

Sensitivity to individual grammars in sentence processing by Armenian-Russian-English trilinguals

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Abstract POSTER10



Introduction

This study investigates sentence processing by a multilingual mind:

- native language (L1-Armenian)
- non-native languages (L2-Russian and L3-English)

Research Questions:

- Is native and non-native processing is sensitive to certain linguistic prompts?
- Do the participants react to a given linguistic prompt differently in their native and non-native languages?

Research Target:

- social conventions triggered by lexical information (Felser, 2019; Clahsen & Felser 2018, 2006)
- sensitivity to syntactic prompts (Dekydtspotter et al., 2019; Sokolova & Slabakova 2019)



Methods

Self-paced reading experiment: Linger

Condition	Favoring HA	Favoring LA	Neutral
perception	Maria saw <i>the granddaughter</i> of the woman that was <u>playing with the kitten</u> .	Maria saw the grandmother of <i>the girl</i> that was <u>playing with the kitten</u> .	Maria saw the sister of the neighbor that was <u>participating in a social project</u> .
non-perception	The police arrested <i>the granddaughter</i> of the woman that was <u>playing with the kitten</u> .	The police arrested the grandmother of <i>the girl</i> that was <u>playing with the kitten</u> .	The police arrested the sister of the neighbor that was <u>participating in a social project</u> .

<i>Total number of participants</i>	<i>Tested in L1-Armenian</i>	<i>Tested in L2-Russian</i>	<i>Tested in L3-English</i>
N = 36	N = 12	N = 9	N = 15
<i>C-test score</i> (proficiency in the language of testing)	99% range 98%–100%	49% range 34%–64%	67% range 42%–90%
<i>Age</i> (at the time of testing)	41 range 34–57	37 range 32–44	47 range 33–76
<i>Daily use of Armenian</i>	67% of time, range 50%–90%	74% of time, range 50%–90%	30% of time, range 25%–50%



Results

Condition	L1 Armenian	L2 Russian	L3 English
Matrix verb (perception)	HA of RC (71%) PercVerb, $p < .05$	HA of RC (71%) no effect PercVerb	HA of RC (47%) PercVerb (53/40), $p < .05$
Matrix verb (perception)	faster RT mid-sentence PercVerb, $p < .05$	slower RT mid-sentence	slower RT mid-sentence
Matrix verb (perception)	slow RespTime in LA bias, $p < .05$	no effect on RespTime	no effect on RespTime
Social bias	within the range of HA, $p < .05$	within the range of HA, $p < .05$	within the range of LA, $p < .05$
Social bias	slower RT mid-sentence in LA bias, $p < .05$	slower RT mid-sentence in LA bias, $p < .05$	slower RT mid-sentence in LA bias, $p < .05$
Social bias	slow RespTime with PercVerb, $p < .05$	no effect on RespTime	no effect on RespTime



Conclusion

Multilingual parser is sensitive to individual grammars

- Perception verb favors HA of the RC in L1, L2 and L3
- The eventive complement is the first parsing hypothesis in L1, L2 and L3
- Perception verb influences sentence processing differently in Armenian, Russian and English

Processing in L1, L2 or L3 is governed similar psycholinguistic mechanisms

- Non-syntactic information is considered in the course of sentence processing in L1, L2 and L3
- Non-syntactic information does **not** override the effect of syntactic information on RC resolution in either L1, L2 and L3

