

Gradience in bilingual grammars: Evidence from processing of optional verb number marking in Turkish-German Heritage Bilingual Speakers

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Processing structures relevant to syntax-semantics interface and pragmatics-syntax interface have been shown to be more demanding than narrow syntax in various bilingual groups: early L2 acquirers, L1 attriters, near-native speakers and heritage bilingual speakers. Recent research suggested syntax-pragmatics interface to be more problematic than syntax-semantics interface for bilingual speakers [1, 2]. However most studies investigated former (focusing almost always on the same structure, i.e., null-subject-phenomenon) and only a few studied the latter, and there is controversial evidence that show bilingual difficulties at syntax-semantics interface [3, 4].

I investigate optional verb number agreement phenomenon in Turkish, which is relevant to both semantics-morpho-syntax interface and pragmatics-morpho-syntax interfaces: the animacy (a semantic property) and givenness level (a pragmatic property) of the plural subjects of the sentences determine the likelihood of occurrence of overt verb number marking. For instance, in the first sentence below, the animate human plural subject ‘children’ (çocuklar) is free to take a singular or a plural verb, whereas, in the second sentence, the inanimate plural subject ‘letters’ (mektuplar) can only take a singular verb and use of a plural verb would lead to ungrammaticality.

1. Çocuk-lar gel-iyor-Ø/-lar.
 Child-PL come-PROG.PRS-3SG/-3PL
2. Mektup-lar gel-iyor-Ø/*-lar.
 Mektup-PL come-PROG.PRS-3SG/-3PL*

When human plural subjects are given discourse entities, for instance they reoccur in discourse, they are modified by a relative clauses or the entities they denote is known both to the speaker and the hearer the likelihood for the occurrence of the overt verb number marking (i.e., plural verb) increases.

I investigate the influence of each of the factors separately; i) animacy (semantics) ii) givenness (pragmatics) effects on use of overt verb number marking. Thus, I provide a direct comparison of the two interface types, namely semantics-(morpho)syntax and pragmatics-(morpho)syntax by measuring the perceived-well-formedness of un/grammatical structures using Magnitude Estimation technique in heritage speakers of Turkish whose dominant language is German (n= 26) and comparing them to age and education matched monolingual Turkish speakers (n=24). I asked whether bilingual speakers tend to overrate the use of overt verb number marking under the influence of their dominant language, which requires obligatory use of overt verb number regardless of any semantic or pragmatic factors.

The results do not indicate cross-linguistic influence effects, bilingual data rather reveals sensitivity to semantic and pragmatic properties: results of both experiments consistently show that unlike the monolinguals, the bilingual speakers make finer distinctions of conceptual properties i.e., animacy categories as well as givenness levels of the plural subjects in the sentences with plural and singular verbs. Typological analysis based on crosslinguistic observations on ‘animacy-number’ interaction as well as ‘givenness-occurrence of overt morphological marking on the verb’ prove the finer distinctions in bilingual data to be in line with cross-linguistic tendencies and implicational hierarchies based on typological

investigations. These results are in line with previous findings, which presents semantically-pragmatically constrained bilingual data and suggest the patterns in bilingual grammars' to be in line with the language universals [5, 6, 7]. Moreover, an emerging pattern in the data suggests the non-native-like patterns in grammar of bilingual speakers to be especially on the gradient areas (yielding optionality) within the interface domains and not on categorical areas (that require obligatory use of the default, i.e., zero marking). I take these findings to suggest that the source of differences in the bilingual pattern is not the interface phenomenon per se but the gradience which is inherent to the semantic and pragmatic properties that control the use of (morpho)syntactic structures. I evaluate these results based on theoretical assumptions and recent approaches on representation and processing of syntax-interface in the bilingual mind [8].

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