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Piloting a Dynamic Assessment Model: Russian Nominal Morphology as a Building Block for L2 Listening Development

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1. Introduction

Second language (L2) Russian research identifies listening comprehension as the least developed language ability among university students and points to the importance of listening instruction in Russian programs (e.g., Rifkin 2005; Comer 2012a; Isurin 2013). For example, Rifkin (2005, 11) states that students typically exhibit an "intermediate-low level of L2 listening proficiency" after completion of a 4-year Russian program. According to Isurin (2013, 39), the survey conducted among L2 Russian learners and instructors acknowledged "listening comprehension as the most problematic area in students' language proficiency in general." Comer (2012a) attributes poor listening ability to insufficient teaching materials and activities as well as inadequate exposure to authentic Russian listening input.

Another important branch of L2 Russian research has dealt with complex Russian inflectional and conjugational paradigms that exhibit numerous patterns, complicated by allomorphy, stress shifts, assimilations, and weakening. A number of studies have discussed the morphological richness of the Russian language regarding its acquisition, processing, and production of morphology by L2 learners and suggested paths for improvement of L2 instruction (e.g., Kempe and MacWhinney 1998; Sheen 2008). Russian textbooks for beginners, such as *Nachalo I* or *Golosa I*, present the basics of Russian nominal and verbal morphology to L2 learners with the hope that students will build their skills based on given prototypes. Intermediate textbooks, such as *Nachalo II*, *Golosa II*, and *V Puti*, offer a general grammatical overview of inflectional and conjugational systems. Russian introductory courses explain phonological features that sponsor morphological complexity, but often leave it up to students to retain and refresh the reasons for different types of inflectional variants,

conjugational paradigms, and patterns of allomorphy. Additionally, oral activities at the intermediate level are focused on the acquisition of new lexemes, syntactic structures, or intonation patterns and rarely target morphological complexities.

At the same time, L2 research reports on the difficulties encountered by native English learners while processing Russian inflectional morphology. For instance, Chrabaszcz and Gor (2014) conducted a study in which they exposed L2 learners to the listening tasks that involved the Russian hard/soft phonological contrast. The results of the study demonstrate that L2 listeners experienced the perception difficulty while processing phonological contrasts, for example, *балет* (ballet) – *болеть* (to be sick). This difficulty is due to learners' "unstable and unreliable perception of L2 phonological contrasts [that] renders words discriminated on the basis of these contrasts ambiguous and confusing" (447). In a similar study, Gor and Vdovina (2010) suggested that learners benefit greatly from explicit instruction on Russian morphology. The findings of their study showed that students who had structural formal instruction on morphology outperformed those who were exposed to abundant native input but lacked explicit teaching.

To effectively address L2 learners' difficulties in comprehending Russian oral productions, it is important to consider precisely which language features might impede overall listening comprehension. Therefore, the present study is motivated by research involving the contribution of both L2 listening comprehension and the perception of Russian inflectional morphology. The study examined the effects of the Dynamic Assessment (DA) approach on listening comprehension development and piloted a set of activities to facilitate the development of listening ability and the acquisition of Russian inflectional morphology. This longitudinal study represents a first attempt to implement a DA model into third and fourth semester intermediate Russian courses.

The goal of this two-semester investigation was twofold: the development of listening ability and the acquisition of inflectional morphology. However, it should be emphasized that, due to space constraints, the present paper is limited to the use of DA to enhance learners' comprehension of Russian morphophonology in oral productions, as one of the building blocks for successful listening comprehension.

2. Theoretical background

2.1. Dynamic assessment

DA is a pedagogical approach based on the theoretical concept of Vygotsky's Zone of Proximal Development (ZPD). DA integrates mediation and assessment into a unified activity in which mediation should be sensitive to learners' ZPD, and it is recognized as the resource of development. According to Vygotsky, the development of the child (or the learner) involves the appropriation of humans' cultural experience in collaboration with adults (or teachers) and includes two levels, i.e., actual level and potential level of development. The actual level presumes the child's independent problem-solving and corresponds to the zone of actual development. The potential level of development presupposes adult–child collaboration during problem-solving activities. These learning activities are intended to reveal the child's abilities that are in the process of maturation. The potential level is associated with the ZPD and is understood by Vygotsky as

> the distance between the actual developmental level as determined by independent problem-solving and the level of potential development as determined by problem-solving under adult guidance or in collaboration with more capable peers. (Vygotsky 1978, 86)

For Vygotsky, when exploring what the child (or the learner) can do independently, one explores the previous or actual level of child's development, whereas studying what the child is able to do with a more-skilled other (e.g., parents, peers, teachers) allows one to determine the child's (or the learner's) potential development. Therefore, what the child can do now only under the guidance of more skilled others and tomorrow without them comprises the ZPD, which emerges when the child (or the learner) is engaged in a learning activity (Leontiev 2001).

Importantly, Vygotsky (1997) claimed that development is not always smooth and straightforward. It can occur at changing rates and can include not only progressive but also regressive moves. With regard to regression in development (including L2 development), the following view should be considered: If, as Vygotsky insists, development entails dialectical reorganization of mental processes it ought to be virtually impossible for a normal (e.g. non-brain damaged or non-psychotic) individual to return fully to a previous developmental stage (Van der

Veer & Valsiner, 1991, p. 176). What should be possible, however, is for the individual to move from a higher to a lower stage, but this "would not constitute retracing of a previously traversed path in development" (ibid); rather it would represent a partial unraveling of the higher functional system (Lantolf and Aljaafreh 1995, 621)

DA is a relatively new approach in the field of L2 assessment. It was introduced to the L2 research and education community by Lantolf and Poehner (2004). In their article, they provided the following definition of DA:

> Dynamic assessment integrates assessment and instruction into a seamless, unified activity aimed at promoting learner development through appropriate forms of mediation that are sensitive to the individual's (or in some cases a group's) current abilities. In essence, DA is a procedure for simultaneously assessing and promoting development that takes account of the individual's (or group's) zone of proximal development [and his/her responsiveness to mediation]. (Lantolf and Poehner 2004, 50)

Such a conceptualization of DA emphasizes a contrast between traditional assessment, which focuses on already-matured abilities, and DA, which aims at promoting functions maturing in the ZPD and in so doing prioritizes learners' future development.

According to Lantolf and Poehner (2004), DA consists of two types: interventionist and interactionist. The interventionist type of DA includes intervention from the examiner during the test procedure, but it is a more formal and standardized approach. During interventionist DA, the examinees are given instruction item by item and if they cannot solve the item correctly, they are given prefabricated hints. Interactionist DA involves mediation emerging from interactions between examiner and examinee. During interactionist DA, leading questions, hints, or prompts are not planned in advance; instead, they emerge from mediated dialogue (or collaborative interaction) between the examiner and the examinee in which the examiner reacts to the examinee's needs and constantly recalibrates his or her mediation. It is important to note that within DA, the examiner–examinee relationship is based on the idea of teaching and helping; for example, learners are allowed to pose questions and receive immediate feedback. Within both formats of DA,

the instruction may be given in individual or group settings (Poehner and Lantolf 2013).

2.2. Interactionist DA

A number of interactionist DA studies investigated the DA framework to capture L2 development in one-on-one settings. DA has been reported as an effective tool for revealing the source of L2 learner difficulties while helping learners to overcome these difficulties. For example, Antón (2009) introduced a study that she conducted in 2003. This study pioneered the effectiveness of a DA procedure to test language proficiency of advanced L2 Spanish learners. Poehner (2005) adopted an interactionist DA procedure to enhance the use of verbal aspects (passé composé and imparfait) among advanced L2 French university students. Ableeva (2010) used an interactionist DA to develop and promote L2 listening ability among intermediate French university students. In her study, students were asked to listen to a series of increasingly complex authentic French texts and to recall them independently in English. The mediator helped the students whenever they encountered problems recalling specific portions of a text. Through learners' responses to mediation, Ableeva determined the specific nature of their problems and assisted them to overcome the problems. The study results showed that grammatical and phonological problems were more salient than what previous listening comprehension research had argued.

Ableeva and Arshavskaya (in preparation) conducted an interactionist DA study pertinent to L2 Russian research and instruction. They investigated the capacity of DA to identify the source of problems with comprehending audio texts among L2 Russian intermediate students. During one-on-one sessions, Ableeva and Arshavskaya observed that in some cases, learners' inability to distinguish appropriately nominal endings resulted in text miscomprehension. The following excerpt from a DA session exemplifies this observation:

> **Extract from the audio text.** The speaker said:
> *Аня думает, что профессия учителя трудная, но ей нравится эта профессия.*
> 'Anya thinks that the profession of a teacher is difficult, but she likes this profession.'

After listening to the text twice, a participant in the study recalled the above extract as follows: "And umh . . . I caught that she thought one of her professors was difficult and she didn't like him." The student's recall demonstrates his failure to recognize a word he already knew well, i.e., *профессия* 'profession.' Even though the noun *профессия* is a cognate and was repeated twice in this audio extract, the student's comprehension resulted in minimal understanding of the excerpt. Through teacher-student DA-based interactions that occurred later in this session, the researchers revealed that the source of students' poor listening performance resided in his inability to discriminate appropriately the endings, and instead of *професс**ия*** he heard *профессо**р***. In fact, the findings from Ableeva and Arshavskya's study provided the impetus for the present DA project.

2.3. Interventionist DA

To date, the most representative L2 study that has explored interventionist DA is the research project *Computerized Dynamic Assessment of Language Proficiency in French, Chinese and Russian* (**https:// calper.la.psu.edu/content/coda**). It is beyond the scope of this article to provide a full discussion of this project (for more details, see Poehner and Lantolf 2013). This project developed online tests of listening and reading comprehension in three languages for intermediate L2 learners. The tests can be administered to an individual learner or to a group of learners.

Each test item includes five multiple-choice options to assess learners' independent performance and graduated assistance to observe learners' mediated performance. Graduated assistance consists of three prescribed prompts that provide learners first with implicit prompts and then gradually with more explicit prompts. This type of gradually mediated intervention allows more fine-grained diagnoses of learner abilities and allows instructors to capture through computer-mediated prompts how much support each individual learner needs to complete a reading or a listening test. Each test includes near-transfer tasks.

2.4. Transfer tasks

Transfer tasks are one of the most salient features of DA and have been used in several L2 studies (for more details on transfer assessments in

L2 settings, see Poehner 2005, Ableeva 2010, Poehner and Lantolf 2013, and section 3 of the present paper). Poehner and Lantolf described transfer tasks as follows:

> Transfer holds that introducing assessment tasks that follow the same principles as earlier ones but are more difficult or complex can offer insights whether learners have internalized mediation previously offered. (2013, 17)

The purpose of transfer tasks is to determine the extent to which learners are able to extend the abilities they developed during mediation to similar activities. In other words, to assess development fully, one must incorporate the following three pieces of information: the person's independent performance, the person's mediated performance, and the person's ability to transfer what is gained through mediation to other similar tasks.

The "multiple transfers" approach originates from DA psychology research and was proposed by the group of Brown and her colleagues, who viewed several transfer sessions as a highly desirable design feature of the DA framework. For example, Campione, Brown, Ferrera, and Bryant (1984) used a set of three transfer sessions conducted directly after the post-test. The set of transfer sessions included: near transfer, far transfer and very far transfer tasks. To assess the "near transfer," the test-takers are given problems that are based on the same principles as the original problems but are presented in new combinations. To test "far transfer" and "very far transfer," test-takers are invited to solve problems similar to the original but more complex.

3. The study

This two-semester study was carried out in 2016–2017 at a large public university in the southeastern United States. The project developed and piloted a DA-based model for L2 Russian instruction and assessment and investigated how to embed the DA model into intermediate teaching resources and a language course. The focus of the study was on the development of listening comprehension and the acquisition of Russian morphophonology among intermediate university students. The areas of Russian morphology selected for this study were nominal inflection, verbal conjugation, stress shifts, and allomorphy.

3.1. Participants

The participants were 16 intermediate students enrolled in a third semester Russian course[1]. Four students who self-evaluated their proficiency in Russian as below average volunteered to participate in all experimental sessions of the study. These enrichment learners are marked as EL 1–4. The control group consisted of 12 students, identified below as CG 1–12. Student numbers were assigned randomly in no particular order and do not bear any significance. All participants were native speakers of English, aged between 18 and 21 years. The experimental group consisted of 4 female students and the control group was a mixed-gender group.

3.2. Materials

The materials developed in this study are based on Chapters 1–8 of *V Puti: Russian Grammar in Context* (Kagan, Miller, and Kudyma 2005). As part of the study, we developed sixteen pseudo-authentic audio texts (two per chapter) that stylistically parallel the texts from *V Puti*. The topic of each text is related to the topic of each chapter and is based on grammar and vocabulary materials of each chapter. In addition, the study created eight sets of audio phonological exercises for Chapters 1–8. These exercises were used during the enrichment program of the study.

3.3. Research design and methodology

The DA model piloted in this study adopted the methodological suggestions advocated by Poehner and Lantolf (2013). The computerized DA instrument described by Poehner and Lantolf (2013, 325) follows an interventionist approach to DA that privileges "scripted prompts arranged hierarchically and administered sequentially." The advantage of this approach regarding its implementation into a language course is that "it enhances efficiency in terms of the number of students that can be simultaneously assessed" (2013, 325), in contrast to the interactionist DA approach, which is usually employed in one-on-one settings.

The research design of the present study included three stages for each of eight chapters: (1) the pre-test, (2) the enrichment program, and (3) the post-test (near transfer assessment). The pre-test included two diagnostic assessments: one listening assessment to check audio-text comprehension and one assessment designed to test a morphological

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[1] One of the authors of the study taught this course.

item. The pre-test assessments did not include a DA procedure; the pre-test involved only independent performance of participants in order to diagnose their ability to understand the audio-texts and the acquisition of a morphology item.

The enrichment program involved one-on-one tutoring sessions and was focused on learners' morphology problem areas, which were identified during the pre-test stage. To cope with the selected Russian morphophonological phenomena, the study developed a series of exercises, which were used during the enrichment program. These exercises were divided into two parts: those that offer listening and production assignments on the level of a word and those that provide training on the level of phrases and sentences. Only experimental learners participated in the enrichment program.

The post-test included two transfer assessments: one listening assessment to check text comprehension and one assessment of a morphological item in order to track the extent to which experimental learners could internalize and extend the mediation provided throughout the enrichment program. The post-test involved independent performance of participants and mediated (or DA-based) performance in cases where the independent performance was not successful.

3.4. Procedure and DA model

The sessions for each of the eight chapters followed the same design procedure and format and included three stages:

Stage 1: Diagnostic assessment (independent performance, no DA at this stage)

> **Stage 1a.** Listening assessment: comprehensive listening activity based on Text 1 (a pseudo-authentic audio-text connected to the topic of a given chapter).
>
> **Stage 1b.** Morphology assessment: discriminative listening activity based on Text 1 (a morphophonology exercise related to the grammar of a given chapter).

Stage 2: Enrichment program

> **Stage 2a.** Level of a word: exercises.
>
> **Stage 2b.** Level of phrases and sentences: exercises.

Stage 3: Near-Transfer Assessment

> *Independent performance*

Stage 3a. Transfer listening assessment: comprehensive listening activity based onText 2 (a pseudo-authentic audio-text connected to the topic of a given chapter, similar to Text 1 but not the same).

Stage 3b. Transfer morphology assessment: discriminative listening activity based on Text 2 (a morphophonology exercise related to the grammar of a given chapter).

Mediated performance

Stage 3c. DA prompts (only if needed)

Stage 3d. Explanation (only if needed)

Mediated performance included a menu of three DA prompts, arranged from the most implicit to the most explicit:

Prompt 1: Offering a choice based on three options (providing learners with three options, one of which includes the key morphophonology item)

Prompt 2: Offering a choice based on two options (providing learners with two options, one of which includes the key morphophonology item)

Prompt 3: Pointing to the mistake(s) and asking learners to correct and explain mistake(s) on their own

Stage 3d (Prompt 4) involved the instructor's explicit explanation if Prompts 1–3 did not result in a correct answer. The graphic presentation of the DA model is summarized in Table 1.

Table 1. The DA model.

Pre-test	Enrichment Program	Post-test	DA Prompts
Independent Performance		Independent Performance	Mediated Performance DA
Stage 1a	Stage 2a	Stage 3a	Stage 3c
Stage 1b	Stage 2b	Stage 3b	Stage 3d

The control group participated only in stage 1b and stage 3b, whereas the experimental group took part in all stages. To illustrate the use of the DA model, this paper considers the assessments of genitive

forms developed for chapter 4 of *V Puti*. Given space constraints, we focus our discussion here on stages 1b, 3b and 3c.

4. Results

4.1. Control group and experimental group: Independent performance

During the stage 1b diagnostic assessment, participants were asked to listen to Text 1 and write down the omitted endings that they heard. This diagnostic assignment targeted genitive forms of nouns, a grammar topic examined in Chapter 4 of *V Puti*. Text 1 included 16 omitted genitive endings.

Figure 1. Results of EL1–4 and CG 1–12 on stage 1b diagnostic assessment: discriminative listening activity based on Text 1.
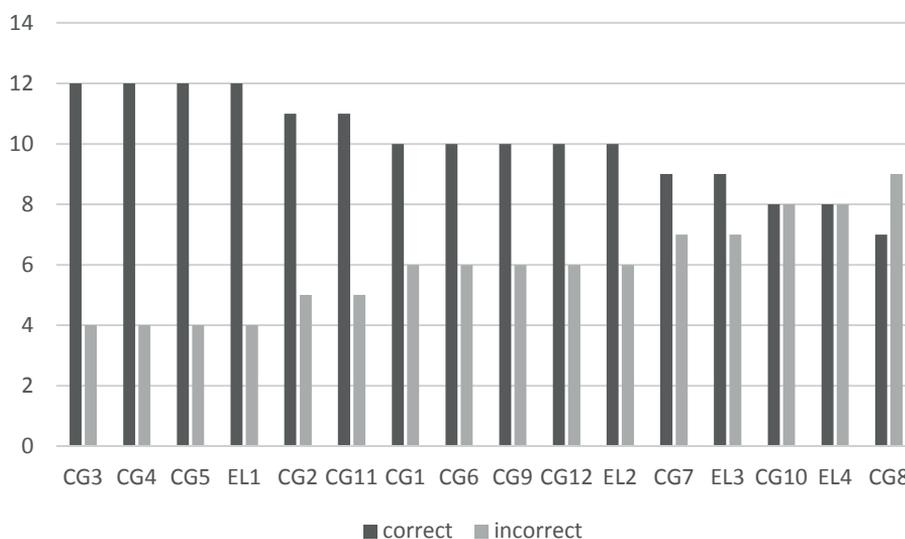

Figure 1 demonstrates that neither the ELs nor the CGs were able to complete this task without errors. Furthermore, the best result achieved at this stage was 75% (12 correct answers; achieved by CG3, CG4, CG5, and EL1)—a score generally interpreted as barely satisfactory performance. CG8, CG10, and EL4 achieved the lowest scores: CG8 scored 44% (9 correct answers) and CG10 and EL4 scored 50% (8 correct answers). The average score of all the ELs and the CGs was 63%. Thus, the stage 1b results demonstrated that nearly a third of participants completed the

diagnostic assignment unsuccessfully and with great difficulties. Figure 2 represents the types of nominal constructions proposed to students during the pre-test, while completing the discriminative listening activity based on Text 1.

*Figure 2. Errors by nominal phrases in results of EL1–4 and CG1–12 on stage 1b diagnostic assessment (symbol * indicates the form being analyzed below).*
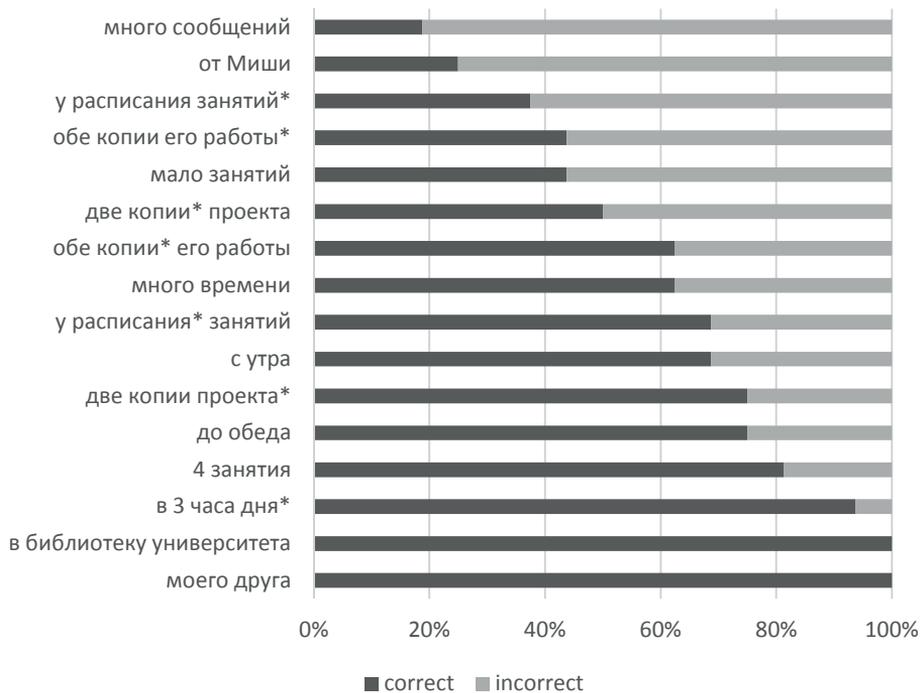

Figure 2 presents phrases, not as they appeared in Text 1, but based on the number of errors that were encountered. Figure 2 demonstrates that genitive singular for the hard-stem masculine nouns was the least problematic, even in those instances where the genitive form complemented another phrase. For example, students successfully processed the phrase в *библиотеку университета* 'to the library of the university.' The success rate for this phrase was 100%. However, students were less successful comprehending these forms when they were part of a prepositional construction. Students exhibited a lower success rate with the constructions *с утра* 'from the morning' and *до обеда* 'until lunch':

69% and 75%, respectively. The difficulty was not with the genitive form itself, but rather with prepositions, which are typically not stressed in Russian and are pronounced together with their complements. Our data show that students did not suggest any variants for the ending in these cases but simply left them blank. It is probable that the participants were having problems comprehending these forms even though they had a written version of Text 1 in front of them.

The instance of *обе копии его работы* 'both copies of his work' is also noteworthy. The success rate for this phrase was only 44%, even though *работа* 'work' is a hard-stem feminine noun that students learn as beginners. Two factors complicate the comprehension of this phrase. On the one hand, *его работы* 'of his work' is a complement for another nominal construction. On the other hand, its genitive ending is unstressed and, as a result, a listener does not hear [i]. In unstressed positions, the high vowel /i/, which can be written in Russian as *и* or *ы*, is slightly lowered to [ɪ] (Comrie and Corbett 2006). The discussion of stressed and unstressed vowels generally occurs at the very beginning of Russian courses for beginners (Lubensky et al. 2002; Robin et al. 2012a). These discussions are focused on unstressed /a/, /o/, and /e/, stating that unstressed vowels are reduced quantitatively and qualitatively and tend to merge, but they do not explain unstressed /i/. Most of the exercises that aim to train students' production and listening comprehension of unstressed vowels offer practice involving isolated words and do not expose students to phrases, sentences, or texts (cf. Robin et al. 2012b). The students' erroneous results in our study demonstrate that students hesitated in their selection of the ending for *его работы* 'of his work,' trying to choose between *e*, *a*, and *й*. This hesitation demonstrates that intermediate students might be aware of differences between stressed and unstressed vowels but lack practice that would help them succeed in listening comprehension in these complex cases.

Figure 2 shows that most of the errors involved soft-stem feminine and neuter nouns, such as *копия* 'a copy' and *занятие* 'a class.' The genitive singular forms *копии* (of a copy), *занятия* 'of a class' and the genitive plural forms *занятий* 'of classes' and *сообщений* 'of messages' accounted for the largest number of errors in our dataset: as shown in Figure 2, students had only a 19% success rate (3 correct answers) with the phrase *много сообщений* 'many messages.' In addition to the unstressed vowels in the ending, these

phrases contain a combination of vowels (*-ии*, *-ия*) or of a vowel and a glide (*-ий*). Russian vowels, which are pronounced as a separate nucleus when combined and do not create a diphthong that native English speakers expect based on phonetic properties of their mother tongue.

Our data shows that the mistakes the participants made consisted of either suggesting different vowels in place of an expected glide or erroneously believing that they heard a glide instead of a vowel. For example, for *много сообщений* 'many messages,' students suggested the incorrect variants *много сообщен**ия***, *много сообщен**ие***, and *много сообщен**ии***, and for *обе копии* 'both copies,' they suggested *обе копий*. The incorrect variant *много сообщен**ия*** could involve a grammatical error where a student failed to apply the rule for usage of the genitive case after quantitative adverbs, but we cannot offer the same explanation for the rest of the examples. Furthermore, our data presents numerous instances when participants made mistakes thinking that they heard a single vowel instead of a combination of sounds. For example, participants offered the form копи for *копии* 'copies' and *сообщение* for *сообщений* 'messages.'

The low score for the phrase *от Миши* 'from Misha' should be attributed to interlinguistic orthography interference in addition to problems with the unstressed ending. It is common for L2 Russian learners to confuse the English letter *e*, which often spells [i:] as in *see*, and the Russian letter *e*, which corresponds to [ɛ]. Several participants offered the erroneous form *от Мише*, showing that this obstacle remained even at the intermediate level.

Following stage 1b, the CGs received no enrichment treatment whereas the ELs participated in two sessions of the enrichment program offered during stages 2a and 2b.[2] Both groups participated in regular classroom activities covered in chapter 4.

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[2] Stage 2a begins with the explicit explanation of differences between stressed and unstressed vowels and the specifics of pronunciation of vowel+vowel and vowel+glide combinations. The exercises range from listening assignments where students listened to and repeated separate nominal nominative and genitive forms, paying attention to the pronunciation of endings, to discriminative tasks where students had to select only the form(s) that they heard from the suggested list. Stage 2b also offered activities where students had an opportunity to compare phrases that share lexemes but differ in forms (e.g., не печатал сообщения 'did not type a message' and не печатал сообщений 'did not type messages') and to choose the construction that they heard. At the end of stage 2b, students worked with familiar exercises that required them to fill in the blanks in passages for forms that they heard.

During the stage 3b transfer morphology assessment, participants were asked to listen to Text 2 and write down the genitive endings that they heard. Text 2 was a continuation of the story in Text 1 and contained similar lexemes and expressions. The total number of omitted endings in Text 2 was 16, the same number as in Text 1. Figure 3 shows the result for the enrichment learners and the control group for stage 3b.

Figure 3. Results of EL1–4 and CG 1–12 on stage 3b Transfer morphology assessment: discriminative listening activity based on Text 2.
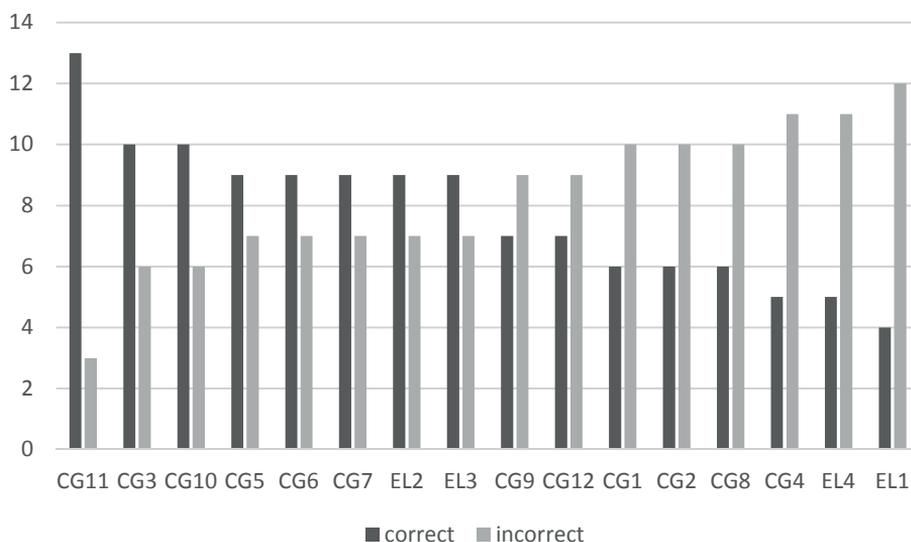

We should specify here that while the identification EL1–4 in Figure 3 and Figure 1 correlate to the same students, the numbers used for the tags referring to the participants from the control group do not correlate to the same students. For example, the tag CG11 in Figure 1 and the tag CG11 in Figure 3 do not refer to the same student. Students in the control group agreed to take part in this project only anonymously. For this reason, we have no way of tracking the progress of learners from the control group. But Figure 3 still carries important information for our study since it documents a holistic representation of the progress of students who had no exposure to enrichment exercises.

Figure 3 demonstrates that once again neither EL nor CG students were able to complete the assignment successfully. Moreover, the overall

results worsened. Even though the highest score (CG11) was 81% (13 correct answers), the lowest (EL1) dropped to 25% (only 4 correct answers). The scores averaged 49%. EL1 displayed a drastic change in scores: during stage 1b this student was among the leaders attaining 75%, but during stage 3b EL1 showed the worst results among ELs and CGs. EL2, EL3, and EL4 also showed a decline. The types of nominal constructions used in Text 2 and the results of the diagnostic assessment on stage 3b are summarized in Figure 4.

*Figure 4. Errors by nominal phrases in results of EL1–4 and CG1–12 on stage 3b diagnostic assessment: discriminative listening activity based on Text 2 (symbol * indicates the form being analyzed).*
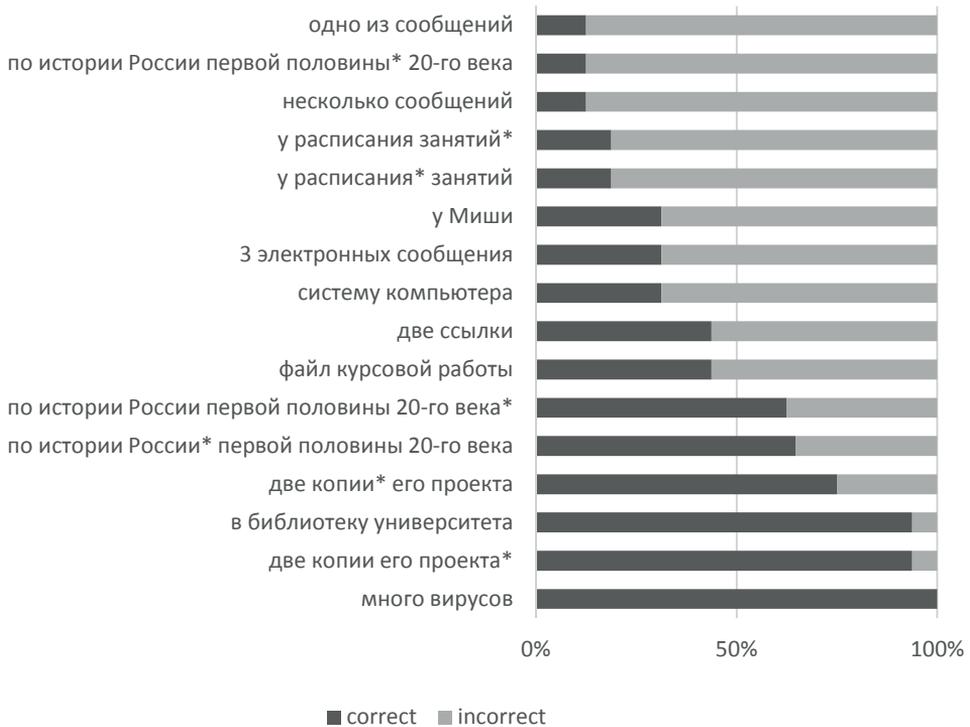
The situation is similar to the one portrayed in Figure 2. The genitive forms of hard-stem masculine nouns remained less problematic while soft-stem feminine and neuter nouns continued to cause problems for the listening comprehension of L2 Russian learners.

One possible explanation for this abrupt drop in learners' ability

to discriminate the genitive endings during stage 3b can be illustrated by findings from L2 reading research. Comer (2012b, 239) asserted that L2 Russian advanced "readers can generally parse adnominal genitive phrases when they contain just two nouns and the vocabulary is known or suggestive." It should be noted that while Text 1 (the pre-test) contained a number of phrases with multiple genitive forms, e.g., *две копии его проекта* 'two copies of the project,' Text 2 (the post-test: transfer) included longer chains of genitives, e.g., *по истории России первой половины 20 века* 'in the history of Russia of the first half of the 20th century.'

Another possible explanation for such low performance is the fact that stage 3b included the transfer task, which was based on a more complex text. L2 researchers have previously commented on the low performance of participants during near-transfer tasks (e.g., Poehner and Lantolf 2013). Further research is needed to examine students' performance throughout consecutive assignments that could determine how students perform during multiple transfer sessions.

4.2. Enrichment learners: Independent and mediated performance
Mediated performance occurred during stage 3c of chapter 4 and involved only three experimental learners: EL1, EL2, and EL3.[3] During stage 3c, EL1–3 were offered Prompt 1, which asked them to listen to Text 2 again and to select an appropriate ending from the three suggested variants. If participants were not completely successful in completing this task, they were offered Prompt 2, but this time they had to select a fitting ending from two variants. If the students continued to experience difficulties, stage 3d provided explicit explanations of a problematic case with a review of the theoretical material under the mediated assistance of the instructor. Figure 5 portrays EL1–3's raw scores for their independent and mediated performance during the post-test assessments at stages 3b and 3c.

Figure 5 demonstrates differences in results between independent performance (the actual level of development) during stage 3b and mediated performance (the potential level of development) during stage 3c. It should be remembered that EL1–3 completed the enrichment program activities before stage 3b.

The analysis of answers provided by EL1–3 shows that the more

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[3] EL4 could not participate in stages 3c and 3d. The demands of her courses at the end of the semester prevented EL4 from participating in the mediated portion of chapter 4

complex nature of the transfer task (Text 2) triggered a drop in learners' correct answers during stage 3b, as compared to stage 1b. However, the increase in correct answers during mediated assistance involving Prompt 1 and Prompt 2 provides evidence of the students' maturing ability to cope with a more challenging listening task based on a text that contained long chains of genitive forms.

With regard to stage 3c, the number of correct answers provided by EL1 demonstrates that she addressed the difficulties brought to the surface during stage 3b: she returned to the leading position already after Prompt 1 and improved her result even further after Prompt 2. Interestingly, the analysis of EL1's data shows one persistent error throughout her three attempts to complete the task. In stage 3b (independent performance), she wrote *первой половине* instead of *первой половины* 'of the first half.' Despite the choices offered during stage 3c (mediated performance), Prompt 1 (*половин е /а /ы*), and Prompt 2 (*половин е /ы*), she delivered the same incorrect answer, i.e., she selected the ending '**е**' in both cases.

Figure 5. Performance of EL1–3 on stage 3b and stage 3c.

■ correct answers: Stage 3b (independent performance)

■ correct answers: Stage 3c (mediated performance: Prompt 1)

■ correct answers: Stage 3c (mediated performance: Prompt 2)
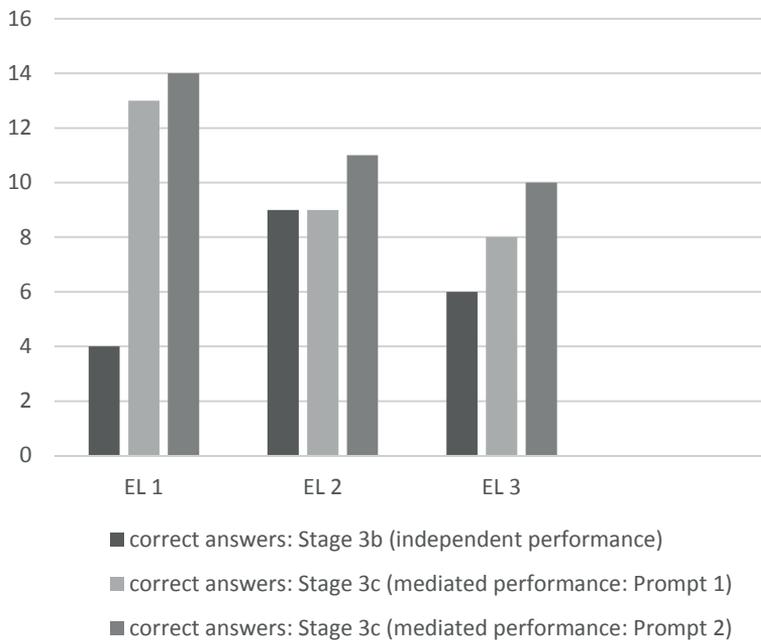
The progress was not straightforward for EL2 and EL3. The analysis of errors made by EL2 reveals her inability to cope fully with the transfer task. Even though EL2 had the same number of correct (9) and incorrect (7) answers at stage 3b (independent performance) and stage 3c (Prompt 1), she made different errors during these two attempts to complete the task. For example, she wrote a correct ending for *у расписания занятий* 'near the schedule of classes' during stage 3b. However, when offered a choice during Prompt 1 (*занят **ии** / **ий** / **ия***) and Prompt 2 (*занят **ии** / **ий***), she selected '***ии***' in both attempts. In addition, she consistently provided incorrect answers for the same ending in *несколько сообщений* 'several messages' and *одно из сообщений* 'one of the messages' during stages 3b and 3c. The examination of EL3's performance demonstrates her struggle to discriminate the genitive forms for soft-stem feminine and neuter nouns where one has to distinguish between combinations of vowels and vowel+glide. Stages 3b and 3c provide evidence of consistent errors in EL3's performance in those instances where she had to distinguish '*ий*' from '*ия*' or '*ие*.'

All ELs exhibited almost identical difficulties during their mediated performance. A possible explanation for this situation is that the enrichment program in this study was limited to only two thirty-minute sessions. The constant errors with the same endings pointed to the fact that the learners still required instructional assistance and more practice to discriminate the endings that contain groups of vowels with a glide in listening tasks. It should be also highlighted here that the development of some language features (e.g., genitive forms) is not even and can take more time and instruction than other language features.

5. Limitations and conclusion

While this study offers empirically based insights into the development of L2 learners to comprehend nominal inflections in audio texts, it also faces several limitations. First, the number of control and experimental learners was too small to possibly generalize beyond the context of this two-semester project. However, the small number of participants did not negate the importance of listening comprehension in L2 teaching and learning. Second, this study was further limited by the duration of the enrichment program, which included only two sessions and prevented the experimental learners from getting expanded listening

practice. Finally, the study was limited by the number of transfer tasks to track the development of learners' ability to discriminate morphological features during listening tasks.

Notwithstanding, the results of the study demonstrate that intermediate learners from the control and the experimental group encountered problems in understanding the genitive phrases during independent performance. However, the findings show that although the experimental learners had difficulties in recognizing the genitive forms independently, they were able to attain a better result through mediation, that is, through the prompts and the mediated guidance of the instructor. Even though the experimental learners still required mediation, their responsiveness to mediated assistance demonstrates that their capacity to discriminate the genitive endings while listening to a text, was in the process of maturing and was in their ZPD. From the perspective of Vygotsky's theory, responsiveness to mediation is an important indicator of ongoing development and is indispensable for understanding the learner's future developmental trajectory.

Based on this pilot study, we conclude that the data obtained throughout learners' independent and mediated performance provide clues for possible paths of development in language acquisition and calls for further research that would investigate mediated performance of L2 Russian learners, gathering data from a larger set of participants.

Appendix

Listening materials (audio texts)

Глава 4. WWW. Всемирная паутина

Text 1 (Pre-test: Diagnostic assessment)	Text 2 (Post-test: Transfer assessment)
Сегодня утром, когда я открыла свою электронную почту, то увидела там много сообщений от Миши, моего друга. Он прислал мне эти сообщения в 7 часов утра. Миша написал, что у него завис	*Итак, в 3 часа дня я пошла в библиотеку университета и встретилась с Мишей у расписания занятий, чтобы отдать ему две копии его проекта. Его проект - это*

компьютер и он не может распечатать свой проект. Ему надо сдать проект сегодня в 3 часа дн*я*, а у него с утр*а* и до обед*а* будет 4 занят*ия* в университете, и он просит меня помочь распечатать две коп*ии* проект*а* в библиотеке.

Мне кажется, что я смогу помочь Мише, потому что у меня сегодня мало занят*ий* и у меня будет много времен*и*, чтобы распечатать его проект. Сначала я пойду в библиотеку университет*а*, а потом встречусь с Мишей в 3 часа у расписан*ия* занят*ий* и отдам ему обе коп*ии* его работы. [16 items]

курсовая работа по истории Росс*ии* первой половин*ы* 20 век*а*. Когда я увидела Мишу, я его не узнала. Он был очень расстроен. Он сказал, что у него всё еще есть проблемы с компьютером. После того как утром компьютер завис, Миша перезагрузил компьютер. А когда он его включил опять, то увидел, что файл курсовой работ*ы* не сохранился. Еще он увидел на мониторе несколько сообщен*ий* о том, что в компьютере много вирус*ов*. Тут он вспомнил, что вчера получил 3 странных электронных сообщен*ия* на свой аккаунт в Рамблере и открыл одно из сообщен*ий*. В сообщении было две ссылк*и*, он открыл эти ссылки… И вот после этого-то у Миш*и* и завис компьютер, и теперь, наверное, надо будет менять операционную систему компьютер*а*. [16 items]

Excerpts from the materials used during Stage 3.

Stage 3b. Independent Performance
Listen to the text again and write down the ending that you hear.
Итак, в 3 часа дня я пошла в библиотеку университет _____ и встретилась с Мишей у расписан_____ занят _____, чтобы отдать ему две коп _____ его проект _____.

Stage 3c. Mediated Performance
Prompt 1 (Implicit). Listen to the text again, and select the ending that you hear

*Итак, в 3 часа дня я пошла в библиотеку университет **а** / **ов** / **о** и встретилась с Мишей у расписан **ия** / **ие** / **ий** занят **ии** / **ий** / **ия**, чтобы отдать ему две коп **ии** / **ий** / **ия** его проект **ов** /**а** / **у** .*

Prompt 2 (Less implicit). Listen to the text again and circle the ending that you hear.
*Итак, в 3 часа дня я пошла в библиотеку университет **а** / **ов** и встретилась с Мишей у расписан **ия** / **ие** занят **ии** / **ий**, чтобы отдать ему две коп **ии** / **ий** его проект **ов** / **а**.*

Prompt 3 (More explicit). Listen to the text again together with a student and point out the errors. Ask a student to correct and explain the indicated mistakes independently.

Stage 3d. Mediated Performance (instructor's explicit explanations)
Prompt 4 (Explicit). If a student is not able to correct a mistake independently, provide correct answers and explanations.

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