Development of L2 syntax: Evidence from elicited written production of *wh*-questions in Italian-English late bilinguals

Jessie QUINN[1], Michaela VANN[1], Giulia BENCINI[1], Virginia VALIAN[2,3]

[1]Ca' Foscari University of Venice, Italy
email: jessiee913@gmail.com
[2]Hunter College [3]City University of New York Graduate Center

The present study investigates the development of late bilinguals' syntactic representations through elicited written production of English main and embedded *wh*-questions as a function of English language proficiency. While main clause *wh*-questions require subject-auxiliary inversion, embedded clause *wh*-questions do not permit such inversion and speakers must apply "cancel inversion" in embedded structures. Previous research has found that both English-speaking children and L2 speakers produce correct, inverted main questions and incorrect, inverted embedded structures such as, "I wonder where is he going," possibly showing an overgeneralization of the subject-auxiliary inversion rule from main to embedded clauses (Pozzan & Quirk, 2014; Pozzan & Valian, 2017). In two elicited written production tasks, 96 L1 Italian native speakers with intermediate/advanced levels of English were asked to produce main (Experiment 1) and embedded (Experiment 2) *wh*-questions with different *wh*-elements: the adjuncts *where* and *why* and the arguments *what, who,* and the less frequently studied *whose*. English language proficiency was measured by combining both a subjective, self-rated measure with an objective test score. To elicit main questions in Experiment 1, participants were introduced to a character (Phil), a shy student who needed help asking his teacher (Ms. Smith) questions. In Experiment 2, to elicit embedded questions Phil was now asking Ms. Smith questions and another student (Bridget) was curious as to what Phil was asking. In order to elicit an embedded question, participants were instructed to begin each trial with "Phil wants to know." See Figures 1 and 2 for a sample trial from each experiment.

The data were analyzed in terms of rates of correct inversion (Experiment 1) and correct noninversion (Experiment 2). The relationship between English language proficiency and correct responses was found to be different in Experiments 1 and 2: whereas bilinguals produced more correct, inverted responses in Experiment 1 as their proficiency increased, the pattern was the opposite in Experiment 2 (see Figure 3). We discuss our findings with respect to current models of bilingual syntactic representations. The shared syntax model of bilingual syntax predicts that bilinguals share structural representations across their languages provided these structures are similar enough (Hartsuiker & Bernolet, 2017). Per this account, as L2 proficiency increases, speakers' syntactic representations become more abstract. With respect to the acquisition of interrogatives, the development of an abstract representation for inversion in main clauses may cause overgeneralization of inverted structures (possibly via a syntactic priming mechanism) from main to embedded contexts. At what point in development late bilinguals retreat from overgeneralization of inversion in embedded contexts remains to be investigated.
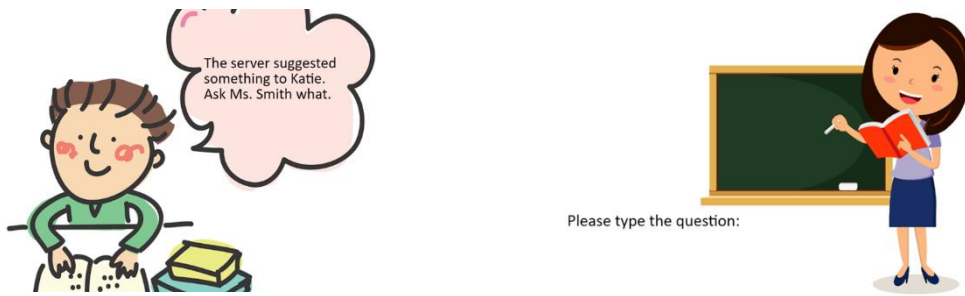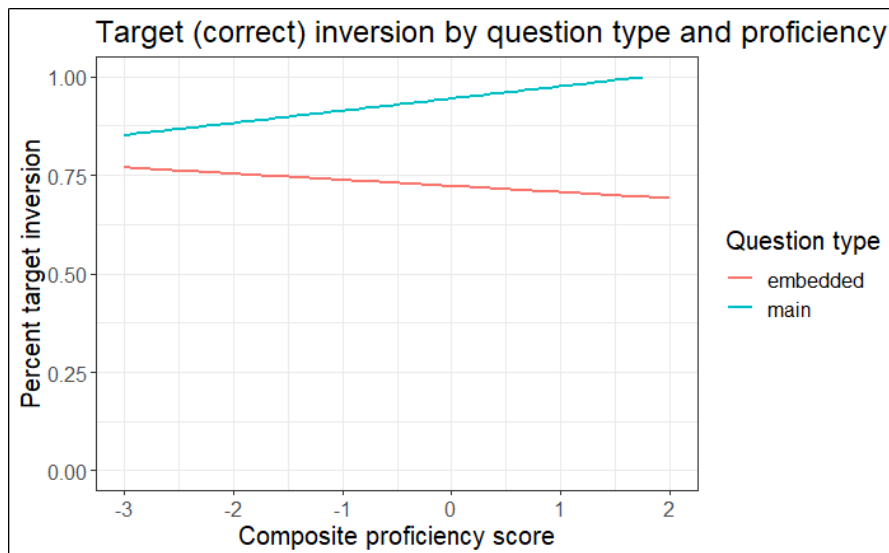
Figure 1 Experiment 1 example trial

Figure 2 Experiment 2 example trial

Figure 3 Rates of correct inversion in main questions and correct 'cancel inversion' in embedded questions as a function of English proficiency.

References

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