

DEFINITENESS IN POSITIVE AND NEGATIVE EXISTENTIALS IN THE L2 ENGLISH OF RUSSIAN SPEAKERS¹

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Introduction

Recent second language (L2) research has focused on how definiteness is represented and realized in the article systems of L2 learners and L2 speakers (henceforth, L2ers). For example, there have been suggestions that L2ers whose L1s lack articles fluctuate between definiteness or specificity as the feature that determines article choice in the L2 (Ionin et al., 2004), or that permanent morphosyntactic deficits are implicated, particularly in cases where the L2 realizes an uninterpretable definiteness feature not found in the L1 (Tsimpli, 2003). In contrast, in this paper, we examine subtle constraints on definiteness and show that L2ers whose mother tongue has no articles can achieve native-like restrictions in this domain, suggesting no featural deficit. We focus on the so-called Definiteness Effect (DE) (Milsark, 1977, amongst others), investigating unconscious knowledge of this restriction on the part of Russian-speaking learners of English.

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The Definiteness Effect in English and Russian

In English, definiteness is expressed by means of articles and other determiners, such as demonstratives, possessives, and numerals, some of which are definite (strong) and others indefinite (weak). There is a well-known restriction on definiteness in the existential *there*-insertion construction, where indefinite DPs are permitted while definite expressions are excluded; see (1a), which illustrates the situation with articles, and (1b), which shows other determiners. This restriction also applies to negative existentials, as in (1c). Exceptions to the DE include deictic expressions (like (2a)) and list readings (like (2b)), where definite expressions are permitted.

- (1) a. There seems to be a/*the fly in my soup.
 b. There is one/*every fly in my soup.
 c. There isn't any/*the salt in my soup.
 (2) a. Look, there's John.
 b. Who could bring cookies? There's John...

Russian, the first language (L1) of our subjects, lacks articles, as illustrated in (3a). Nevertheless, definiteness can be expressed by means of other determiners, just as it can in English, as shown in (3b).

- (3) a. Uborshhik vybrosil cvetok.
 cleaner threw-out flower
 'A/the cleaner threw out a/the flower.'
 b. Kakoj-to/ehtot uborshhik vybrosil cvetok.
 some/this cleaner threw-out flower
 'Some/this cleaner threw out the/a flower.'

Furthermore, Russian shows a definiteness effect in existential constructions, although the restriction is not identical to English. Like English, Russian permits weak determiners and prohibits strong determiners in positive existentials, as can be seen by comparing (4a) and (4b). However, Russian differs from English in negative existentials, where it fails to show a definite/indefinite contrast. Instead, a variety of strong DPs can occur: Russian (4c) and (4d) are both grammatical, even though the DP is definite in (4d).^{2,3}

² Subjects of Russian negative existentials obligatorily exhibit the so-called genitive of negation. In other negative contexts, genitive optionally alternates with nominative or accusative. Where the genitive of negation is optional, it is normally

- (4) a. V ofise est' kakoj-to koshelek.
 in office exist some.nom purse.nom
 'There is some purse in the office.'
- b. *V ofise est' tvoj koshelek.
 in office exist your.nom purse.nom
 'There is your purse in the office.'
- c. V ofise net nikakogo koshel'ka.
 in office not-exist no.gen purse.gen
 'There isn't any purse in the office.'
- d. V ofise net tvoego koshel'ka.
 in office not-exist your.gen purse.gen
 'There isn't your purse in the office.'

In other words, Russian positive existentials behave similarly to English, showing a definiteness effect (though not via an article system), whereas Russian negative existentials differ from English, showing no definite/indefinite contrast (see Borschev & Partee, 1998; Padučeva, 2000, amongst others).

L2 acquisition of the Definiteness Effect

Previous research has shown that L2ers whose L1s lack articles (Mandarin) or have only one article (Turkish) observe definiteness restrictions in their production of English (Lardiere, 2005; White, 2003, 2008). In addition, White, Belikova, Hagstrom, Kupisch & Özçelik (2009) show that Turkish-speaking L2 learners of English are sensitive to definiteness restrictions when making acceptability judgments. Turkish, like Russian, does not show a DE in negative existentials.

No study so far has investigated the DE in Russian-speaking learners of English. We assume the Full Transfer Full Access (FTFA) hypothesis of Schwartz and Sprouse (1996), which predicts that L2ers will initially analyze L2 data in terms of their L1 representations, and that they will subsequently arrive at the L2-appropriate constraints, provided that positive input from the L2 indicates that the L1 analysis is untenable.

associated with indefiniteness or non-specificity, so the genitive of negation might be thought of as turning strong DPs into weak ones. However, Turkish patterns with Russian for the DE, but exhibits no genitive of negation, so we believe that this cannot be the right analysis.

³ Some authors do not treat cases with genitive definite subjects as true existentials (e.g. Babby, 1980).

Consider the task facing learners of an L2, such as English, that realizes definiteness through an article system, when the L1 lacks articles, as is the case in Russian. In addition to discovering that the article *the* realizes definiteness and *a* indefiniteness, learners must work out how the DE plays out. Transfer from the L1, in such cases, would result in an inappropriate analysis. In the experiment below, we show that proficient L2ers are successful in overcoming the differences between the two languages.

Experiment

Subjects were adult Russian-speaking L2 learners of English, of intermediate (n=10) and advanced (n=15) proficiency, as well as native speaker controls (n=17). The task was an acceptability judgment task, refined and modified from White et al. (2009). Subjects were presented with short contexts on a computer screen, each followed by a sentence to be judged as natural or unnatural. The crucial DP in the test sentence did not appear in the same form in the context. In test items involving definites, the contexts established the referent in the discourse prior to the test sentence. This was to avoid any successful recognition of ungrammaticality based on the general infelicitousness of definites in first-mention contexts. When subjects chose *unnatural* as their response, they had to supply a correction. This was to ensure that they were responding relevantly to the test items. An example is presented in Figure 1, which shows an ungrammatical negative existential involving a proper name (i.e., a definite expression).

Some students have problems with an assignment, so they ask the secretary whether the statistics professor is available to help them. She says:		
<i>No, there isn't Professor Black in his office today.</i>		
How natural is this sentence in this context? If you choose 'unnatural', please correct the sentence.		
natural	not sure	unnatural
Correction:		

Figure 1. Sample item: ungrammatical negative

There were 90 test items, divided into various subtypes, with 5 sentences per subtype, including: positive and negative existentials, list and deictic

readings, sentences controlling for other aspects of (in)definiteness. The most important categories are illustrated in (5) to (7) below.

The items in (5) are positive existentials (grammatical and ungrammatical), testing whether L2ers are sensitive to the DE in cases where L1 and L2 behave similarly. The items in (6) involve negative existentials; these test sensitivity to the DE when the L1 and L2 behave differently, sentences like (6d) being ungrammatical in English and grammatical in Russian. Finally, the examples in (7) illustrate cases that did not involve existentials. Sentences like (7a), (7b) and (7c) are included in order to determine whether L2ers simply reject all definite expressions (especially cases involving *there*). Sentences like (7d) and (7e) are included to check that subjects treat indefinites appropriately in non-existential contexts.

(5) Positive existentials

- a. Grammatical *there*-insertion with indefinite articles
There's a reliable copy machine downstairs.
- b. Ungrammatical *there*-insertion with definite articles
There's the most reliable copy machine downstairs.
- c. Grammatical *there*-insertion with other weak determiners
There are four students from France in my class.
- d. Ungrammatical *there*-insertion with other strong determiners
There's every student here today.

(6) Negative existentials

- a. Grammatical *there*-insertion with indefinite articles
There isn't a suitable bowl here.
- b. Ungrammatical *there*-insertion with definite articles
There isn't the bowl here.
- c. Grammatical *there*-insertion with other weak determiners
Actually, there aren't any books in my office yet.
- d. Ungrammatical *there*-insertion with other strong determiners
There isn't your book in my office.

(7) Control items

- a. Grammatical list contexts
Well, for a start, there's the moon.
- b. Grammatical deictic contexts
Oh, look, there's the car!
- c. Grammatical definite subjects
The next job candidate is waiting outside.

- d. Grammatical indefinite subjects
A key has been found by the coffee machine.
- e. Ungrammatical indefinites
A kitchen stove is broken.

Results

For all results reported below, we conducted 2 factor mixed ANOVAs, followed by post hoc tests (Scheffé, Tamhane's T2 or paired t-tests with a Bonferroni correction, as appropriate) and one factor repeated measures ANOVAs, to determine the source of any differences (SPSS 16.0 for Windows).

We begin with the results from our control sentences (see (7)), in order to establish that participants have no general problems with definite and indefinite subjects and that they do not adopt strategies such as accepting all indefinites and rejecting all definites in our task. As Figure 2 shows, deictic and list readings were largely accepted by both learner groups, performance on grammatical (G) definite and indefinite subjects was at or close to ceiling, and ungrammatical (U) indefinite subjects were rejected.

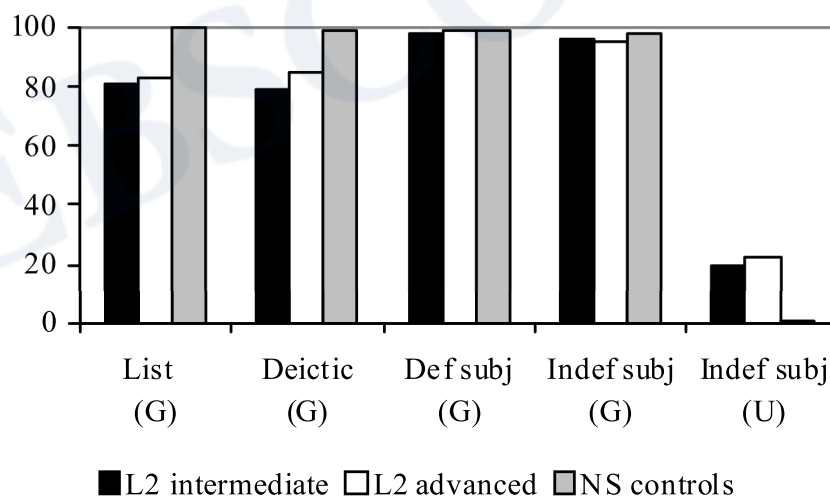


Figure 2. Control items: mean acceptances (in %)

A 2 factor mixed ANOVA shows no effect for group ($f(2, 39) = 0.7$, $p = 0.5$), a significant main effect for sentence type ($f(2.7, 106.3) = 209.9$, $p < 0.000001$) and a significant interaction ($f(5.5, 106.3) = 5$, $p < 0.001$). Paired t-tests show that acceptance of ungrammatical indefinite subjects is significantly lower than acceptance of all grammatical conditions ($p < 0.000001$); in addition, acceptance of grammatical list items is

significantly lower than acceptance of grammatical definite and indefinite subjects ($p < 0.001$ and $p < 0.05$, respectively). One factor ANOVAs indicate that the overall difference associated with the list condition is due to the performance of the L2ers, whose acceptance of this condition is lower than the native speakers.

Turning to the overall results on existentials, Figure 3 compares all grammatical and ungrammatical cases of positive and negative existentials.

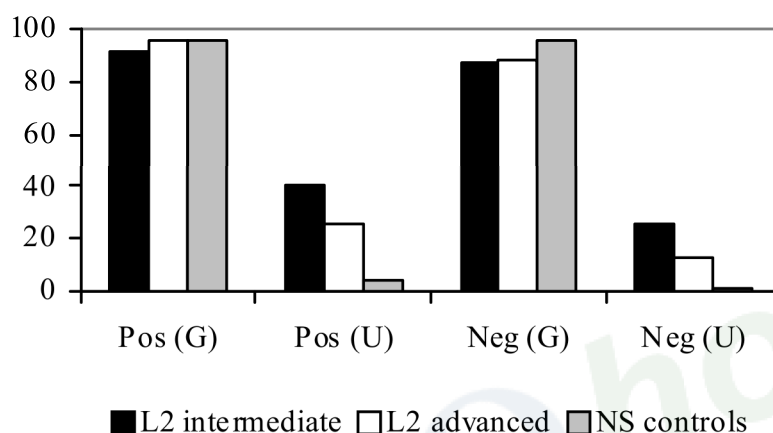


Figure 3. Existential sentences: mean acceptances (in %)

A 2 factor mixed ANOVA shows a significant main effect for group ($f(2, 39) = 6.1$, $p < 0.005$), a significant main effect for sentence type ($f(2.4, 93.8) = 611.1$, $p < 0.000001$) and a significant interaction ($f(4.8, 93.8) = 14.9$, $p < 0.000001$). Post hoc Scheffé tests show no significant difference between native controls and advanced L2ers, while the difference between controls and intermediate L2ers is significant ($p < 0.01$). According to paired t-tests, participants show a significant difference in acceptance of grammatical and ungrammatical existentials, whether positive or negative ($p < 0.000001$). Crucially, both the intermediate and advanced L2ers reject definite DPs in negative existentials. Indeed, they reject definite negative existentials, which are grammatical in Russian, to a greater extent than definite positive existentials, which are ungrammatical ($p < 0.02$).

Results on the crucial ungrammatical sentences are shown in Figure 4 (positive existentials) and Figure 5 (negative existentials), divided into subtypes: definite articles (Def art); proper names (Names); possessives (Poss); strong quantifiers (Quant).

As can be seen in Figure 4, while the advanced L2 group appropriately rejects existentials with definite articles, proper names and quantifiers, they accept possessives almost 50% of the time. The intermediate group

are slightly more likely to accept the ungrammatical items in each subcondition, with possessives, again, being particularly problematic (61%).

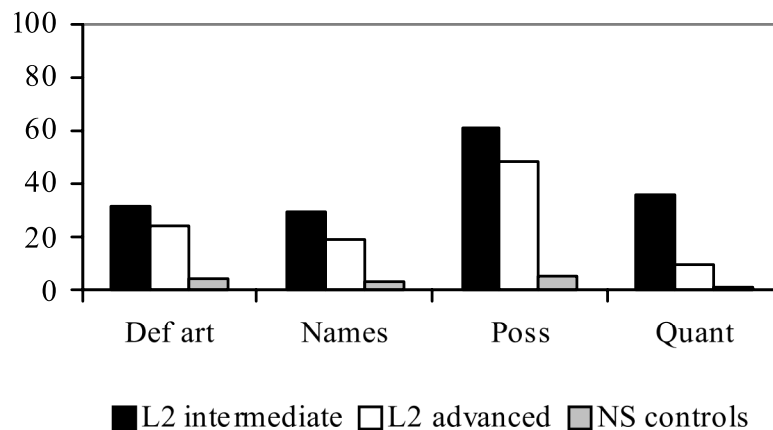


Figure 4. Ungrammatical positive existentials: mean acceptances (in %)

A 2 factor mixed ANOVA shows a significant main effect for group ($f(2, 39)=14.8, p<0.0001$), a significant main effect for sentence type ($f(3, 117)=13.5, p<0.000001$) and a significant interaction ($f(6, 117)=3.4, p<0.01$). Post hoc Tamhane's T2 tests reveal that native controls perform better than L2ers ($p<0.01$), while the two L2 groups perform similarly, with no significant difference between them. Paired t-tests show that acceptance of ungrammatical possessives is significantly higher than acceptance of the other ungrammatical conditions ($p<0.01$); differences between the other ungrammatical sentences are not significant. According to one factor repeated measures ANOVAs, native controls show no significant differences between the 4 types of ungrammatical positive existentials, while advanced L2ers accept ungrammatical possessives significantly more often than the other types ($p<0.05$); for the intermediate L2ers, the only significant difference is between ungrammatical possessives and proper names ($p<0.02$).

As for negative existentials (Figure 5), both L2 groups reject all four subtypes. A 2 factor mixed ANOVA shows a significant main effect for group ($f(2, 39)=13.4, p<0.0001$), no effect for sentence type ($f(2.8, 107.9)=1.9, p=0.1$) and no interaction ($f(5.5, 107.9)=0.5, p=0.8$). Post hoc Tamhane's T2 tests show that native controls perform better than L2ers ($p<0.02$), while the two L2 groups do not differ from each other.

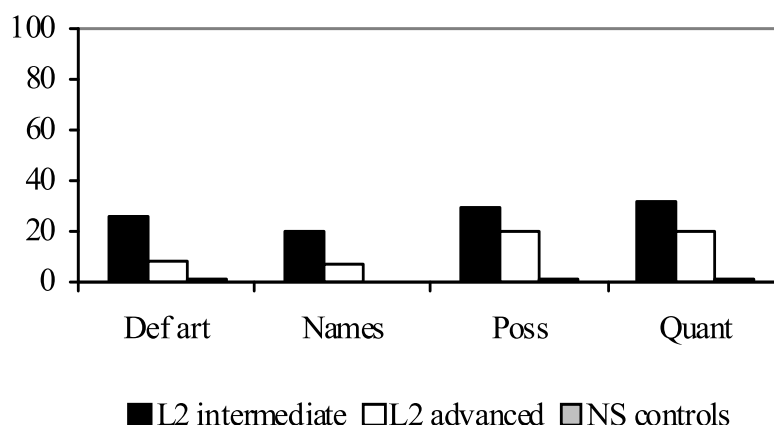


Figure 5. Ungrammatical negative existentials: mean acceptances (in %)

Comparing Figures 4 and 5, L2ers are better at rejecting possessive negative existentials, which are grammatical in the L1, than possessive positive existentials, which are ungrammatical ($p < 0.01$). There are no statistically significant differences in rejecting negative versus positive existentials across the other subtypes.

Conclusion

To summarize, we have found that L2ers at both proficiency levels differentiate between grammatical and ungrammatical cases of *there*-insertion, rejecting definite/strong DPs in positive existentials as well as in negative existentials, even though the latter are grammatical in the L1. In addition, performance on sentences which are not existential (list, deictic and other grammatical and ungrammatical items) suggests that accuracy on the DE does not reflect a general bias towards accepting all indefinites and rejecting all definites.

It has been suggested to us that properties of English *there*-insertion are instructed, with L2ers being taught that *there is a ...* is grammatical and *there is the ...* ungrammatical. However, in list and deictic contexts, our subjects accepted grammatical cases of *there is the ...*, suggesting that they had no general prohibition against definites with *there*. Furthermore, it is unlikely that instruction distinguishes between weak and strong determiners.

According to the FTFA hypothesis, evidence of transfer might have been expected, whereas our subjects showed no L1 effects. Where the L1 and L2 differ, as is the case for negative existentials containing definite DPs, there was no tendency to treat English like Russian. However, our subjects were of intermediate and advanced proficiency in English and it

could be that learners of lower proficiency would have performed differently. What is not yet clear to us is what property of the English input signals to Russian speakers that negative existentials work differently in the two languages.

The results from Russian-speakers reported here, including absence of L1 influence at higher levels of proficiency, are similar to those reported in White et al. (2009). That study used an earlier version of the same task. Results showed that intermediate and advanced Turkish-speaking English L2ers observed the DE in English; they rejected definite expressions in both positive and negative existentials, even though the latter are grammatical in Turkish, as they are in Russian. There are, however, some minor differences in performance across the two studies. As reported above, the Russian-speakers, at both proficiency levels, accepted possessives (which are strong) about 50% of the time in positive existentials, and also, to a lesser extent, in negative existentials. The advanced Turkish speakers, on the other hand, rejected the possessive cases, while the intermediates accepted them to a lesser extent than the Russian speakers. It remains unclear why there are differences between the two L1 groups for the possessives, or why possessives (in contrast to other definite expressions) are accepted at all.⁴

In conclusion, it appears that L2ers' achievements regarding definiteness have sometimes been underestimated. Our results suggest that subtle definiteness restrictions are acquirable, regardless of L1/L2 differences. Hence, we should be wary of taking previously reported problems in suppliance of surface morphology as indicative of deeper problems at the level of representation.

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⁴ One possible explanation is that, in English, possession can in fact be signified by means of weak DPs, such as *a book of mine*. Indeed, possessives in some languages alternate between strong and weak readings, as is the case for Turkish, where possessives occur in positive and negative existentials.

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