

# VERB POSITION PREDICTS ACCEPTABILITY IN A FLEXIBLE SOV LANGUAGE

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## BACKGROUND

Previous research on flexible SOV languages has shown that non-canonical constituent orders result in a lowering of acceptability, presumably due to increased processing difficulty associated with these orders (Weskott & Fanselow 2011).

Most research on non-canonical orders has focused on the position of the arguments (but see Mishra et al. 2010 on Hindi). Here, we focus on the **position of the verb**.

In **Malayalam** (Dravidian), canonical constituent order is SOV, but **each of the six logical orders is grammatical and attested**.

## NON-CANONICAL ARGUMENT POSITIONS

In isolation, non-canonical argument positions are thought to increase processing difficulty, which could be responsible for the lowered acceptability.

- **Syntactic dependencies:** If SOV is the basic order, other orders could result in filler-gap dependencies that need to be processed (Miyamoto & Takahashi 2001).
- **Construction of complex discourse context:** Non-canonical orders require particular discourse contexts, and constructing these contexts results in increased processing difficulty (Kaiser & Trueswell 2004).

This explains why SOV would have the highest acceptability.  
What about the other orders?

Order	"BINDU SOLD A MANGO"		
<b>SOV</b>	Bindu Bindu	oru maṅṅa a mango	vitu sold
<b>OSV</b>	oru maṅṅa a mango	Bindu Bindu	vitu sold
<b>SVO</b>	Bindu Bindu	vitu sold	oru maṅṅa a mango
<b>OVS</b>	oru maṅṅa a mango	vitu sold	Bindu Bindu
<b>VSO</b>	vitu sold	Bindu Bindu	oru maṅṅa a mango
<b>VOS</b>	vitu sold	oru maṅṅa a mango	Bindu Bindu

## VERB POSITIONS

Speakers should posit a clause boundary at the verb, so each post-verbal argument requires reanalysis, increasing processing difficulty and lowering acceptability.

In Malayalam:

- **Argument-dropping**
- **No subject-verb agreement**
- **Verb usually signals the end of the sentence**

Each reanalysis point (=post-verbal argument) should result in processing difficulty

<b>SOV</b>	Bindu	oru maṅṅa	vitu ] <sub>c</sub>
	Bindu	a mango	sold
<b>OSV</b>	oru maṅṅa	Bindu	vitu ] <sub>c</sub>
	a mango	Bindu	sold
<b>SVO</b>	Bindu	vitu ] <sub>c</sub>	oru maṅṅa ] <sub>c</sub>
	Bindu	sold	a mango
<b>OVS</b>	oru maṅṅa	vitu ] <sub>c</sub>	Bindu ] <sub>c</sub>
	a mango	sold	Bindu
<b>VSO</b>	vitu ] <sub>c</sub>	Bindu ] <sub>c</sub>	oru maṅṅa ] <sub>c</sub>
	sold	Bindu	a mango
<b>VOS</b>	vitu ] <sub>c</sub>	oru maṅṅa ] <sub>c</sub>	Bindu ] <sub>c</sub>
	sold	a mango	Bindu

## METHODS

Acceptability judgment task (rating on a 1-7 scale)

18 university students from central Kerala, India (12 female)

Design:

- 6 conditions (SOV, OSV, SVO, OVS, VSO, & VOS)
- Each participant saw 5 items from each condition; 30 experimental items
- 40 bi-clausal fillers from another sub-experiment
- 10 fillers of very low acceptability
- Counterbalanced (Latin square design)

Stimuli consisted of animate subjects and inanimate objects:

- No object case-marking for these events
- The semantic role of each argument is relatively unambiguous

Audio stimuli presented in Praat:

- Avoid effects of diglossia
- Appropriate intonation associated with each order

## DISCUSSION

- Even in a relatively flexible language, there are sharp distinctions in acceptability among non-canonical orders.
- Verb position likely has a major effect on processing in flexible constituent order languages.
- Many interesting research questions arise about how variable verb position within languages affects processing.

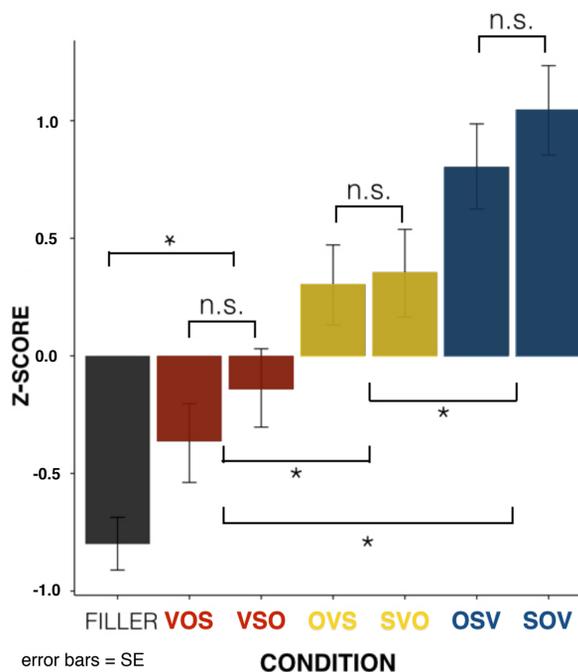
## IMPLICATIONS FOR LANGUAGE CHANGE

- The widely-attested change from flexible SOV to SVO would seem to involve a shift to a previously less acceptable order
- Flexible constituent order languages often develop more rigid constituent order when in contact with a fixed order language.

How is the acceptability of non-canonical orders affected by experience with another language?

Prediction: **Three-way distinction in acceptability**  
Verb-final > Verb-medial > Verb-initial

## RESULTS



Main effect of order ( $p < 0.001$ )

The differences between each of the verb positions were significant as calculated by pairwise t-tests ( $p < 0.001$  for each).

Pairwise t-tests between the orders within each verb position (SOV and OSV, SVO and OVS, and VSO and VOS) were not significant.

This indicates a three-way distinction in acceptability, as predicted.

## REFERENCES & ACKNOWLEDGEMENTS

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