

# Does Bilingualism Influence Clause Type Usage in English Narratives Across Registers?

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## INTRODUCTION

### Background

Heritage speaker (HS) bilinguals may have difficulties in their majority language (ML) when starting formal education.<sup>1,2</sup> Do the difficulties remain in adolescence? If so, do they affect supra-clausal phenomena and discourse organization in various registers (combination of situational parameters of communication<sup>3</sup>)?

Previous research on supra-clausal phenomena and discourse organization in Spanish HSs:

- ❖ HSs have register awareness in heritage language (HL): in academic essays, they make similar use of clause types in their heritage Spanish and maj-English – but only one register, no comparison with Spanish or English monolingual speakers (MSs)<sup>4</sup>
- ❖ HSs produce narratives of similar complexity in their HL compared to Spanish monolinguals: both groups use a similar number of subord. clauses (SCs) – but only one register, no analysis of ML<sup>5</sup>

**Gap** Little research on clause types in various registers, especially in HSs' ML, and in adolescent HSs of languages other than Spanish

### Research Questions

- RQ1.** Do adolescent HSs of German make similar use of clause types in their maj-English compared to English MSs?
- RQ2.** Do registers play a role for both HSs and English MSs?

### Hypotheses and Predictions

**H1:** HSs will be similar to MSs in English since English is usually HSs' dominant language in adolescence

**P1:** Similar clause type distributions in HSs and MSs

**H2:** Registers influence clause type use in both HSs and MSs

**P2:** More SCs in formal registers since SCs are associated with higher textual complexity<sup>6,7</sup>

## METHOD

### Participants

- ❖ 20 German HSs in USA (mean age = 15.9, SD = 1.3; 10 fem.)
- ❖ 20 English MSs in USA (mean age = 16.1, SD = 1.4; 12 fem.)

### Procedure

Language Situations method<sup>8</sup>:

- ❖ Participants watch a video of a car accident and recount it
- ❖ Counterbalanced 2x2 design: setting (formal/informal) x mode (spoken/written), resulting in four registers
- ❖ Four narratives in four registers from each participant: formal spoken (oral police report), formal written (written police report, on laptop), informal spoken (voicemail to friend), informal written (text to friend, on mobile phone)

### Data Preparation

Data transcribed and annotated in Praat<sup>9</sup> and EXMARALDA<sup>10</sup>

Data separated into clauses based on finite verbs

Each clause coded as independent main clause (IMC), coordinate main clause (CMC) or subordinate clause (SC)

### Examples of clause types

- ❖ *[I just saw this car crash into another one].* (English MS, informal written) → 1 IMC
- ❖ *[It was kinda crazy] [but thankfully no one was hurt].* (German HS, informal spoken) → 1 IMC, 1 CMC
- ❖ *[I witnessed the crash] [as I was walking along the side of a street].* (German HS, formal written) → 1 IMC, 1 SC

**Video link** <https://osf.io/szfh/>

## ANALYSES & RESULTS

### Binomial GLMMs

- ❖ Three models:
  - IMC vs. non-IMC,
  - CMC vs. non-CMC,
  - SC vs. non-SC
- ❖ Maximally specified<sup>11</sup>
- ❖ DV – clause type (e.g. *IMC/non-IMC*)
- ❖ Fixed effects (sum contrast):
  - bilingualism (*bi/monoling*),
  - setting (*formal/informal*),
  - mode (*spoken/written*),
  - their interactions
- ❖ Random effects:
  - random intercept for speaker,
  - random slopes for setting and mode

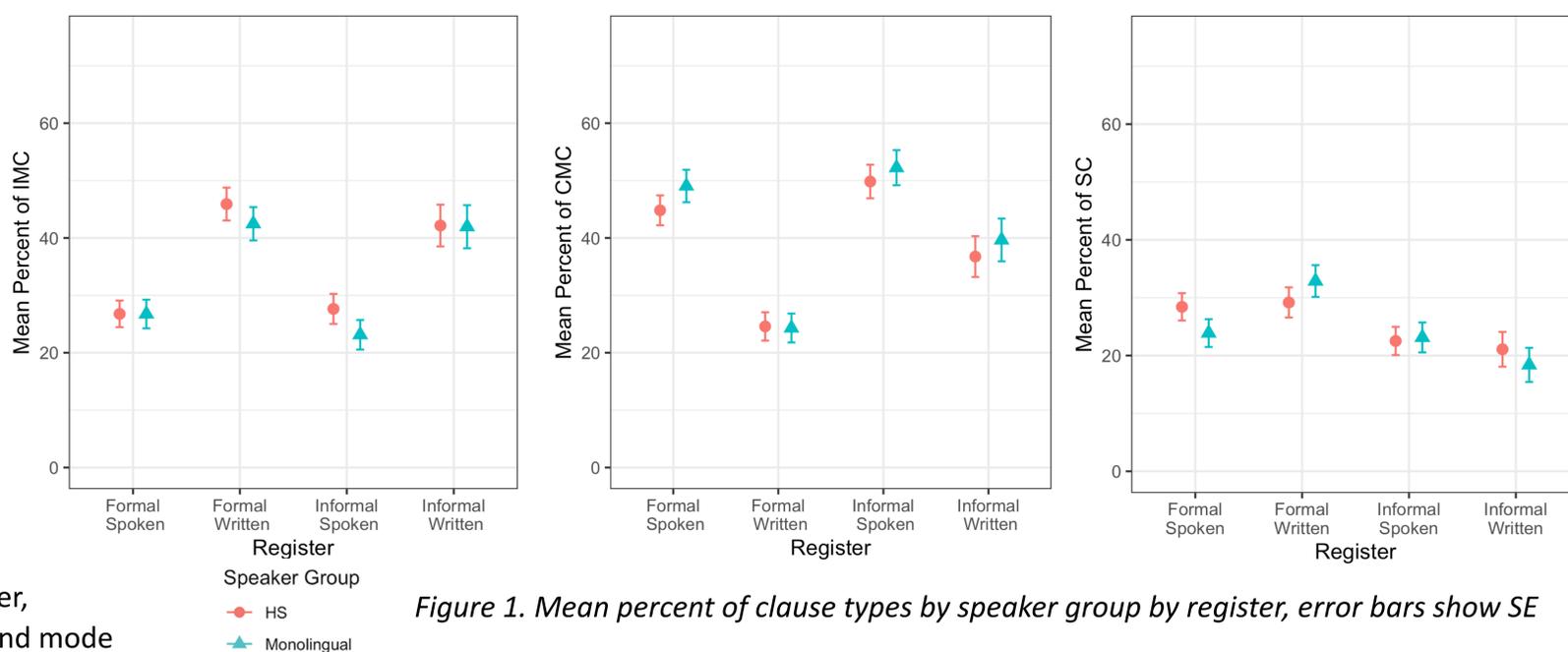


Figure 1. Mean percent of clause types by speaker group by register, error bars show SE

### RQ1

No main effect of bilingualism in any clause type →

**P1 confirmed**

**H1 confirmed:** German HSs make similar use of clause types in their maj-English compared to English MSs, so HS bilingualism did not influence clause type usage in English narratives across registers

### RQ2

Main effect of setting in SCs ( $p < .001$ ): formal > informal →

**P2 confirmed**

Main effect of mode in IMCs ( $p < .001$ ; spoken < written) and in CMCs ( $p < .001$ ; spoken > written)

**H2 confirmed:** Registers influence the usage of clause types in both HSs and MSs, with setting playing an important role for SCs, and mode - for IMCs and CMCs.

## SUMMARY & CONCLUSIONS

- ❖ Adolescent German HSs make the same use of clause types in maj-English as English MSs in various registers
  - No difficulties in ML with respect to clause-type choice
  - Same strategies of discourse organization considering the clause types in four registers examined → similar understanding of register norms
  - In this study, HS bilingualism did not influence syntactic strategies of discourse organization in ML – what about other HSs & types of bilinguals?
- ❖ Registers influence clause-type use
  - More SCs in formal registers – SCs possibly relate to higher textual complexity
  - Coord. conjunctions serve to increase coherence in spoken discourse?
  - Clause type distributions might be a part of register norms

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