/Framesetters > Actions



- ### VERBAL DESCRIPTIONS
- after each act-out run
  - Task: describe 3rd picture of comic strip verbally in native language
  - Prediction: Language-specific word order



## RESULTS

### RESULTS PER GROUP

#### ENGLISH

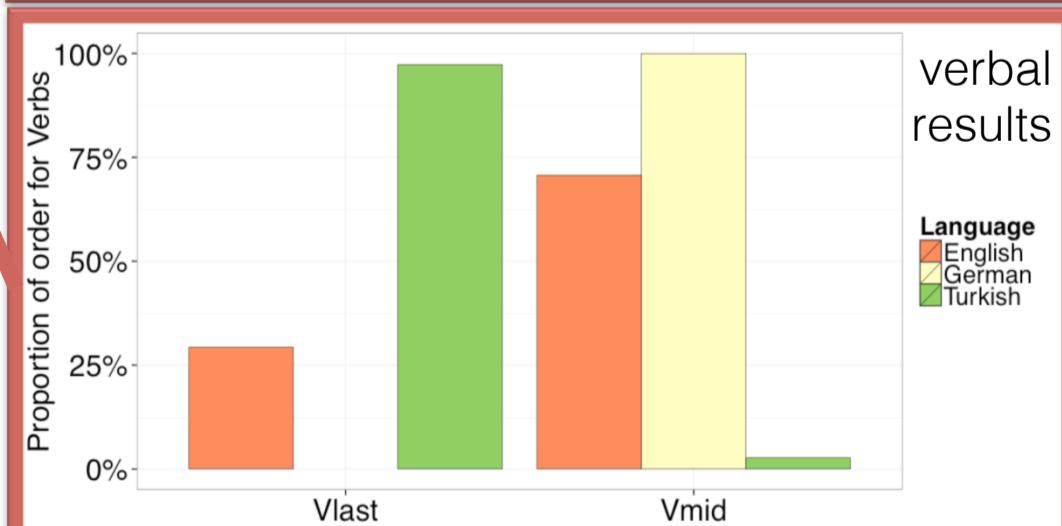
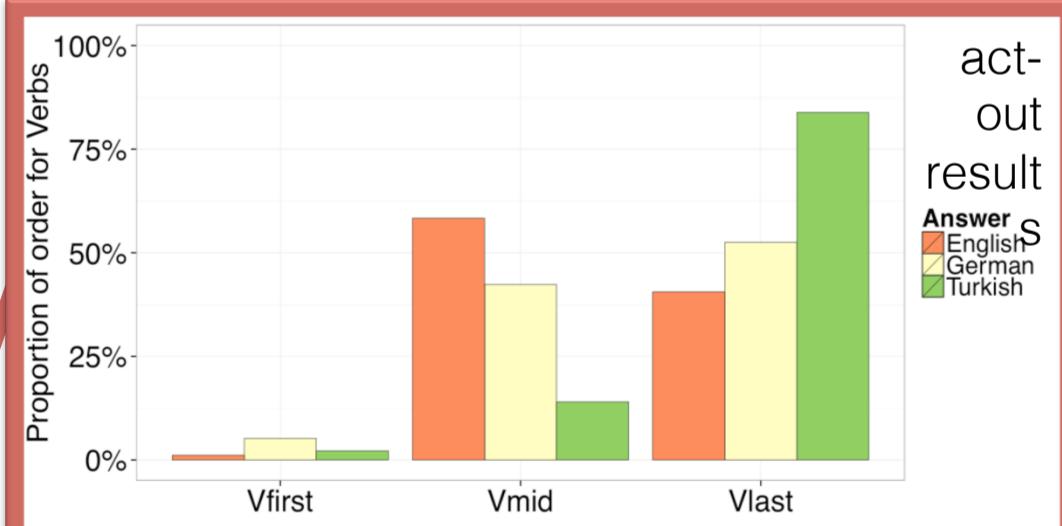
- ACT-OUT: Vmid > Vlast > Vfirst
- VERBAL: Vmid > Vlast
- comparing the two tasks:  
 $\chi^2 = 24.8$ , df = 2,  $p < .0001$

#### GERMAN

- ACT-OUT: Vlast > Vmid > Vfirst
- VERBAL: 100% Vmid
- comparing the two tasks:  
 $\chi^2 = 508.7$ , df = 2,  $p < .0001$

#### TURKISH

- ACT-OUT: Vlast > Vmid > Vfirst
- VERBAL: Vlast > Vmid
- comparing the two tasks:  
 $\chi^2 = 65.3$ , df = 2,  $p < .0001$



### COMPARING LANGUAGES

#### ACT-OUT TASK:

- significant differences between languages:  
 $\chi^2 = 87.3$ , df = 2,  $p < .0001$
- Tendency to place topics and framesetters first, as predicted
- language-specific influences: Topic > Framesetters in Turkish
- Verb-last more than expected from grammatical preferences in German and English

#### VERBAL TASK:

- significant differences between languages:  
 $\chi^2 = 1236.5$ , df = 2,  $p < .0001$
- People followed language-specific preferences, as expected

## CONCLUSIONS

- verbal descriptions followed different language-specific word orders.
- in the extra-grammatical task, in addition to language-specific effects, we found a strong overarching pattern where speakers placed framesetters and topics before the verb  
**→ information-structural preferences can violate language-specific restrictions**
- findings point to information-structural patterns that are independent of, and interacting with, language-specific grammatical constraints.