

## Bilingual processing of complex structures: evidence from heritage Greek

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The present study examines the online processing of subject and object relative clauses (RCs) in monolingually raised and bilingual Greek/German children and adults with Greek as heritage language. Although in recent years there is an increased interest in heritage speakers' online parsing, most studies focus on lexical processing while studies on morphosyntactic processing are up to date quite limited (e.g. Keating et al., 2016; Gračanin-Yuksek et al., 2020). The investigation of heritage speakers' morphosyntactic parsing can shed light on the question of whether or not heritage speakers employ the same parsing strategies as monolingually raised speakers, or employ L2 learners' processing strategies such as shallow processing (Felser & Roberts, 2007; Marinis et al., 2005).

We conducted a self-paced listening task in Greek in which we manipulated the type of relative clause (subject vs. object), and the RC internal word order (canonical vs. scrambled). The relative clauses were introduced with the complementizer *pu* ('that'). In total there were four conditions:

- 1a. O majiras-NOM *pu* **esprokse** ton servitoro-ACC ekapse to fajito (Subject RC, canonical)
- 1b. O majiras-NOM *pu* ton servitoro-ACC **esprokse** ekapse to fajito (Subject RC, scrambled)

"The cook that pushed the waiter burned the food"

- 1c. O majiras-NOM *pu* o servitoros-NOM **esprokse** ekapse to fajito (Object RC, canonical)
- 1d. O majiras-NOM *pu* **esprokse** o servitoros-NOM ekapse to fajito (Object RC, scrambled)

"The cook that the waiter pushed burned the food"

Sentences were presented in a segment-by-segment fashion, and in the end of each sentence participants judged the grammaticality of the sentence by pressing one of two buttons. We have up to now recorded online listening times and grammaticality judgments from 40 11- to 13-year-old children (22 monolinguals, 18 heritage), and 107 adults (100 monolinguals, 7 heritage (data collection in process)).

The statistical analysis of the listening times showed faster listening times for subject RCs than for object RCs on the RC verb segment for monolingual adults, no significant RC effect for monolingual children, and, interestingly, faster times for object RCs for heritage Greek children and adults (marginal significance for adults due to lack of power). Both monolingual and heritage children's listening times correlate with age. The younger the children the "shallower" they seem to process the relative clauses, a fact possibly linked to evidence that RCs are not fully mastered until adolescence MacWhinney and Pléh (1988). At around age 12, however, children pattern with adults, thus showing evidence for continuity of processing (Clahsen & Felser, 2006). Importantly, the significant object RC effect in both groups of heritage speakers stems from heritage adult and children's processing nominative preverbal NPs faster than accusative ones (1c vs. 1b), a pattern that contrasts with monolingually raised speakers, and may constitute evidence of crosslinguistic transfer from German.

### References

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