Cross-Linguistic Influence in the Acquisition of Definiteness: Evidence from L2-Hebrew in the Context of Different L1s (English and Russian)

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Abstract

Previous studies show cross-linguistic effects, i.e., effects of L1 properties, for the acquisition of articles in L2-Enlgish (see Ionin et al., 2022; Zdorenko & Paradis, 2008, 2012). The present study investigates the impact of L1 properties on the acquisition of definiteness marking in L2- Hebrew of bilingual children with L1-Enlgish and L1-Russian as compared to Hebrew- speaking monolingual child and adult control.

The three languages (Hebrew, Russian, and English) vary with respect to definiteness marking. Hebrew marks only definite nouns using the article *ha-*, whereas indefinite noun phrases are unmarked (Danon, 2001). English has indefinite articles for count nouns *a/an*, and the definite article *the* marks count, mass and plural nouns (e.g., Schaeffer & Matthewson, 2005). Russian has no articles in its grammatical system (e.g., Nichols, 1988). Previous studies on definiteness marking in Hebrew show that monolingual children exhibit adult-like production by age 3;0 (Uziel-Karl, 2015; Zur, 1983).

Using the "Baby bird" narrative in Hebrew of the Multilingual Assessment Instrument for Narratives (MAIN) (Gagarina et al., 2012), four groups participated in the study: (1) Monolingual Hebrew-speaking adults (N=20), (2) Monolingual Hebrew-speaking children (N=20, ages 5-8), (3) English-Hebrew-speaking bilinguals (N=20, ages 5-10), and (4) Russian- Hebrew-speaking children (N=27, ages 5-8). Narratives were transcribed using the CHILDES project (MacWhinney & Snow, 1990). Coding scheme included Definiteness (+/-), Type of definiteness (Anaphoric, Bridging, or context), and its correctness (1/0) (see Table 1).

Using mixed-effect modeling with Participant as a random effect, the results revealed that monolingual children displayed adult-like patterns (see Fig 1-3), while both bilingual groups showed lower accuracy than adult controls. Pairwise comparisons indicated that L1- English bilinguals were comparable to monolingual Hebrew-speaking children, but L1-Russian bilinguals lagged behind. A detailed analysis of error patterns showed that Russian-Hebrew bilinguals had a higher likelihood of omitting the definite article compared to their monolingual Hebrew and English-Hebrew counterparts.

The study provides evidence for the effects of cross-linguistic influence in L2 article acquisition, showing that L2-Hebrew definiteness acquisition is shaped by L1 properties, in line with previous studies for L2-English acquisition (e.g., Ionin et al., 2022; Zdorenko & Paradis, 2008, 2012).

(Word count: 343)

References

Danon, G. (2001). Syntactic definiteness in the grammar of Modern Hebrew. Linguistics, 39(6), 1071-1116 .| Gagarina, N., Klop, D., Kunnari, S., Tantele, K., Välimaa, T., Balčiūnienė, I., Bohnacker, U., & Walters, J. (2012). MAIN: Multilingual Assessment Instrument for Narratives. ZAS Papers in Linguistics, 56, 1–140. https://doi.org/10.21248/zaspil.56.2019.414 | Ionin, T., Choi, S. H., & Liu, Q. (2022). What transfers (or doesn't) in the second language acquisition of English articles by learners from article-less native languages?. *Linguistic Approaches to Bilingualism*, *12*(2), 133-162. Nichols, J. (1988). Russian prose. *Clause combining in grammar and discourse*, *18*, 399. | Schaeffer, J., & Matthewson, L. (2005). Grammar and pragmatics in the acquisition of article systems. *Natural Language & Linguistic Theory*, *23*(1), 53-101. | Uziel-Karl, S. (2015). The development of differential object marking in child Hebrew. *Revue Roumaine Linguistique*, *4*, 339-350. http://dspace.bcu-iasi.ro/handle/123456789/15866 | Zur, B. (1983). *On the acquisition of definiteness by Hebrew-speaking children* [Master's thesis]. Tel Aviv University. (Hebrew). | Zdorenko, T., & Paradis, J. (2008). The acquisition of articles in child second language English: fluctuation, transfer or both?. *Second language research*, *24*(2), 227-250. https://doi.org/10.1177/0267658307086302 | Zdorenko, T., & Paradis, J. (2012). Articles in child L2 English: When L1 and L2 acquisition meet at the interface. *First language*, *32*(1-2), 38-62. https://doi.org/10.1177/0142723710396797
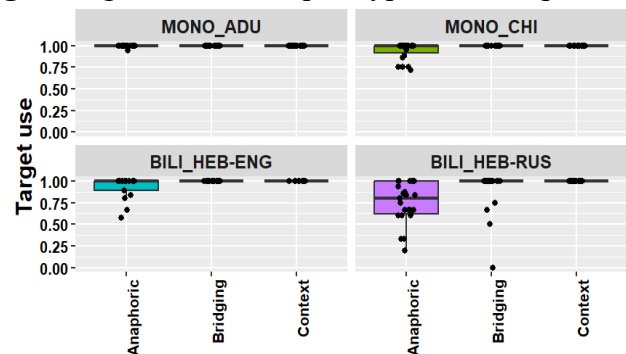
Table 1. Example of coding scheme

	Def.	Type	Correct use	Context
cipor 'a bird'	-		1	*Pa'am cipor halxa letayel.* 'Once upon a time a bird went for a walk.'
et ha-cipor ACC-DEF-bird	+	ANA	1	*Hu tafas et ha-cipor* He caught **ACC DEF**-bird
et ha-zanav ACC DEF-tail	+	BRID	1	*Hu mashax et ha-zanav shel ha-xatul* 'He pulled **ACC DEF** -tail of the cat.'
al ha-ec on DEF-tree	+	CONTEXT	1	*Hu tipes al ha-ec* He climbed on **DEF** -tree

Fig 1. Target (in)definite use per Group
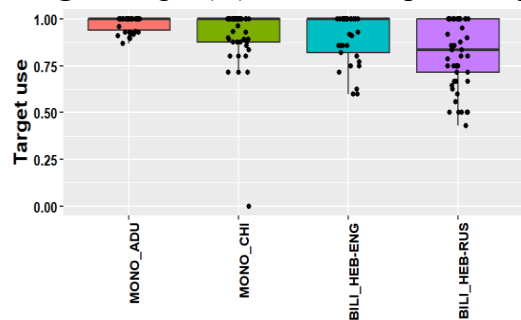
Fig 2. Target definite use per Type and Group

Fig 3. Non-target use per Group