

ENGLISH INFLUENCE ON RUSSIAN EMBEDDED YES-NO QUESTIONS IN BILINGUAL CHILDREN'S PRODUCTION: A CASE STUDY

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1. Introduction

In this study, I explore cross-linguistic influence in the L1 of early child L2 learners whose L2 acquisition started at the cutoff age for simultaneous bilingualism – 3-4 years (according to Meisel 2007, Montrul 2008), and whose languages have unequal status. At this age, the core syntactic knowledge of the L1 is already in place, but development continues, as the child acquires more complex syntax. Studies of adult heritage speakers with such language acquisition history suggest that when L1 is the heritage language, and L2 is the majority language of the society, reduced exposure to L1 often results in what is usually termed incomplete acquisition – failure to reach ultimate attainment in L1 (e.g. Montrul 2008). This paper deals with L2 influence on L1 development during early school age – the first few years of being bilingual, when sequential bilinguals are in the process of acquisition of both languages.

To look for the signs of L2 influence on L1, I examined spontaneous speech production at the ages 5;0-7;9 of one Russian-English sequential bilingual child who started acquiring Russian (the heritage language) from birth, and English (the majority language), at the age of 3;9. The child is fluent in both languages, and rarely makes errors. However, one error stood out in this child's speech: overextending the conditional complementizer and the structure of a conditional clause to embedded yes-no questions in Russian, presumably under the influence of the English complementizer *if* that occurs in both types of clauses. Hence, I concentrate on embedded yes-no questions in the L1 – Russian: what factors make this property vulnerable to the influence of English?

The structure of this article is as follows. In section 2, I discuss factors in cross-linguistic influence. In Section 3, I provide the background on embedded yes-no questions in Russian. In Section 4, monolingual acquisition of Russian embedded yes-no questions is examined. Section 5 contains the method and the results of the longitudinal study. Section 6 contains discussion and conclusion.

2. Cross-Linguistic Influence in Bilingual Children

What causes cross-linguistic influence? Where should we expect it? One of the most influential hypotheses has been proposed by Hulk and Müller (2000). According to them, two conditions should be met for influence of Language A

on Language B: 1) the C-domain, the locus of the syntax-pragmatics interface, is involved; 2) there is a structural overlap: language B has a construction which may seem to allow more than one analysis, and language A contains evidence for one analysis. However, Hulk and Müller admit that these are necessary but not the only conditions, and it is unclear what the additional conditions are. On the other hand, transfer without interface issues and/or overlap has been attested (Foroodi-Nejad and Paradis 2009, Chan 2010, Nicoladis 2002, 2003; Pérez-Leroux, Cuza and Thomas 2011; Strik and Pérez-Leroux 2011).

The interface between syntax and semantics has also been argued to be vulnerable to cross-linguistic influence. Serratrice, Sorace, Filiaci and Baldo (2009) found overacceptance of ungrammatical bare nouns in generic context in Italian of English-Italian 6-10 year old bilinguals.

According to Derivational Complexity Hypothesis, influence is caused by the difference in derivational complexity between the two languages for a given structure. Less syntactically complex structures - those that require fewer steps in derivation (Jakubowicz and Strik 2008) - are more likely to be transferred to the other language of a bilingual (Strik and Perez-Leroux, 2011). An example is *wh-in-situ*, as opposed to *wh-movement*, transferred from French to Dutch in bilingual children studied by Strik and Perez-Leroux (2011).

The role of external factors such as dominance is not clear. While there are suggestions that transfer occurs from the dominant language to the non-dominant one (Yip and Matthews 2000), this is not always the case. There is evidence for dominance playing no role (e.g. Nicoladis 2002). Kupisch (2007) argues that language-internal factors alone or dominance alone do not explain presence or absence of cross-language influence; rather, both play a role.

This applies to simultaneous bilinguals, but what about sequential bilinguals in a heritage language situation? While they acquired most of the heritage language knowledge as monolinguals, there are morphosyntactic properties that are acquired late. In Russian, in particular, Gvozdev (1949) reported some errors made at the age of 9. Grebenyova (2011) demonstrated that Russian monolingual 3-6 year olds produced non-adultlike multiple *wh*-questions, fronting only one *wh*-word and leaving the other(s) *in situ*, though adults fronted all *wh*-words. Acquisition of such L1 structures by a child sequential bilingual goes on when the child is no longer monolingual. Complex syntax, especially the structures that involve higher projections that are acquired late, is vulnerable in heritage language (Benmamoun, Montrul and Polinsky 2010). On the other hand, even structures acquired before L2 exposure may be influenced by extensive use of the L2 in children, and morphosyntactic attrition may occur (Kaufman and Aronoff 1991, Turian and Altenberg 1991).

In sum, the language-internal factors include location at an interface, structural overlap, and derivational complexity. The external factors include dominance, age of exposure to L2, and age of acquisition of a given variable.

3. Properties of Embedded Yes-No Questions

There are three options for forming embedded yes-no questions in Russian. The first, and most preferred, option, shown in (1), involves focus-driven movement and the complementizer *li* that has an unusual for Russian complementizers property of being a clitic. *li* is merged in a position in the C-domain; Schwabe (2004) argues that it is the head of the ForceP (assuming Rizzi's (1997) Split-CP Hypothesis), where clause-typing features are located, because *li* bears the feature [Q]. According to Schwabe (2004), *li* cliticizes on the nearest phonological word below it. The focused constituent moves to the FocP, which is lower than ForceP, and *li* cliticizes on that constituent. If there is no focused constituent, *li* cliticizes on the verb, which adjoins to C to be the clitic host (King 1995, Junghanns 1995) or, according to Schwabe (2004), stays in T (Schwabe assumes that the rest of the constituents stays in AgrSP so the verb is the closest word to ForceP). In (1a), *li* cliticizes on the verb; in (1b), on the focused constituent *utrom* 'in the morning'.

- (1) a. Spros-i Liz-u, prid^l-ot li ona utr-om.
 Ask-imp¹ Lisa-acc come.perf-3sg LI she morning-instr
 'Ask Lisa if she will come in the morning.' OR
 'Ask Lisa if she WILL COME in the morning.'
- b. Spros-i Liz-u, utr-om li ona prid^l-ot.
 Ask-imp Lisa-acc morning-instr LI she come.perf-3sg
 'Ask Lisa if she will come IN THE MORNING'

The second option is adding *ili net* 'or not', as in (2). The third option, shown in (3), does not involve adding a (overt) complementizer or any other (overt) material. Unlike in other types of embedded yes-no questions, this one has rising intonation typical of non-embedded questions, suggesting that it is different from true embedded questions. However, it is not equal to direct speech, since the third person pronoun is used in (3) instead of the second person pronoun expected in direct speech, as in *Ask Lisa*, "Will you come?". Use of this option is limited to informal speech.

- (2) Spros-i Liz-u, ona prid^l-ot ili net.
 Ask-imp Lisa-acc she come.perf-3sg or not
 'Ask Lisa if she will come or not.'

¹Abbreviations: acc – accusative, gen – genitive, dat – dative, imp – imperative, inf – infinitive, instr – instrumental, neg – negation, , neut – neuter gender, nom - nominative, perf – perfective, pl – plural, pst – past, refl – reflexive, sg – singular.

- (3) Spros-i Liz-u, ona prid^ǰ-ot?
 Ask-imp Lisa-acc she come.perf-3sg
 'Ask Lisa if she will come.'

The same three options are used for non-embedded yes-no questions as well, but with different distribution. The no-complementizer option is the most common and neutral, while *li* and *ili net* are less frequent.

In English, embedded yes-no questions usually contain the complementizer *if* that also occurs in conditional clauses. Another complementizer, *whether*, is restricted to embedded yes-no questions; however, it is less common (presumably, even less in the input received by children).

- (4) a. *Conditional*
 I will hug Lisa if she comes.
- b. *Embedded yes-no question*
 Ask Lisa if/whether she will come.

In Russian, the conditional complementizer *jesli* is used only in conditional clauses, as in (5), and never in embedded yes-no questions. It is a regular complementizer, not a clitic. Unlike in English, future conditional clauses do not differ in tense marking from non-embedded future clauses.

- (5) Ja obnim-u Liz-u, jesli ona prid^ǰ-ot.
 I hug-3sg Lisa-acc if she come.perf-3sg
 'I will hug Lisa if she comes.'

Russian embedded yes-no questions have several properties that can make them vulnerable to influence from English. One of them is involvement of the syntax-pragmatics interface: what *li* cliticizes on is determined by focus consideration, and focus is a discourse property.

An overlap between Russian and English is present but it is different from that required in Hulk and Müller's hypothesis. There is no overlap in embedded yes-no questions per se: none of the three Russian options overlaps with its English counterpart. However, there is an overlap in conditionals, and the same complementizer *if* in English is used in the two types of clauses.

Derivational complexity differs across the three types of Russian embedded yes-no questions. The *li* option has the highest derivational complexity; it is also higher than in English embedded yes-no questions because of focus movement and *li* cliticization. The no-complementizer option is the simplest, and is even less complex than the English counterpart, since there is no need for an overt complementizer. The *ili net* option is between the other two Russian options in terms of complexity: adding an extra clause (*ili net*) is

supposed to be simpler than adding an extra element into an existing clause. The derivational complexity account predicts a preference for the no-complementizer option and no influence of English; rather, the no-complementizer option could be transferred from Russian to English. English influence can be expected only if stylistic properties of the no-complementizer option and seeing the *ili net* option as not completely synonymous to the others can cause children to avoid these options.

4. Monolingual Acquisition of Embedded Yes-No Questions

There are no studies on monolingual acquisition of embedded yes-no questions in Russian. Even Gvozdev's (1949) extensive diary study of his son's acquisition of Russian from age 1 to 9 does not contain any mention of them. Non-embedded yes-no questions, according to Gvozdev, appear at 1;11.

In any case, embedded questions are not expected to be among the earliest acquired variables. Sentences containing embedded questions are by definition multiclausal. Therefore, they are produced only by children with high MLU, who already acquired all pre-requisites to complex sentences production.

In order to obtain a monolingual baseline for comparison of spontaneous production, I searched for embedded yes-no questions in two monolingual Russian corpora of child speech on CHILDES (MacWhinney 2000): Protassova corpus, up to 2;10.14, and Tanja corpus, up to 2;11 (Bar-Shalom and Snyder 1997). No occurrences were found in Tanja, and one occurrence (with *li*) was found in Protassova at age 2;10.14, with an incorrect word order.

- (6) Ja u nego nibas + On <papa> xoch-et li chayk-u?"
 I at him ??? he <daddy> want-3sg LI tea-gen.sg. (2;10.14)
 'I ??? him if he wants tea'
Target: Xochet li on chayku?

Therefore, embedded yes-no questions can be produced before age 3, but they are not fully acquired at that age. They are extremely rare, at least at the ages of recording for these two corpora.

The complementizer *jesli* in conditional clauses is acquired at 2;8-2;10 in monolingual Russian, according to Gvozdev (1949), though no occurrences in the two CHILDES corpora were found.

It is difficult to say much about monolingual acquisition of Russian embedded yes-no questions because the data is so scarce. At this point, it is not clear when and how they are acquired in monolingual Russian children. However, since Grebenyova (2011) found that monolingual Russian children as old as 6 have difficulties with another construction that requires focus

movement – multiple wh-fronting in Russian², it is reasonable to expect difficulties in yes-no embedded questions as well.

5. A Longitudinal Study of a Russian-English Bilingual Child

5.1 Procedure

Audio-recordings of spontaneous conversations in Russian between the participant and her family members between the ages 5;0 and 7;9 were analyzed. I chose the starting age to be sure that the child was already bilingual – after spending a year in an English-speaking kindergarten³. The audio-recordings were complemented by diary notes. The use of the diary notes was necessitated by the low frequency of errors or unusual constructions in the child's speech. As I have access to the child on the regular basis, I could hear her producing embedded questions outside of recording sessions and write them down immediately after production. Relying solely on recordings would mean missing a significant amount of data.

For dominance assessment, the child produced narratives in both languages, based on the same picture book *Frog, Where Are You* (Mayer 1969), with one month interval (English at 7;7, Russian at 7;8), following the procedure in Berman and Slobin (1994). The measures for dominance included speech rate and lexical diversity as general indicators of proficiency. Speech rate and vocabulary size correlate with grammatical measures in adult heritage speakers (Polinsky and Kagan 2007); in children, vocabulary size also correlates with grammatical measures (Bates et al. 1994).

5.2 Participant

The participant is a female child growing up in a Russian-speaking family in Toronto, Canada. She was exposed to Russian and some English since birth, attended a bilingual Russian-English daycare since age 2;0, but spoke almost exclusively Russian until the start of regular exposure to English through school and day camps at age 3;9. She uses Russian at home, English at school and the afterschool program, and both languages with friends, in extracurricular activities, reading books and watching cartoons.

5.3 Results

The child made few morphosyntactic errors. Most of them existed alongside the majority of correct instances of the same linguistic variables. Some of these errors were self-corrected. Therefore, these are processing errors, not revealing

²It is argued to be focus-driven movement by Rudin (1988), Bošković (1998), and Stjepanović (1998), inter alia.

³In the province of Ontario, children start attending junior kindergarten at age 4.

any deficits in the underlying grammar, as argued by Meisel (2007). The exceptions were two types of persistent errors: embedded yes-no questions and case marking on DPs containing numerals (e.g. *tri belki* 'three squirrels'). DPs with numerals are also problematic for Russian monolingual children of the same age (Gvozdev 1949), and hence will be out of scope of this article.

Embedded yes-no questions were first recorded at 5;6, and were rare (18 occurrences between 5;6 and 7;9). Initially, their use was consistently non-target: for several months, the child overextended the conditional complementizer *jesli* to embedded yes-no questions, as in (7), and also used the structure typical for conditional clauses, without focus movement. In such cases, the embedded clauses in Russian can only be interpreted as conditional, but not as embedded yes-no questions. Sentences such as (7), with non-past main verbs, while they do not have the meaning attributed to them by the child, are not ungrammatical in Russian. Rather, they are infelicitous as conditionals without an appropriate context (such as *What are Masha's favourite toys? Let's ask [her about it]⁴ if she wants to play with us.*). However, when the main verb is in past tense, there is no context in which such sentences may be felicitous.

- (7) #Davaj sprosím, jesli Maša xočet s nami igratj
 Let's ask-1pl if Masha want-3sg with us play-inf
 *'Let's ask if Masha wants to play with us.' (5;6)
Can only mean
 If Masha wants to play with us, let's ask [something]'
Target:
 a) Davaj sprosím, xočet li Maša s nami igratj? OR
 b) Davaj sprosím, Maša xočet s nami igratj ili net? OR
 c) Davaj sprosím, Maša xočet s nami igratj?

Parental corrections and recasts with *li* were ignored for more than a year. Interestingly, the child did not use the simplest structure - the no-complementizer option, - at all during the whole period analyzed. No sentences with *ili net* were recorded either. At 6;7, she started using *li* with the correct structure, as in (8), on some occasions, continuing to use *jesli* on others.

- (8) Ja sproš-u, xoč-et li pap-a pirok-0.
 I ask.perf-1sg want-3sg LI daddy-nom pie-acc
 'I will ask if daddy wants some pie.' (6;7)

The child used both *jesli* and *li* (with correct structure) up to 7;8. This inconsistency is best illustrated by the examples in (9): she produced a correct sentence with *li* (9a), and seconds later started producing almost the same sentence with *jesli*, stopped mid-sentence and corrected it to *li* (9b).

⁴Russian allows ellipsis of previously mentioned constituents.

- (9) a. Davaj spros-im Sofi, mož-et li ona poj-ti v bassejn.
 Let's ask-1pl Sophie can-3sg LI she go-inf in pool
 'Let's ask Sophie if she can go to the swimming pool'
- b. Nu davaj spros-im, *jesli ... mož-et li Sofi.
 So, let's ask-1pl if can-3sg LI Sophie
 'Let's ask if Sophie can.' (7;7)

Sometimes the child even used both *jesli* and *li* in one sentence, as a blend of the two structures, like the one shown in (10), which is ungrammatical. In such cases, *jesli* occupied the complementizer position, but at the same time, movement and *li* cliticization occurred.

- (10) *Davaj spros-im, jesli bud-et li...
 Let's ask-1pl IF will-3sg LI
 'Let's ask if it will...'
Target: Davaj spros-im, budet li... (7;3)

Another common structure that the child used is a blend of *li* and *ili net* options, as in (11). It seems redundant, but is not considered ungrammatical by adult native speakers.

- (11) Ja ne zna-ju, sby-l-o-s^j li ono ili net.
 I neg know-1sg come.true-pst-neut-refl LI it or not
 'I don't know if it [a wish] came true or not.' (7;5)
Target:
 i) Ja ne znaju, sbylos^j li ono.
 ii) Ja ne znaju, sbylos^j ono ili net.

Starting from 7;8, the child did not produce **jesli* in embedded yes-no questions anymore; she produced the structures with *li*, *ili net*, or both.

Interestingly, parental speech directed to the child contained a few examples (12, 13) with conditional clauses embedded under a verb that can also embed a question (equivalents of *ask*, *tell*, *see*, *check*, etc.). Such clauses have a potential to be understood by the bilingual child as ambiguous between conditional clauses and embedded yes-no questions, and therefore reinforce the use of *jesli* and conditional clause structure for embedded yes-no questions.

- (12) Skaž-i mne, jesli tebe čto-nibud^j nužno
 Tell-imp me.dat if you.dat something necessary
 'Tell me if you need anything'
 a) 'If you need anything, tell me'
 b) **Tell me whether you need anything'*

- (13) Tolko smotr-i, jesli vilk-i mokr-yje, vytir-aj ix.
 just see/watch-imp if fork-pl wet-pl dry-imp them
 (a) 'Just watch - if the forks are wet, dry them.'
 (b) *'Just see if the forks are wet - dry them.'

Finally, in the narratives (Frog Stories), the child produced approximately the same number of words in each language: 196 in Russian, 194 in English. Lexical diversity was higher in Russian (98 types, TTR (Type-Token Ratio)=.5) than in English (78 types, TTR=.4). The speech rate in Russian was higher than in English (65.3 vs. 58.3 words per minute). The child also produced more clauses in Russian than in English (42 vs. 32). Clauses rather than sentences were counted as it was sometimes difficult to tell where one complex sentence ends and another begins, especially when they are coordinated with *and*. English clauses, on average, contained more words than Russian ones (6.1 vs. 4.7 words per clause), but one must keep in mind the differences between these two languages: in many cases, Russian uses a morpheme to express a grammatical contrast for which English uses a separate word, and determiners in Russian are not obligatory. Therefore, an English sentence often contains more words than its Russian equivalent. For example, an English sentence *The bees went out and wanted to sting the dog* (10 words) is translated into Russian as *Pčoli vyleteli i xoteli užaliť sobaku* (6 words): there is no equivalent of *the*, *out* is translated by the prefix *vy-* in *vyleteli*, and the infinitive is marked by the suffix *-ť* in *užaliť*.

6. Discussion and Conclusion

Cross-linguistic influence was clearly and consistently present in this child's L1 development only for embedded yes-no questions. Starting from her first recorded embedded yes-no questions, she overextended the Russian conditional complementizer *jesli* and the structure of the conditional clauses to the embedded question clauses. This is due to the fact that the English equivalent of *jesli - if -* is used both in conditional clauses and embedded yes-no questions. Unlike with the other errors in Russian, initially this was not a processing error but the child's only way to produce embedded yes-no questions between the ages 5;6 and 6;7. At that age, there is no evidence of target representations. Cross-linguistic influence here does not equal to syntactic transfer because no new structure is created; rather, an existing Russian structure is assigned an additional meaning that does not exist in monolingual Russian. The same error was reported by Andrews (1999) to be common in the speech of adult heritage speakers of Russian in the U.S.A.

However, the child overcame cross-linguistic influence after two years. First, she started to produce the target structure with *li* and went through a period of using both the old grammar generating the English-induced structure and the new grammar generating the preferred target Russian structure, which resulted in inconsistent use and hybrid forms. The hybrid forms can be explained as

blends of competing structures, and inconsistent use, as selection of the non-target, but highly activated competing structure. The non-target structure, with *jesli*, is produced by the child's old grammar and, in addition, is primed by processing the equivalent structure in English. We can speculate that later on, when the target structures are produced more frequently, the target representation is established, and the influence is caused only by priming.

Cross-language syntactic priming has been observed in bilingual adults (Meijer and Fox Tree 2003) and children (Vasilyeva, Waterfall, Gámez, Gómez, Bowers and Shimpi 2010). The priming mechanism for **jesli* in embedded questions can be described as follows. The Russian matrix verb activates the structure for embedded yes-no questions. The language not currently in use is never suppressed completely (Kroll, Bobb and Wodniecka 2006), so the structures in both languages are activated. This, in turn, activates complementizers in both languages: Russian *li* and English *if*. Since translation equivalents activate each other, *if* activates *jesli*. *Jesli*, in turn, activates the structure for a conditional clause to the level high enough to compete with the target structure. The hybrid forms are thus similar to a particular type of accidental speech errors – syntactic blends, in which two synonymous phrases or sentences are combined, such as in (14) (Fromkin and Bernstein Ratner 1998).

- (14) It would be of interesting to see =
It would be of interest... + It would be interesting...

Later, the child ended up producing only target structures. The stages in her development of embedded yes-no questions are summarized in (15).

- (15) *Development of Russian embedded yes-no questions in a bilingual child:*
- | | | |
|-------------------|--------------------------------------|-----------|
| English influence | Only <i>*jesli</i> : | 5;6 – 6;7 |
| Inconsistent use | <i>*jesli and/or li (+ili net)</i> : | 6;7 – 7;7 |
| Target use | <i>li (+ili net)</i> | 7;8+ |

Interestingly, English – here the source of influence – is not the dominant language of the child. The comparison of the controlled narratives in Russian and English showed that in Russian, the child's speech rate was slightly higher, she produced more clauses, and her vocabulary was also more varied. Therefore, this child still has slightly better skills in her L1 - Russian, yet the non-dominant language influences the dominant one.

Unfortunately, age of acquisition for this variable is not known, and therefore, it is not clear whether the child was in the process of its acquisition, or have acquired it before L2 exposure and experienced a temporary effect of L2. However, since embedded yes-no questions were not recorded in this child's speech prior to 5;6, it is likely that this was a bilingual acquisition process.

However, no matter whether L2 influenced development of L1 or already developed structures of L1, it could be seen that the child has overcome

influence from English and has acquired the target Russian structure for embedded yes-no questions. Similar findings were reported by Sorace, Serratrice, Filiaci and Baldo (2009): among English-Italian bilinguals in the UK, 6-7 year olds showed more English influence than older children (8-10 y.o.). It is theoretically possible that for children who receive continuing adequate support for both languages (like the child in this study), cross-linguistic influence is only a stage, but children who receive low quantity of input in Russian might remain in this stage into adulthood. If so, at least some adult heritage speakers of Russian who produce **jesli* in embedded yes-no questions may not have acquired the target Russian structures in their childhood.

A derivational complexity account, on one hand, correctly predicted transfer of the **jesli* option because the former is less syntactically complex than the preferred target Russian option, *li*. On the other hand, Russian has the no-complementizer option, even less complex than the English counterpart. Contrary to the derivation complexity hypothesis, not only this did not prevent transfer, but also no instances of the no-complementizer option were recorded in this child's production. It is true that the no-complementizer option has limited use due to its stylistic properties, but it is a grammatical option, unlike using *jesli*, and so is supposed to be a better choice. The role of derivational complexity is then controversial in this case - unless pragmatic properties of the no-complementizer option override derivational complexity.

It is possible that *li* is affected because it involves focus-driven movement (i.e. it is pragmatically determined which constituent to move). In Russian, word order varies based on topic and focus considerations. Polinsky (2006) found loss or reduction of word order variability in adult heritage speakers' production in Russian. It is therefore plausible that focus-driven movement requires continuous extensive exposure to be acquired and maintained, and it is vulnerable in a heritage language situation when a bilingual spends the majority of his/her time speaking another language. However, there are no other persistent errors that involve focus-driven movement in this child's speech.

Pérez-Leroux, Pirvulescu and Roberge (2009) argued that syntactic structures involving lexical learning are vulnerable, because lexical acquisition is more dependent on amount of exposure and more sensitive to frequency of use than syntax; they studied object realization and omission, which depends on the argument structure of verbs. For *jesli* and *li*, lexical learning appears to be involved: complementizers are lexical items, and being a clitic is an idiosyncratic property of *li*. Properties of Russian *jesli* and English *if* partially coincide, creating a potential for interference. However, unlike verbs, complementizers are functional words, and their processing differs from that of content words, as shown by ERP studies (Neville, Mills, and Lawson 1992, *inter alia*), so they are possibly affected by language experience in a way different from that of content words.

There is no overlap in embedded yes-no questions in the sense of Hulk and Müller (2000), but there are interesting relations between the two types of

clauses in these languages. Interface with semantics is also involved here and can be yet another contributing factor. Complex sentences containing conditional clauses and those containing embedded yes-no questions share some of their semantics: for both types of subordinate clauses, their truth value is unknown. English is not the only language where the same complementizer is used for conditionals and for embedded yes-no questions; the same happens in French, Spanish, and Hebrew. In Czech – a Slavic language, like Russian - *li* occurs in both types of clauses (Schwabe 2004). Even in Russian, *jesli* and *li* are historically related: *jesli* comes from a combination of *jesť* (third person singular form of 'be') and *li* (Schwabe 2004).

In addition, English clauses with *if* can be ambiguous between conditionals and embedded yes-no questions, as in (16), when they are embedded under a verb that can take both kinds of clauses (*ask, tell, etc.*), and when their surface morphosyntactic structure is the same.

- (16) I'd like to know if you are leaving.
 a) If you are leaving, I'd like to know that.
 b) I'd like to know whether you are leaving.

A morphological clue is the difference in tense marking when the matrix clause is in the future or past tense; however, there is no difference in the present. A syntactic clue is that an embedded yes-no question is a complement of the matrix verb, but a conditional clause is an adjunct, and in the latter case, the matrix verb typically has to have another sentential complement; however, the latter complement may undergo ellipsis, and then the surface structure will look identical. When the surface morphosyntactic structure of an *if*-clause is compatible with both interpretations, listeners distinguish between these types of sentences using clues from lexical semantics (whether the main verb can embed a question) and pragmatics (which interpretation is more plausible in a context).

Because of this ambiguity in English, Russian conditional clauses with *jesli* embedded under such verbs (like (12) and (13) above) can be incorrectly analyzed by bilinguals as ambiguous in the same way. Encountering such ambiguity may reinforce the incorrect use of *jesli*. For such sentences, overlap between Russian and English is again not like that described in Hulk and Müller (2000) as a necessary condition for transfer. English has two real possibilities; Russian seemingly has two, and English provides reinforcement for both, including the one non-existent in Russian.

The challenge to the study of embedded yes-no questions in Russian is that they are very rare in child speech, and it is difficult to collect enough data. The next steps should go in two directions: 1) longitudinal studies of more children, with varying language experience; 2) experimental studies eliciting production of embedded questions.

To conclude, a combination of factors has the potential to make embedded yes-no questions vulnerable to influence from English. Higher

derivational complexity than its English equivalent and interfaces with pragmatics and semantics are present for embedded yes-no questions with *li*, but none of them leads to cross-linguistic influence by itself. First, the no-complementizer option did not win even though it has neither higher complexity than in English nor interface issues. Second, there were no other structures affected by cross-linguistic influence. Dominance did not predict the directionality of influence: on the contrary, the non-dominant L2 influenced the dominant L1. There is no overlap between embedded yes-no questions in Russian and English, but they are affected by an overlap in conditionals. The most important factor was the ambiguity in English *if*-clauses, which causes cross-linguistic influence via two mechanisms: one in acquisition and another in processing. In acquisition, bilinguals attribute ambiguity to the unambiguous Russian structure, that is, impose a new meaning on it. Thus, cross-linguistic influence may occur if Language A contain data that may seem as evidence that a Language B-like structure is acceptable in Language A, when in reality it occurs only under certain circumstances, is used in a different context, and/or has a different meaning. In processing, there is priming from English, when the polysemous English complementizer activates the non-target structure in Russian.

References

- Andrews, David R. (1999). *Sociocultural perspectives on language change in diaspora: Soviet immigrants in the United States*. Amsterdam/Philadelphia: John Benjamins.
- Bar-Shalom, Eva, and William Snyder. (1997). Optional infinitives in Russian and their implications for the pro-drop debate. In *Formal approaches to Slavic linguistics: The Indiana Meeting 1996*, eds. Martina Lindseth and Steven Franks, 38–47. Ann Arbor: Michigan Slavic Corpora.
- Bates, Elizabeth, Virginia Marchman, Donna Thal, Larry Fenson, Philip Dale, J. Steven Reznick, Judy Reilly, and Jeff Hartung. 1994. Developmental and stylistic variation in the composition of early vocabulary. *Journal of Child Language* 21: 85-124.
- Benmamoun, Elabbas, Silvina Montrul, and Maria Polinsky. 2010. *White paper: Prolegomena to heritage linguistics*. Ms., Harvard University.
- Berman, Ruth A., and Dan Isaac Slobin. (1994). *Relating events in narrative: A crosslinguistic developmental study*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Bošković, Željko. 1998. Multiple wh-fronting and economy of derivation. In *Proceedings of the 16th West Coast Conference on Formal Linguistics*, eds. Emily Curtis, James Lyle, and Gabriel Webster, 49–63. Stanford, CA: CSLI Publications.
- Chan, Angel. 2010. The Cantonese double object construction with *bei2* 'give' in bilingual children: The role of input. *International Journal of Bilingualism* 14: 65-85.

- Foroodi-Nejad, Farzaneh, and Johanne Paradis. 2009. Crosslinguistic transfer in the acquisition of compound words in Persian-English bilinguals. *Bilingualism: Language and Cognition* 12: 411-427.
- Fromkin, Victoria, and Nan Bernstein Ratner. 1998. Speech production. In *Psycholinguistics*, eds. Jean Berko Gleason and Nan Bernstein Ratner, 309-346. Orlando: Harcourt Brace.
- Grebenyova, Lydia. 2011. Acquisition of Multiple Questions in English, Russian, and Malayalam. *Language Acquisition* 18(3): 139-175.
- Gvozdev, Aleksandr. (1949). *Voprosy izucheniya detskoy rechi*. St. Petersburg: Detstvo-Press.
- Hulk, Aafke, and Natascha Müller. 2000. Bilingual first language acquisition at the interface between syntax and pragmatics. *Bilingualism: Language and Cognition* 3(3): 227-244.
- Jakubowicz, Celia, and Nelleke Strik. 2008. Scope-marking strategies in the acquisition of long-distance wh-questions in French and Dutch. *Language and Speech* 51: 101-132.
- Junghanns, Uwe. 1995. Funktionale Kategorien im russischen Satz. In *Linguistische Beiträge zur Slavistik aus Deutschland und Österreich*, ed. Uwe Junghanns, 167-203. Wiener Slavische Almanach (37).
- Kaufmann, Dorit, and Mark Aronoff. 1991. Morphological disintegration and reconstruction in first language attrition. In *First Language Attrition*, eds. Herbert W. Seliger and Robert M. Vago, 175-188. Cambridge: Cambridge University Press.
- King, Tracy Holloway. 1995. *Configuring topic and focus in Russian*. Stanford: CSLI.
- Kroll, Judith F., Susan C. Bobb, and Zofia Wodniecka. 2006. Language selectivity is the exception, not the rule: Arguments against a fixed locus of language selection in bilingual speech. *Bilingualism: Language and Cognition* 9(2): 119-135.
- Kupisch, Tanya. 2007. Determiners in bilingual German-Italian children: What they tell us about the relation between language influence and language dominance. *Bilingualism: Language and Cognition* 10(1): 57-78.
- MacWhinney, Brian. 2000. *The CHILDES Project: Tools for analyzing talk*. 3rd Edition. Vol. 2: The Database. Mahwah, NJ: Lawrence Erlbaum Associates.
- Mayer, Mercer. 1969. *Frog, where are you?* New York: Dial Press.
- Meijer, Paul J., and Jean E. Fox Tree. 2003. Building syntactic structures in speaking: A bilingual exploration. *Experimental Psychology* 50(3): 184-195.
- Meisel, Jürgen. M. 2007. The weaker language in early child bilingualism: Acquiring a first language as a second language? *Applied Psycholinguistics* 28: 495-514.
- Montrul, Silvina. 2008. *Incomplete acquisition in bilingualism. Re-examining the age factor*. Amsterdam: John Benjamins.
- Neville, Helen J, Debra Mills, and Donald S. Lawson. 1992. Fractionating language: Different neural subsystems with different sensitive periods. *Cerebral Cortex* 2: 244-258.
- Nicoladis, Elena. 2002. What's the difference between toilet paper and paper toilet? French-English bilingual children's crosslinguistic transfer in compound nouns. *Journal of Child Language* 29: 843-863.
- Nicoladis, Elena. 2003. Cross-linguistic transfer in deverbal compounds of preschool bilingual children. *Bilingualism: Language and Cognition* 6: 17-31.

- Pérez-Leroux, Ana-Teresa, Alejandro Cuza, and Danielle Thomas. 2011. Clitic placement in Spanish/English bilingual children. *Bilingualism: Language and Cognition* 14: 221-232.
- Pérez-Leroux, Ana-Teresa, Mihaela Pirvulescu, and Yves Roberge. 2009. Bilingualism as a window into the language faculty: The acquisition of objects in French-speaking children in bilingual and monolingual contexts. *Bilingualism: Language and Cognition* 12: 97-112.
- Polinsky, Maria. (2006). Incomplete acquisition: American Russian. *Journal of Slavic Linguistics* 14(2): 191-262.
- Polinsky, Maria, and Olga Kagan. 2007. Heritage languages: In the 'wild' and in the classroom. *Language and Linguistics Compass* 1(5): 368-395.
- Pozzan, Lucia. (2011). *Asking Questions in Learner English: First and Second Language Acquisition of Main and Embedded Interrogative Structures*. Doctoral dissertation, City University of New York.
- Protassova, Ekaterina. 2004. *Russian Protassova corpus*. TalkBank.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In *Elements of grammar: Handbook in Generative Syntax*, ed. Liliane Haegeman, 281-337. Dordrecht: Kluwer.
- Rudin, Catherine. (1988) On multiple questions and multiple wh-fronting. *Natural Language and Linguistic Theory* 6: 445-501.
- Schwabe, Kerstin. (2004). The particle *li* and the left periphery of Slavic yes-no interrogatives. In *The syntax and the semantics of the left periphery*, eds. Horst Lohnstein and Susanne Trissler, 385-429. Berlin: de Gruyter.
- Serratrice, Ludovica, Antonella Sorace, Francesca Filiaci, and Michela Baldo. 2009. Bilingual children's sensitivity to specificity and genericity: Evidence from metalinguistic awareness. *Bilingualism: Language and Cognition* 12: 239-257.
- Sorace, Antonella, Ludovica Serratrice, Francesca Filiaci, and Michela Baldo. 2009. Discourse conditions on subject pronoun realization: Testing the linguistic intuitions of older bilingual children. *Lingua* 119: 460-477.
- Stjepanović, Sandra. 1999. *What do second position cliticization, scrambling, and multiple wh-fronting have in common?* Doctoral dissertation, University of Connecticut.
- Strik, Nelleke, and Ana-Teresa Perez-Leroux. 2011. Jij doe wat girafe? Wh-movement and inversion in Dutch-French bilingual children. *Linguistic Approaches to Bilingualism* 1(2): 175-205.
- Turian, Donna, and Evelyn P. Altenberg, 1991. Compensatory strategies of child first language attrition. In *First Language Attrition*, eds. Herbert W. Seliger and Robert M. Vago, 207-226. Cambridge: Cambridge University Press.
- Vasilyeva, Marina, Heidi Waterfall, Perla B. Gámez, Ligia E. Gómez, Edmond Bowers, and Priya Shimpi. 2010. Cross-linguistic syntactic priming in bilingual children. *Journal of Child Language* 37: 1047-1064.
- Yip, Virginia, and Stephen Matthews. 2000. Syntactic transfer in a Cantonese-English bilingual child. *Bilingualism: Language and Cognition* 3: 193-208.