

A bidirectional study on complex *wh*-movement in heritage speakers and L2 learners: Transfer versus derivational complexity

In a comparative study of heritage L1 and late L2 acquisition, we investigate the production and comprehension of filler-gap dependencies in Plautdietsch (Mennonite Low German) and English by Plautdietsch-English bilinguals. Previous research shows that complex (i.e. cross-clausal) *wh*-dependencies pose more difficulty to child L1 and adult L2 learners than monoclausal dependencies (Jakubowicz and Strik 2008, Schulz 2011, Slavkov 2014). To avoid complex dependencies, learners often license medial constructions where the *wh*-item surfaces once at the left periphery of the embedded CP and a second time at the left periphery of the matrix clause, as illustrated by (1) and (2).

- (1) What do you think where she put the book? (medial scope-marking)
(2) Where do you think where she put the book? (copy)

Medial-*wh* is ungrammatical in English, though possible in (Low) German. In this paper, we investigate whether medial-*wh* in heritage and L2 speakers is due to cross-linguistic transfer or grammar-internal complexity reduction according to the Derivational Complexity Hypothesis (DCH; Jakubowicz, 2005). Our study presents a comparison of fluent L1 speakers of Plautdietsch, a Germanic variety spoken by Mennonites around the world. We compare two groups within the same population, i.e. six speakers with Plautdietsch as L1 who learnt English late, and six speakers who have Plautdietsch as a heritage language and acquired English early. All speakers performed a production task in form of an interactive game between the researcher and the participant. We thereby elicited a combined total of 833 long-distance, embedded, and matrix questions in Plautdietsch and English. Subsequently, all participants completed a computerized acceptability judgment task on 144 questions in both languages.

In production and comprehension, all speakers clearly differentiated between languages in matrix and embedded questions. For long-distance *wh*-questions, we found an interaction of group and language: In English, only late learners produced medial constructions in the L2; in Plautdietsch, only heritage speakers produced medial-*wh* in their L1. This pattern cannot be due to transfer since speakers/groups produced medial-*wh* in only one of their languages. Instead, medial-*wh* surfaces as a mechanism to reduce syntactic complexity in the less dominant language, irrespective of whether it is the L1 or the L2 or whether it was acquired early or late. These group differences partially extend to comprehension. We argue that the DCH can account for grammatical restructuring in both heritage L1 speakers and late L2 speakers and discuss its potential as a metric of incomplete acquisition and attrition in bilingual syntax.

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