The Genitive of Negation Construction in Russian-English Bilinguals

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1. Introduction

How does near-native proficiency and extensive exposure to a second language (L2) affect knowledge of a first language (L1)? In adults, the withering away of aspects of a first language or *attrition* has been documented whenever there was a diminished use of L1 in conjunction with predominant use of L2 (e.g. Sorace 2000, Polinksy 1996), which in extreme cases resulted in complete loss of L1 knowledge.

The present study asked what properties of L1 would be attrited or not learned when a child mostly uses and hears L2, and what other environmental factors influence the state of a child's knowledge. Given that the generative grammar tradition assumes that languages are determined by universal principles and language-specific parameters (set on the basis of abundant input (e.g. Smith & Cormack 2002)), we explore the hypothesis that idiosyncratic properties of L1 would be less known relative to properties shared between L1 and L2.

It is important to note that distinction between attrition and lack of learning is harder to make in children than in adults. If an adult has fully learned their L1, then learned L2, and later it turns out that some aspects of L1 have disappeared from the adult's language, then clearly this is an instance of forgetting/attrition. What about a child still learning L1 and beginning to learn L2? The child may not have had a chance to learn some aspect of L1, and then, of course, this child will not use this aspect of L1 in virtue of not knowing it. This distinction is something to keep in mind for later discussion.

This paper looks at how initially Russian-speaking children continue acquiring Russian language in the surroundings of English language. English and Russian differ greatly in their respective grammars. For example, Russian allows sentences without subjects, whereas English does not; Russian has a rich case system on nouns unlike English. Specifically, the Genitive of Negation construction will be studied, but along with it usage of other cases will be investigated. It is predicted that either English grammar will become (partially) imposed on Russian grammar, in other words, while Russian words will still be used in sentences, the grammar of the sentences may resemble that of English; or, alternatively, idiosyncratic aspects of Russian will be lost. The aim of the study is to discover whether the languages interact and whether English influences Russian, if at all; and whether any currently available linguistic theories can explain what is going on.

2. Russian and Genitive of Negation[1]

One of the ways that Russian, a language with relatively free word order, rich morphology and no articles, chooses to mark (non)specificity of arguments is by use of morphological case. Specific interpretation of an argument arises when it has an identifiable referent in the world, e.g. the North Star. If an argument does not have such a referent, it is nonspecific (from

[1] Readers interested in syntactico-semantic mechanisms of Genitive of negation are referred to the many analyses that have been proposed, e.g. Richards 2001, Babyonyshev 1996, Brown 1999, Babby 1980, Franks 1995, Neidle 1988.

Babyonyshev & Brun 2001). In Russian, genitive case is used to denote nonspecificity of a direct object of a negated verb. In other words, genitive of negation can only appear on complements/internal arguments of verbs that are in the scope of sentential negation when the complement has no identifiable referent in the world. If there is no negation or the object is specific, genitive is not licensed and an alternative case is used.

A direct object of a negated transitive verbs takes accusative if the object is specific in interpretation, genitive if it is nonspecific. In the case of a negated unaccusative verb, i.e. one whose only argument is an underlying object, the argument can be nominative and carry specific interpretation, or it can be in genitive case and carry nonspecific interpretation. Accusative case, however, is ungrammatical with unaccusatives. Lastly, a single argument of a negated unergative verb, that is one with an underlying external argument (subject), can never appear in the genitive, it can only bear nominative case.

There is a higher tendency to use genitive of negation with 'bleached' unaccusatives than with 'normal' unaccusatives. The bleached unaccusatives, e.g. *byt' = to be/exist; okazat'sya = turn out to be,* carry the meaning of existence, whereas normal unaccusatives, e.g. *poyavit'sya = to appear,* do not. Use of genitive of negation may also be enhanced by word order: Verb Object word order is more likely to have genitive with it, and Object Verb order is more likely to take accusative. (Wade 1992)

3. Monolingual Acquisition of Genitive of Negation

Studies of child Russian demonstrate that children handle morphological case and agreement correctly very early (e.g. Gvozdev 1949). When children do make mistakes, they use nominative instead of all other cases (Babyonyshev 1993). However complete sorting out of all cases (and other morphology) takes a long time – at least until age seven (Slobin 1966).

Babyonyshev, Ganger, Pesetsky and Wexler (2001) investigated genitive of negation for unaccusative and transitive verbs (as well as structural nominative and accusative cases) in 30 Moscovite children 3-6 years of age. Their results, in a nutshell, showed that children do know genitive, accusative and nominative cases in normal circumstances – i.e. with transitive and unergative verbs as early as 3 years old, and that children frequently do not know genitive on unaccusatives as late as 6 years old and instead use nominative – in support of their hypothesis that development of unaccusative verbs is delayed in children. Table 1 summarizes their results.

Table 1. Results of Monolingual Acquisition, across subjects[2] (Babyonyshev et al 2001)

Number of children, age range	Nonspecific transitive GEN	Specific transitive ACC	Normal Unaccusative GEN	Bleached Unaccusative GEN	Unergative NOM
30 3;0 – 6;6	75% gen	95% acc 5% gen	47% gen	48% gen	100% nom

Table 2 shows results grouped by kinds of responses (unergative verbs correctly elicited nominative case in 100% of cases and are not included):

[2] In all tables, cases mentioned in the top row are indicative of the target adult response.

Table 2. Results of Monolingual Acquisition, by response types[3](Babyonyshev et al 2001)

Group, number of children in a group, age range, mean age	Nonspecific transitive GEN	Specific transitive ACC	Normal Unaccusative GEN	Bleached Unaccusative GEN
Group a 7 3;8 - 5;9 4;4	Gen	Acc	**Nom**	**Nom**
Group b 3 4;1 - 5;2 4;6	Gen	Acc	Gen	**Nom**
Group c 8 4;3 - 6;6 5;5	Gen	Acc	**Nom**	Gen
Group d 4 4;6 - 4;8 4;7	Gen	Acc	Gen	Gen
Group e 6 3;0 - 6;2 4;3	**Acc**	Acc	**Nom**	**Nom**
Group f 1 4;2	Gen	**Gen**	Gen	**Nom**
Group g 1 4;8	**Acc**	Acc	Gen	**Nom**

Groups e, f, g: these children do not use genitive of negation consistently nor correctly on transitives, and therefore are taken to not know the rules for genitive of negation.
Group d: adultlike.
Groups a, b, c: these children do know genitive of negation – as shown by their handling of transitives. However they did not consistently perform with unaccusatives.
Group c: The fact that genitive of negation is used with bleached unaccusatives but not with normal ones is taken to mean that the delayed unaccusative development in these children is overridden by the "overwhelming positive evidence" for use of genitive of negation with these verbs – e.g. the frequently-used verb *byt' (be)* was included into the stimuli. Therefore the correct usage of genitive of negation here is taken to be more imitation rather than reflecting actual knowledge. Thus normal unaccusatives are taken to reflect the true state of the children's grammar.
Group b: These children's performance is actually unexpected in light of the immediately above. They use nominative with bleached (incorrectly) and genitive with normal unaccusatives (correctly). It is possible that these subjects are in a 'flux' – they have not sorted out the genitive of negation rules correctly.

4. Methods

4.1 participants

The present data comes from a group of eleven Russian-English children attending a Saturday Russian Language School. One Russian adult was used as control for correctness of stimuli. The data were collected over a period of several months, from November 2002 through March 2003. The children formed a continuum of ages, from 5 to 10, and came from a variety of socioeconomic backgrounds. All had considerable and consistent exposure to English language for several years in virtue of attending English Schools or being born in England and frequently to mixed parents (See Table 5 for details). On informal observation, all subjects speak English natively, without Russian accent, and without any noticeable errors. Sadly (from linguistic,

[3] Henceforth, incorrect case usage will be in bold for clarity.

cultural, and nationalistic points of view), all of them, even the high-proficiency ones, prefer to speak English. Technically, tentatively saying that English has become or is their L1 would raise fewer objections than saying confidently that these children are native speakers of Russian.

Bilinguals children's exposure to Russian consists of their communication with their family and four hours of Russian school every Saturday. In the majority of cases, more time is spent in English-speaking circumstances than in Russian-speaking ones. The word 'bilingual' as used in reference to these children does not imply their mastery of both languages, but rather a relatively decent knowledge and use of both languages.

4.2 Elicited Sentence Completion Paradigm

A set of data was collected using elicitation scenarios, based on those used in Babyonyshev et al (2001), requiring the children to respond with a noun in a particular case as determined by the context created by the scenario. This was done to see how children, who had less exposure to Russian than normal monolinguals, deal with the genitive of negation. Usage of other structural cases, namely nominative and accusative, was also tested, in virtue of the design of the experiment.

Each child was tested with four transitive verbs with nonspecific object contexts (adult response genitive), four transitive verbs with specific/definite object contexts (adult response accusative), four unergative verbs (adult response nominative), four regular unaccusative verbs with nonspecific objects (adult response genitive), and four bleached unaccusative verbs (adult response genitive). In total, there were five different verb-types, each with four trials (as opposed to three in the original study) using different verbs.

The requirements on the stimuli were as in Babyonyshev et al 2001. The use of words, in the form in which they were going to be elicited from the children, was avoided as far as possible in the stimuli stories in order to prevent children from imitating. The primary aim was to make sure that elicited nouns distinguished nominative and genitive; this immediately excluded animate masculine nouns and most of neuter ones (due to unstressed and hence indecipherable case suffix). Therefore final-stressed neuter, feminine and inanimate masculine nouns were used.

The present stimuli consisted of four stories, with five substories each centring around a verb-type, such that the same verb-type was not used twice within a story and that as far as possible no verbs were used twice within a story. The order of presentation of verbs and verb-types within a story was fixed by the line of plot, but varied between stories. Thus it was impossible for a child to use a strategy and not his/her own knowledge to answer. The length of each testing session depended on the willingness of the child to cooperate and on the time available during playtime – thus some were tested in a single session in a single day, while others where tested a story at a time over several weeks.

Because initially older children were tested, the stories were presented verbally, without staging a puppet show. The children were asked to help the investigator summarize the main idea of each substory – a task the children are used to doing as part of Russian Literature lessons. Five-year olds, it turned out, were also fully capable of attending to the verbal stories without visual input.

Translated example of stimulus story with Bleached Unaccusative:

One day, the children were watching TV. After class, two boys had to move the TV stand against the wall, but they couldn't do it! They looked, and they found that one of the wheels was missing, and they decided not to move it. So, they decided not to move the TV stand…

….because the stand-Gen not was-Sg-Neutre….wheel-Gen (adult), wheel-Acc/Nom (child)

u shkavchika ne bylo kalesa kaleso

5. Results

Table 3. Total Bilingual Case-Usage, Across Subjects

Number of children, age range	Nonspecific transitive GEN	Specific transitive ACC	Normal Unaccusative GEN	Bleached Unaccusative GEN	Unergative NOM
5 8;9 – 10;6 Older	65% gen 35% acc	87.5% acc **5% nom**	50% gen 40% nom **10% acc**	70% gen 30% nom	90% nom **10% acc**
6 5;2 – 7;5 Younger	12.5% gen 71% acc **12.5% nom**	75% acc **22% nom**	46% gen 46% nom **7.5% acc**	75% gen 25% nom	100% nom

According to Table 3, bilingual children roughly know their cases. They know well that unergative subjects are nominative. They know that specific transitive objects are accusative, although to a lesser extent than monolinguals (compare 95% accusative rate in Table 1).

The children *seem* to know that bleached unaccusative objects are genitive or nominative but not accusative – in accordance with Russian grammar. The normal unaccusative objects however, as said above, do show the more accurate state of affairs: Here genitive is used only half of the time, with nominative close behind and very little accusative. Thus bilinguals know genitive of negation for unaccusatives half of the time – a rate almost identical to the monolingual rate (compare 47% in Table 1).

The older children do know genitive of negation for nonspecific transitive objects – although to a lesser extent than monolinguals; they also know that nominative is not the case to use with objects. The younger children, however, do not know genitive of negation for nonspecific transitives. The difference between the younger and the older group is highly significant ($t(9)=3.53$, $p=.006$).

Table 3 also shows that the older group is sensitive to the non/specific semantic distinction on transitive verbs – as illustrated by their appropriate use of genitive of negation on one condition and use of accusative on the other. The younger group as a whole does not seem to be sensitive to the non/specific distinction, but at the same time there is no evidence about knowledge of specificity in other domains. Therefore, whether this lack of distinction is an effect of age or lack of knowledge is not clear at the moment[4].

[4] Babyonyshev et al (2001, footnote 25) explained their 75% rate of genitive with nonspecific transitives by saying that children may interpret new information as old information and can interpret nonspecific instances as specific ones. Since the younger group does roughly fall into this age-range, it is quite possible that lack of transitive Genitive of negation is a reflection of

Because, as will be seen in Table 5, only one child (4) performs better with normal unaccusatives than with bleached ones, the reason for the difference in performance between the two kinds of unaccusatives is the same as in Babyonyshev et al 2001. Bleached unaccusatives are likely to be frequently used with genitive of negation by adults, and as a result the children are bombarded with abundant input, and they can memorize/imitate the obligatoriness of genitive of negation with these verbs. Thus, at least for the bleached unaccusatives, it is not surprising that the majority of children has a correct grasp of the genitive of negation construction.

It should be noted that the overall rate of use of nominative is greater in the younger group due to inclusion of two children (subjects 4 &5) for whom Russian is more of a foreign language than a first/second language.

Table 4 explicitly compares rate of genitive of negation in bilingual acquisition with monolingual acquisition. There are significant differences between bilingual and monolingual use of genitive of negation with the nonspecific transitives ($t(39) = 3.08$, $p=.004$), and with bleached unaccusatives ($t(39) = 2.12$, $p=.04$)

Table 4. Rate of Genitive Responses in Bi- and Mono- Lingual Children

	Nonspecific Transitive	Specific Transitive	Unaccusative	Bleached
Monolinguals (Babyonyshev et al)	75%	5%	47%	48%
Bilinguals (Modyanova)	36%	2%	49%	73%

Table 5 shows details about the individual subjects and their performance and a linguistic 'diagnosis' best describing the pattern of performance.

Table 5. Individual Bilingual Subjects: Details of Results

Age at test	Age of exposure to L2	Years of exposure to L2	Father's L1[5]	Nonspecific Transitive GEN	Specific Transitive ACC	Normal Unaccusative GEN	Bleached Unaccusative GEN	Diagnosis	#
10.5	4.5	6	Russian	Gen/Acc	Acc	Nom	Nom	Attrition	12
5.3	0	5.3	English	Gen/Acc	Acc	Gen	Gen	Delayed	1
5.3	0	5.3	Russian	Acc	Acc	Gen	Gen	Delayed	2
5.8	0	5.8	English	Acc	Acc	Acc	Gen	English	3
7.4	3.5	4	Russian	Acc	Acc	Nom	Gen/Acc	English	6
10.3	3	7.3	Russian	Acc	Acc	Gen/Nom/Acc	Gen	English	11
5.9	0	5.9	English	Nom	Nom	Nom/Gen	Nom	L3	4
6.8	0	6.8	Russian	Nom	Nom	Gen	Nom	L3	5
8.8	4	4.8	Russian	Gen	Acc	Gen	Gen	Russian	8
9.7	3.9	5.8	Russian	Gen	Acc	Gen	Gen	Russian	9
9.9	6	3.9	English	Gen	Acc	Gen/Nom/Acc	Gen/Nom	Russian	10

underdeveloped pragmatic module. However rate of genitive of negation in young bilinguals is 12.5%. Since the only other option is lack of learning, it must be said that 60% of non-genitive answers the younger subjects of this study have produced are due to lack of learning.

[5] Mothers were are all native speakers of Russian.

Subjects 1 and 2, despite being youngest, are the only ones (of the younger group) to show near-perfect genitive of negation with all unaccusatives. Transitive genitive of negation is used less consistently, but appears nonetheless. These two subjects are overall very communicative, with parents who greatly encourage speaking Russian; therefore the subjects can be said to be delayed.

Subjects 3, 6 and 11, despite being of different ages, show the same patterns and proficiency scores: a good performance/imitation for bleached unaccusatives, only one instance of genitive of negation on normal unaccusatives, and huge preference for accusative with all transitive objects regardless of semantics. Essentially their case patterns mirror those found in English language. Because 11 and 6 emigrated very early (at age of three & three and a half)), it is possible that all these children never had the opportunity to learn that genitive of negation is used on all nonspecific objects. Another factor may be that they (and 12 below) are in a disadvantaged situation due to having hard-working parents who are rarely home as their only source of Russian input.

Subjects 9, 8, and to a lesser degree 10, show (near) adult knowledge of genitive of negation. They consistently use genitive of negation with all unaccusatives and with nonspecific transitives. The 50% success rate of subject 10 with unaccusatives may be more a reflection of lack of attention (as observed independently and informally) than lack of knowledge – 10 arrived relatively late – at age of six – and has consistent Russian input from his family so is unlikely to be attrited. 9 and 8 however arrived early – in their early fours – and that their knowledge is retained is remarkable and probably due to significant family input.

Which leaves us with subjects 12, 5 and 4. All of them have significant problems with Russian. Only 5 (a remarkable case in that he has been in a Russian-speaking environment for only a year) shows consistent knowledge/imitation of genitive of negation on bleached unaccusatives. 5 & 4 make mistakes in case throughout the conditions, e.g. using nominative with transitive objects; note however that they are correctly not using accusative with unergative subjects.[6] So these children are not blank sheets of paper, they do know some basics. 4 has very poor attention, which probably prevents him from being able to imitate bleached unaccusative genitive of negation, while 12 does not get enough input to be able to imitate genitive of negation consistently. However 12 uses transitive genitive of negation 50% of the time with nonspecific objects and never with specific ones – therefore 12 could have known the construction, but is now losing it. 12 is further disadvantaged in having to handle Lithuanian language on top of Russian and English, which she says she does not do very well.

Now a generalization, resolving the distinction between attrition and lack of learning is possible. The non-imitable instances of genitive of negation have a tendency: to not be learned by those who were in bilingual environment from birth (subjects 3, 4, 5) or before three and a half (6 & 11); to be preserved by those who had monolingual exposure for at least the first four years of life (10, 8, 9); to be attrited in 12; and to be delayed elsewhere (1, 2). This generalization is in concord with findings of Babyonyshev et al (2001): their monolinguals (Table 2 above), on average, know genitive of negation by the age of four, i.e. provided there is relevant amount of

[6] Overuse of nominative case may be explained if nominative form of the noun is taken to reflect the way the noun is stored in the mental lexicon. The children are then simply not bothering to put any additional morphology on the stored form and produce it as it is. (Babyonyshev 1993, Neeleman and Weerman 1999)

input (whatever that unquantifiable amount is), a child will learn genitive of negation by their fours.

An ANOVA analysis showed that there's an interaction between verb type and age of initial exposure ($F=1.9$, $p=.056$). If a child arrived after their fourth birthday – they retain the knowledge of the idiosyncratic genitive of negation. Earlier exposure to English results in genitive of negation not being learned. However, and this may be due to low number of subjects, length of exposure to English is not significant, neither is father's language.

6. Discussion

Let us recap: there is one case of attrition; five cases of lack of knowledge; three cases of successful knowledge maintenance, and two cases of delay. Typical mistakes include lack of genitive of negation in non-imitable instances and consequent overuse of accusative and of nominative cases.

Delay cases can be explained by natural variation in acquisition rates: after all, monolinguals (Table 2) vary widely in the timing of their performance. Successful knowledge maintenance can be explained by abiding input. For other cases two possible explanations are offered. One (6.1) is based on common linguistic sense. Another (6.2) is based on the only existing theory of language attrition.

6.1 Lack of 'Sufficient Input'

Let us take the view that languages are determined by universal principles (which are innate and not discussed) and language specific parameters (which have to be set (or learned or triggered) on basis of abundant (i.e. more than a handful of instances) input). Genitive of negation is a Russian specific rule/parameter which cannot develop without abundant input as the discussion of Table 5 above shows. Nominative case for surface subjects, accusative for surface objects, on the other hand, are properties/parameters of both Russian and English that monolingual children learn well very early (Babyonyshev 1993).

Smith and Cormack (2002) say that in order to learn an aspect of "… syntax there may be a frequency threshold which has to be crossed before learning is assured." If there is not enough input, the parameter responsible for the aspect of syntax may not be set at all, or be set randomly.

Or in a bilingual case, a parameter may be set in one language and that setting may spread to another language if there is no evidence to the contrary. I.e. the parameter settings of English language are to blame. This can explain the 'lack of knowledge' cases. These children have set their parameters according to English evidence – namely that all subjects are nominative (even unaccusative ones) and that all objects (regardless of interpretation, as English does not distinguish specificity using case) are accusative. The child does not receive any Russian evidence to the contrary. The fact that genitive is a possible alternative may only be registered on objects of bleached unaccusatives because these are the only nonspecific objects to be used with an above-threshold frequency. Other instances of genitive of negation may not be used frequently enough for children to pay attention to them and to comprehend the obligatoriness of

genitive of negation for interpretations. So the children seem to be treating the language as if it does not matter. [7]

Alternatively, bilingualism itself – i.e. the burden of having to handle two languages – may be to blame for attrition/nonlearning. After all, the subjects with low 'case' scores (3, 4, 5, 6, 11, 12) are doing worse than the monolingual children, and the only difference is that those subjects are bilingual. Now, as any adult-learner of a language would attest, language learning is hard, that because the adult experiences are conscious. It seems to me that the only reason language learning seems to be easy in children is because in them it is subconscious and just 'happens', as many complicated things 'happen' in children, e.g. development of 3D vision. How much effort and energy (measured in calories or rate of cellular and molecular processes in the brain) is actually expended, is anybody's guess. But it is logically possible that it is harder to juggle two+ languages with uneven input levels, than it is to juggle two+ languages with relatively even input levels. As Smith and Cormack (2002) say – it is the frequency of input that matters. Furthermore, Pallier et al (2003) note that there may be great interference/burden caused by having to process as second language in addition to having to maintain a first language without proper support/input.

On both explanations it is predicted that only idiosyncratic properties of Russian would not be handled well – in accordance with the findings.

A comparison of bilingual acquisition with adult second language acquisition of genitive of negation shows striking similarities. Observe that what unites these subject populations is lack of extensive Russian input. Lakshmanan & Lindsey (1997, 1998) investigated how fourteen undergraduate native speakers of English learn Russian as a second language. Their results, illustrated in Table 6, show that advanced and intermediate L2 speakers of Russian tend to rely on their knowledge of English grammar when assigning cases, i.e. they show little knowledge of genitive of negation: objects of transitive verbs get accusative, and subjects of unergative and unaccusative verbs get mostly nominative.

Table 6. Bilingual vs Adult L2 Acquisition of Genitive of Negation

Number of subjects, age range	**Nonspecific transitive GEN**	**Specific transitive ACC**	**Normal Unaccusative GEN**	**Bleached Unaccusative GEN**	**Unergative NOM**
14; adult; L1 English, L2 Russian (Lakshmanan&Lindsey)	4% gen 96% acc	75% acc **7% gen**	75% nom 21% gen	75% nom 25% gen	91% nom **6% gen**
6; 5;2 – 7;5 Younger Bilinguals (Modyanova)	12.5% gen 71% acc 12.5% nom	75% acc 22% nom	46% gen 46% nom 7.5% acc	75% gen 25% nom	100% nom

[7] Note that this point of view seems to imply that case in English and case in Russian have the same syntactic status even though in English there is no distinguishable case on nouns, and Russian nouns do distinguish cases morphologically. The implication is questionable, but exact claim is irrelevant for the current purposes. See Neeleman and Weerman 1999 for discussions.

6.2 Checking Theory of Attrition

Sorace 2000, Tsimpli et al. 2002, Bouba et al. 2002, and Tsimpli 2001, 2003 have proposed a theory of language attrition and acquisition based on the minimalist checking theory mechanisms (Chomsky 1995). These mechanisms say that lexical items and functional projections can have two kinds of features. The features that are interpretable (that carry meaning) at the Logical Interface (LF, a place between syntax and semantics/pragmatics) do not upset anybody. Purely syntactic, uninterpretable features however must be eliminated before the derivation/representation reaches LF. Crosslinguistic variation stems from exact properties of these uninterpretable features, and whether they are eliminated before the derivation is pronounced, or after but before it gets to LF.

The basic idea of Sorace's and Tsimpli's theory is that because syntax is an encapsulated module, uninterpretable – syntactic features – will not be subject to attrition, whereas interpretable features will be attrited because LF, in virtue of being an interface, is cognitively penetrable. Among other things, this theory is used to explain attrition in Greek and Italian adults who are near-native in English.

Greek and Italian are languages that allow phonologically null subjects (NS). These NS are licensed by rich verbal agreement which is a morphophonological realization of un/interpretable features on a functional projection of a verb. Null pronouns, in virtue of not having phonological realization are deficient, and therefore their distribution is restricted: they cannot refer to a nonprominent discourse antecedent, i.e. their interpretation can only be recovered if their antecedent is a topic. A topic is an entity that has shifted to the front of the sentence. Overt pronouns, on the other hand, are not restricted, and can refer to anything except the topic, and are ungrammatical if they refer to the topic (unless they receive stress). The overt pronouns are taken to have an interpretable TopicShift (TS) feature. (Sorace 2000)

English is a language that does not distinguish non/topic-shifted entities; therefore prolonged exposure to English may cause the interpretable TS feature to become 'optionally unspecified'. This means that near-native speakers will sometimes use overt pronouns when speaking their L1 in places where only NS are licensed, i.e. in places where overt pronouns are infelicitous in L1. And this is exactly what happens. Thus the obligatory mapping between the interpretable TS feature and overt pronouns is lost. (Sorace 2000)

On this view, attrition is an instance of demarking: taking interpretable features and making them optionally uninterpretable.

Applying the above theory to the findings of this paper, the genitive of negation in Russian can be taken to encode an interpretable feature, e.g. nonspecificity. Accusative is taken to encode specificity. Because English has no obligatory encoding of semantics by case-features, and because English case features are all taken to be uninterpretable, the Russian encoding may become optionally unspecified as a result of near-nativeness in L2 English. Then it is possible that the obligatory mapping between these non/specificity features and their exact morphophonological realization is lost. In other words, prolonged exposure to English brings about optionality in presence of interpretable features and consequently their realization. The mappings present in the influencing language (English), namely those between uninterpretable case features (English accusative and nominative) and their realization become transferred to Russian. The encoding of nonspecificity idiosyncratic to Russian is lost.

7. Conclusion

The present investigation showed that bilingual children's knowledge of their first lesser-used language is compromised by extensive use of their second language. Balanced linguistic input, on the other hand, promotes retention of properties idiosyncratic to languages.

Acknowledgements. I would like to thank Neil Smith of UCL, Ken Wexler of MIT, Tania Ionin, Antonella Sorace, and teachers and students at the School of Russian Language and Literature in Golders Green, London, UK.

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