Revitalizing the Russian of a Heritage Speaker

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Revitalizing the Russian of a Heritage Speaker

Aaron Jordan

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Arts

Jeffrey Parker, Chair
Dan Dewey
Jennifer Bown

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ABSTRACT

Revitalizing the Russian of a Heritage Speaker

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Master of Arts

This study presents a linguistic profile of a heritage speaker of Russian and recounts the efforts to revitalize his Russian after he had nearly stopped speaking it. The study was conducted over the course of almost two years, starting when the subject was twelve years old and ending when he was fourteen. Although this study found that the subject displayed many of the linguistic features typical of heritage speakers, the subject’s Russian had suffered less attrition than is common for heritage speakers of Russian in the United States. This study presents its linguistic findings under the rubrics of phonology, morphosyntax, and semantics/pragmatics. This study also describes the pedagogical efforts to improve the subject’s reading, writing, listening, and speaking skills in Russian. Finally, this study includes some reflections on the psychological factors that influenced the methodology and outcome.

Keywords: heritage speakers, Russian, attrition, revitalization
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Chapter 1: Introduction

1.1 Background

My son Thomas is a heritage speaker of Russian. “A heritage speaker is a bilingual who grew up hearing and possibly speaking an immigrant or minority language in the family or home and who has been dominant in the majority language of the wider community since early childhood” (Polinsky 2011: 306). Thomas was born and raised in the United States, but he spoke only Russian for the first three years of his life and learned English while in pre-school when he was three and four. Russian remained his dominant language for those two years, but during his kindergarten year, when he was five, English became his stronger language.

Thereafter he started to resist speaking Russian. My wife and I overcame this resistance for a while by taking him on several trips to Russia over the ensuing years, the last one occurring when he was eleven. At the age of twelve, however, Thomas was using Russian noticeably less and less, and it seemed that he might be in danger of losing his Russian entirely.

These fears became acute at the end of 2019 and the beginning of 2020. By that time Thomas was almost never saying anything in Russian, and when our family read from the Russian Book of Mormon every evening, Thomas often felt uncertain about where to place the stress in Russian words. His reluctance to have me or my wife hear his struggles in Russian led him to mumble almost inaudibly when his turn came to read. Rarely did I hear him say anything coherent in Russian anymore, and I wondered if he was even capable of doing so.

For my master’s thesis project, I decided to evaluate the state of his Russian and to revitalize it, if necessary. My primary research question is this: what is the overall state of Thomas’s Russian? I want to create a linguistic profile of the features of his Russian, and I will
examine this primary question from three angles: phonology, morphosyntax, and semantics / pragmatics.

My secondary research question is: how can we revitalize his Russian? I undertook to help him with his reading, writing, listening, and speaking, the four basic skill areas of language proficiency (see Shrum & Glisan 2016: 51).

I hypothesize that his Russian will display some of the problems typical of heritage speakers of Russian. Regarding phonology, I hypothesize that he might show problems with pronouncing palatalized consonants, especially at the end of words. Regarding morphosyntax, I hypothesize that he will likely have problems with declensions (cases) and with verbal aspect. As for semantics and pragmatics, I hypothesize that his vocabulary and diction will show some problems.

As for revitalization, I hypothesize that one-on-one tutoring at home will help him to improve his Russian. More specifically, I hypothesize that reading will be of particular help to him in improving his Russian, as will speaking with native speakers, because conversational speaking involves a high cognitive load (Payne 2020: 245). I will also work with him on his writing and listening skills.

I will consider my efforts successful if my son will start to use Russian again with me and my wife.

1.2 A Note on Conventions

This thesis generally follows standard linguistic notation conventions for documents written in English, except that Russian words in Cyrillic type are usually enclosed in Russian quotation marks « ». 
For the transliteration of Russian Cyrillic into English, this thesis employs the “linguistic” system of transliteration (Timberlake 2004: 25; accord Chicago 2003: 432), also referred to as the “international scholarly system” (Yanushevskaya & Buncic 2015: 221).
Chapter 2: Literature Review

2.1 Phonology

As a general rule, Russian heritage speakers often demonstrate phonology that is similar to that of L1 speakers, and in this area heritage speakers differ greatly from L2 learners, who typically have severe deficiencies in their Russian pronunciation, especially in the area of stress patterns. Heritage speakers are less likely than L2 learners to misplace the stress in Russian words, though heritage speakers often fall short of monolingual L1 speakers in their placement of stress (Kagan & Dillon 2006; Montrul 2010).

In their ability to hear the differences between unpalatalized and palatalized sounds, heritage speakers are closer to L1 speakers than to L2 speakers (Lukyanchenko & Gor 2011). Heritage speakers are also much better able to pronounce Russian sounds in a native or near-native way and to use correct stress patterns, whereas American learners of Russian as an L2 usually show severe deficiencies in both palatalization and stress patterns (Kagan 2006).

Nevertheless, Russian heritage speakers in the United States do manifest phonological problems. They tend to shift all their vowels backward, to mimic English aspiration, and to use intonation different from that of standard Russian speakers, which can make their Russian sound odd (Kagan 2003). Some Russian heritage speakers speak with an intonation reminiscent of the distinct speech of the Odessa area in southwest Ukraine, which many Russians consider comical (Andrews 2001). Bluntly stated, some Russians feel that heritage speakers simply sound funny.

One area that is particularly helpful for diagnosing phonological problems in the Russian of American learners of Russian as an L2 is in the palatalization of Russian consonants, especially when palatalized consonants occur in word-final position. As a general rule, English-speaking L2 learners of Russian produce all such consonants as unpalatalized. American learners of Russian as an L2 do better with palatalization when the palatalized consonant is not in
word-final position, especially when it precedes a vowel, in which case L2 learners approximate Russian pronunciation by inserting the glide [j] between the consonant and the vowel. By contrast, L1 Russian speakers do not add an additional consonant to produce a palatal sound; rather, the palatalization occurs simultaneously with the consonant as a suprasegmental feature. (Hacking, Smith, Nissen & Allen 2016; Hart & Lundberg 2013). Heritage speakers are more capable than L2 speakers of palatalizing Russian consonants and thereby sounding like L1 speakers, but heritage speakers nevertheless often demonstrate difficulties in producing Russian palatalized consonants in a truly Russian way (Lukyanchenko & Gor 2011).

2.2 Morphosyntax

Monolingual L1 Russian speakers who fully acquired Russian tend to show little variation among themselves in their morphosyntactic features; by contrast, individual heritage speakers show much variation when compared to each other (Montrul 2011; Kondo-Brown 2010). Nevertheless, if we consider heritage speakers as a group, the linguistic variation among them reveals many frequently recurring patterns. These common features make it possible to create a general portrait of heritage speakers.

In a seminal article, Isurin & Ivanova-Sullivan (2008) examine various types of errors made by heritage speakers of Russian. They show that heritage speakers often alternate verb tense and verb aspect, even within the same sentence, and commit many case errors. Case errors are common to both heritage speakers and L2 learners of Russian, but some of the errors committed by heritage speakers differ from those committed by L2 learners. In the use of personal pronouns, heritage speakers frequently substitute one case for another in inappropriate ways, such as by using accusative case or dative case instead of instrumental case. This is one area where American L2 learners make fewer errors than Russian heritage speakers, but that
result might be explained by avoidance, because American L2 learners are much less likely to attempt to use pronouns than are heritage speakers (see also Kagan & Dillon 2006).

Isurin & Ivanova-Sullivan (2008) point out that case errors typical of Russian heritage speakers but not of American L2 learners also show up in some usages of nouns and adjectives. Heritage speakers often fail to make a direction-location distinction in their choice of cases. They often conflate the accusative case, used for direction, and the prepositional case, used for location. Heritage speakers often fail to use the instrumental case following some verbs that require the instrumental case, like after the verb stat’ (‘to become’) (though some L1 speakers also leave the direct object in nominative case after this verb, so perhaps it should not be considered an error). Russian heritage speakers often do not properly decline the word kotoriy (‘which’) when it occurs in relative clauses. Heritage speakers have a tendency to confuse oblique cases (those other than nominative, namely accusative, genitive, prepositional, dative, and instrumental), such as by using dative instead of accusative, by using prepositional or dative instead of genitive, and by using instrumental instead of prepositional. Andrews (2001) notes that sometimes Russian heritage speakers eliminate case inflections altogether.

Isurin & Ivanova-Sullivan (2008) also address a variety of additional traits that they observed in Russian heritage speakers, such as the following. Heritage speakers tend to be more concise than L2 learners in their use of circumlocution to fill gaps in vocabulary. Ironically, heritage speakers are more likely than L2 learners to make errors when using emotion words, but this counterintuitive result is probably caused by avoidance on the part of the L2 learners, because heritage speakers feel more comfortable using Russian fluidly and intuitively, whereas L2 learners tend to be more deliberate and cautious and to use a narrower scope of Russian so as to stay within the grammar they have consciously studied. Heritage speakers tend to use English
equivalents less often than L2 learners, probably because heritage speakers have more synonyms or near synonyms available to rely on when they cannot recall a specific word. As far as vocabulary range goes, heritage speakers tend to be closer to monolingual Russians than to L2 Americans, but this depends on the individual speaker, because heritage speakers’ vocabularies cover a wide range between L1 speakers and American learners of Russian as an L2. The most common errors made by heritage speakers involve errors of tense and aspect with verbs and case errors with other parts of speech. Heritage speakers are more likely to use V–S word order than are L2 learners. Heritage speakers also tend to prefer coordinate clauses to subordinate clauses in Russian, which often leads to using pronouns redundantly. Sometimes heritage speakers confuse reflexive and non-reflexive verb forms (Kagan & Dillon 2004).

Andrews (2001) notes other items that heritage speakers often struggle with, such as the genitive plural endings for nouns and adjectives, the Russian concept of animate versus inanimate nouns, and the means by which Russian handles direction and location. Moreover, as Kagan & Dillon (2004) point out, heritage speakers sometimes make mistakes that neither L1 Russian speakers nor American L2 speakers of Russian would make, such as with their diction and with certain borrowings from English.

According to Kagan & Friedman (2003), heritage speakers are more likely to use substandard or nonstandard structures in Russian that are typical among emigrants or dialect speakers but not among L1 speakers of standard Russian who live in Russia. Heritage speakers are also more likely to use calques, to borrow from English, and to engage in code-switching, whereby they switch back and forth between languages during a conversation (Gass, Behney & Plonsky 2020: 555). A common problem among heritage speakers is a lack of literacy skills, which have been described as often being severely underdeveloped or nonexistent (Kagan &
Friedman 2003; see also Kondo-Brown 2010). Kagan & Dillon (2004) explain further that heritage speakers are also more likely to mix vocabulary from incompatible registers and domains. Like traditional American L2 learners of Russian, Russian heritage speakers often display inconsistencies between words and their accepted meanings (Andrews 2001), they make inappropriate use of set phrases and idioms (Kagan & Dillon 2004), and they often do not use proper register in formal and informal contexts (Kagan & Friedman 2003).

2.3 Semantics and Pragmatics

Isurin & Ivanova-Sullivan (2008) found that the two main factors causing variation among heritage speakers in the ability to create narratives were age of arrival in the United States and exposure to Russian. The basic correlation, which to me seems intuitively obvious, is that the younger a heritage speaker is upon arrival in the U.S., and the less that speaker is exposed to Russian in the U.S., the greater the likelihood of language attrition. But the authors add another consideration that is less intuitive, namely that it is possible that intensive regular exposure to Russian in Russia for those children who make frequent trips to Russia might be more influential than age of arrival in the United States, particularly regarding the acquisition of Russian patterns of verb tense and aspect. The authors caution that age of arrival cannot be considered separately from other factors such as the amount of daily exposure to Russian and the use of Russian at home.

In a different study by Ringblom & Dobrova (2019) of four separate groups of Russian-speaking children in Russia and Sweden, the researchers found that L2 learners of Russian who moved to Russia and started learning Russian after the age of five outperformed L1 speakers of Russian who had spent their early childhood years in Russia but had moved to Sweden. The
authors explained this ironic result by reference to the power of language dominance in the surrounding society outside the home.

One article by Kagan & Dillon (2006) broke down Russian heritage speakers at American universities into four groups based on when they left Russia: (1) those who had received at least some high-school education in Russia, (2) those who had attended some middle school in Russia, (3) those who had some elementary schooling in Russia, and (4) those who were born and raised in the United States or who were born in Russia but did not have any education in Russia beyond preschool. These categories helped me to put my son’s challenges into perspective as I realized that because he was born in the United States and never had any schooling whatsoever in Russia, he fell within the last of the four categories listed above, and this last category represents those heritage speakers who are at the highest risk of language attrition.

In addition to strictly linguistic considerations, high language proficiency in the heritage language among heritage speakers has been correlated with stronger ethnic identity and more positive attitudes toward one’s ethnic background, as well as stronger family relationships and higher academic achievement (Chen, Zhou, & Uchikoshi 2018).

Andrews (2001) explains that some of the nonstandard features in the Russian of heritage speakers can be characterized as “problems of categorization” caused by interference from English. This can be observed in words like “blue,” “house,” “season,” “visit,” “ask,” “if,” “go,” and “take,” where heritage speakers apparently attach English categories of meaning associated with these words to their Russian counterparts, which in Russian can represent a different scope of meaning. For example, the English category of meaning for the word “blue” is broader than the meaning of either the Russian word siniy (regular blue) or the word goluboi (light blue), so
some heritage speakers use *siniy* to refer to both regular blue and to light blue. What Andrews calls “problems of categorization” could also be termed as examples of overextension, whereby a child stretches the scope of a word’s meaning beyond how adults would typically use it (Dawson & Phelan 2016).

Kagan & Dillon (2006) examined how Russian heritage speakers construct narratives and found that Russian heritage speakers are often deficient in their use of some structures that are usually observed among L1 Russian speakers. For example, heritage speakers of Russian tend not to use inverted word order as much as L1 speakers do to make their narratives more emotionally expressive. They tend to make less use of immediate word repetition for emphasis, and they also make less use of parenthetical words and cohesive devices, which are tools for making smooth transitions and keeping narratives coherent and fluid.
Chapter 3: Research Design

3.1 Overview

3.1.1 Overall Approach—A Qualitative Case Study

A researcher studying one or two variables across multiple samples would probably reach the best results by doing a quantitative study with the help of statistical analysis, but a researcher examining multiple variables within a single sample subject is likely to get the best results by doing a qualitative study (Duff 2008). “Quantitative researchers tend to apply prescribed methods and tools to a research question, believing that such standardization guarantees the validity of their results. The qualitative researcher, however, looks first to the object of study and determines which methods and types of data are most likely to shed light upon it” (Heigham & Croker 2009: 69). “The strengths of one approach tend to be the weaknesses of the other” (Duff 2008: 42).

Advantages of a qualitative case study include a high degree of completeness and a rich depth of analysis, as well as a tendency to be more readable than a dense quantitative study (Duff 2008: 43). In this thesis, I have loosely followed a methodological pattern from other case studies. Primary among these was the case study in which researcher Richard Schmidt provided some biographical background information about his subject, Wes, a Japanese man in Hawaii struggling to learn English, and then characterized Wes’s abilities (Schmidt 1983). Schmidt cites numerous examples of Wes’s English and provides commentary on these samples. Likewise, in this thesis I cite numerous examples of Thomas’s Russian and comment on these samples to explain their significance.

Other helpful case studies that provided examples of a narrative format for me to follow include the following: the case of Uguisu, a Japanese child learning English (Hakuta 1977); the
case of Julie, a British adult learner of Egyptian Arabic (Ioüp et al. 1994); and the case of Alberto, a Costa Rican adult learner of English (Schumann 1978). Short background narratives of five heritage speakers are set forth in Scontras, Fuchs & Polinsky (2015). The basic methodology of these case studies is to tell a story about one or more speakers and then expound upon aspects of their language skills, and I follow a similar approach here.

I had only a single individual, Thomas, as the subject of my study. My driving questions were these: what is the state of his Russian, and how can I help him to start using Russian again? I wanted to pursue these questions from multiple angles. I did not have a predetermined method that was in search of samples to test the method out on, but a single sample, a population size of one, to which I intended to apply various methods ad hoc to collect whatever data I could in the hope that it would give me some helpful answers to my research questions. I was on a fishing expedition, unsure of what I might find. Under these circumstances, a qualitative case study seemed the best fit.

One other qualitative method, narrative inquiry, is also appropriate. With narrative inquiry, the researcher tells a story about his subject and interprets it through the lenses of his field in order to derive “implications for practice, future research[,] or theory building” (Heigham & Croker 2009: 46). Narrative inquiry can help the researcher to explore motivation, identity, multilingualism, learning strategies, communities of practice, autonomy, and self-directed learning, and it “can inform theory building and policy-making” as well as “yield practical pedagogical information” (Heigham & Croker 2009: 47). Qualitative approaches, including narrative inquiry, are common in investigations of heritage language. The narrative approach is central to my methodology as I recount incidents from Thomas’s experiences and interpret them within the framework of the academic literature on heritage speakers of Russian.
3.1.2 Evaluation and Revitalization

This project consists of two overarching areas of focus: evaluation and revitalization. As far as evaluation goes, I looked at pronunciation first, then examined issues related to morphosyntax, semantics, and pragmatics. The idea was to see where Thomas fell on the spectrum between L1 Russian speakers and American learners of Russian as an L2 and to document the features of his Russian, especially any nonstandard features that L1 speakers in general would consider to be errors. If the evaluation phase revealed any such nonstandard features, as I was sure it would, then I would attempt to revitalize his Russian by conducting one-on-one tutoring sessions with him, thereby empowering him to fill the gaps in his knowledge and abilities. Evaluation and revitalization ran concurrently.

I was convinced from the outset that Thomas’s Russian was declining, and this preconception made me vulnerable to confirmation bias. To counteract this potential bias, I recruited my wife to evaluate Thomas’s Russian skills independently of my own judgments. She is an L1 speaker of Russian who was born, raised, and educated in Russia until she was eighteen. She completed high school there, as well as a year of college. After coming to the United States, she eventually completed a doctorate degree in Russian literature. She qualifies as a highly educated L1 speaker of Russian who I considered qualified to make judgments about whether Thomas’s Russian conformed to the Russian spoken in Russia.

As further protection from biases, confirmation or otherwise, I also asked a Russian linguist from Moscow, Nikita Alekseyevich Safronov, about what constitutes “standard” Russian so that I would have an objective standard by which to measure Thomas’s Russian. He replied that the old notion of two standards of Russian—that spoken in Moscow and that spoken in St.
Petersburg—has given way in recent decades to a single national standard, and this standard is spoken in all large cities across Russia. He told me that when it comes to Russians from large cities, even he, as a professionally trained linguist, cannot usually determine where a person is from based on the person’s pronunciation, at least not without a large speech sample that includes subtle but telling shibboleths. He told me that the way he speaks is standard Russian (personal correspondence from September 15, 2021).

My wife is from Chelyabinsk, a large city with a population of more than a million people. I accept Safronov’s definition of standard Russian, according to which my wife also speaks standard Russian. Later in my study, I asked a family friend, also from Chelyabinsk, for her opinion of Thomas’s Russian as well. As I collected samples from Thomas and evaluated them, I deferred my own phonological judgments to the judgments of my wife and this family friend. In this way I sought to avoid confirmation bias as to Thomas’s phonology. See also the discussion below of my use of Praat for evaluating Thomas’s phonology.

3.2 Phonology

Probably the most difficult part of Russian pronunciation for Americans is the production of palatalized consonants, especially at the end of words, so I focused primarily on this aspect of phonology in my search for problems with Thomas’s Russian pronunciation.

When Russians pronounce a palatalized consonant, the palatal consonant sound [j] occurs simultaneously with palatalized consonants as a suprasegmental feature rather than as a separate accompanying consonant sound (Hacking, Smith, Nissen & Allen 2016; Hart & Lundberg 2013; Dawson & Phelan 2016). Palatalization plays a major role in standard Russian, whereas it is of minimal importance in American English. Americans often fail to hear Russian palatalization at all and are usually incapable of producing it, especially as a suprasegmental feature. I
hypothesized that if my son was losing his Russian to English, then palatalization would be the best place to look for evidence of this, especially because it can be subtle and difficult to fake.

To answer the specific question about Thomas’s pronunciation of palatalized consonants in Russian, I recorded samples of him speaking Russian words, and I analyzed them with the help of the computer program Praat (see Boersma & Weenink 2001). As a control to measure his Russian against, I recorded my wife speaking those same words, and I analyzed her speech using Praat as well. In addition to relying on Praat, I also asked my wife to listen to Thomas’s speech samples for any signs of pronunciation problems.

The purpose of using Praat was to examine the two main acoustic cues that distinguish palatalized and unpalatalized consonants in Russian, namely (1) the F2 formant transition of adjacent vowels and (2) the frication during consonant release. If the tongue palatalizes during a vowel in preparation for a palatalized consonant, the F2 formant line will bend upward from left to right. If the tongue depalatalizes during a vowel after pronouncing a palatalized consonant, the F2 formant line will bend downward from left to right. If the tongue is palatalized throughout a vowel, the F2 formant line will remain horizontal but will be relatively high. If the tongue is unpalatalized throughout a vowel, the F2 formant line will remain horizontal but will be relatively low. As for frication during consonant release, especially of plosives, palatalized consonants will result in increased frication and longer duration. In this way Praat can objectively measure whether a person is pronouncing a palatalized or unpalatalized consonant sound (Hacking et al. 2016; Timberlake 2004).

I began the phonological inquiry by recording Thomas and his mother saying fourteen words that involved palatalized and unpalatalized variations of several consonants, as shown below in Table 1. The words were read in isolation, not as part of sentences. Where possible,
they were read in hard-soft pairs. Thomas almost certainly knew what I was looking for, and this awareness probably motivated him to try to speak more clearly than he might have otherwise, but I did not consider this a problem, because all I wanted to know at this point was whether he was still physically capable of producing the Russian sounds.

Table 1—The Initial Word Set Involving Palatalized and Unpalatalized Consonants

<table>
<thead>
<tr>
<th>Russian</th>
<th>English</th>
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<td>час</td>
<td>čas</td>
</tr>
<tr>
<td>often</td>
<td>part</td>
</tr>
<tr>
<td>parts</td>
<td>particles</td>
</tr>
<tr>
<td>hours</td>
<td>hour</td>
</tr>
<tr>
<td>мат</td>
<td>mat’</td>
</tr>
<tr>
<td>мать</td>
<td>mat</td>
</tr>
<tr>
<td>мяты</td>
<td>mjat</td>
</tr>
<tr>
<td>мять</td>
<td>mjat’</td>
</tr>
<tr>
<td>checkmate</td>
<td>mother</td>
</tr>
<tr>
<td>crumpled</td>
<td>to crumple</td>
</tr>
</tbody>
</table>

Realizing afterward that my initial sample was inadequate to capture all the possible palatalized and unpalatalized consonant pairs, I then collected additional samples (see Tables 2 and 3 below). The Russian alphabet contains twenty-one consonant letters representing the basic consonant sounds in Russian. Of these, three are always palatalized and three are always unpalatalized, so they are of limited value for comparing palatalization contrasts in the same consonant sound. The other fifteen consonants, however, come in palatalized-unpalatalized pairs, so I focused on these. I decided to look at them both in word-initial and word-final positions, knowing that the word-final measurements would probably be the most helpful, because word-final palatalized consonant sounds present the greatest challenge for Americans. I
reasoned that if Thomas’s Russian was being overcome by his American English, then the consonants in word-final position would probably give me the clearest indication of this.

In addition to these samples, at some point I recorded Thomas saying the brief phrase \(\text{психиатрическая помощь}\) (‘psychiatric help’). This was an unplanned fluke that I originally did not intend to use, but later I realized that the Praat recording contained some relevant data, so I include it here parenthetically.

One additional consideration is that voiced consonants become voiceless in word-final position, so there was no need to examine all twelve of the voiced-voiceless paired consonants in word-final position, because the six voiceless consonants could represent all of them. Moreover, the three velars [g] [k] [x] are always unpalatalized in word-final position, so I did not bother with these either. (Note also that word-final [g] will devoice to become [k], so there are in fact only two word-final velar sounds.)

In the end, to capture the full spread of palatalized and unpalatalized consonant sounds, I recorded my son pronouncing eight pairs of words with corresponding palatalized and unpalatalized consonant sounds in word-final position (see Table 2 below), and I also recorded him pronouncing sixteen pairs of words containing corresponding palatalized and unpalatalized consonant sounds in word-initial position (see Table 3 below).
<table>
<thead>
<tr>
<th>Word</th>
<th>Word</th>
<th>Word</th>
<th>Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>брат</td>
<td>brat</td>
<td>брать</td>
<td>take</td>
</tr>
<tr>
<td>brat</td>
<td>brat’</td>
<td>kolen</td>
<td>olen’</td>
</tr>
<tr>
<td>brother</td>
<td>take</td>
<td>knees</td>
<td>deer</td>
</tr>
<tr>
<td>отброс</td>
<td>otbros</td>
<td>отбрось</td>
<td>съем</td>
</tr>
<tr>
<td>otbros</td>
<td>otbros’</td>
<td>s’em</td>
<td>s’em’</td>
</tr>
<tr>
<td>waste</td>
<td>throw</td>
<td>I’ll eat</td>
<td>seven</td>
</tr>
<tr>
<td>star</td>
<td>vратарь</td>
<td>Тамбов</td>
<td>любовь</td>
</tr>
<tr>
<td>old</td>
<td>vratar’</td>
<td>Tambov</td>
<td>ljubov’</td>
</tr>
<tr>
<td>иоп</td>
<td>top</td>
<td>уголь</td>
<td>уголь</td>
</tr>
<tr>
<td>top</td>
<td>top’</td>
<td>ugol</td>
<td>ugol’</td>
</tr>
<tr>
<td>top</td>
<td>marsh</td>
<td>corner</td>
<td>coal</td>
</tr>
</tbody>
</table>
Table 3—The Word-Initial Sample

<table>
<thead>
<tr>
<th>боты</th>
<th>бить</th>
<th>пот</th>
<th>пить</th>
</tr>
</thead>
<tbody>
<tr>
<td>boty</td>
<td>bit’</td>
<td>pot</td>
<td>pit’</td>
</tr>
<tr>
<td>galoshes</td>
<td>beat</td>
<td>sweat</td>
<td>drink</td>
</tr>
<tr>
<td>вот</td>
<td>вить</td>
<td>фото</td>
<td>Фи菲</td>
</tr>
<tr>
<td>vot</td>
<td>vit’</td>
<td>foto</td>
<td>Fifi</td>
</tr>
<tr>
<td>here</td>
<td>twist</td>
<td>photo</td>
<td>Fifi</td>
</tr>
<tr>
<td>год</td>
<td>гид</td>
<td>кот</td>
<td>кит</td>
</tr>
<tr>
<td>god</td>
<td>gid</td>
<td>kot</td>
<td>kit</td>
</tr>
<tr>
<td>year</td>
<td>guide</td>
<td>cat</td>
<td>whale</td>
</tr>
<tr>
<td>холод</td>
<td>химия</td>
<td>дорого</td>
<td>дикий</td>
</tr>
<tr>
<td>xolod</td>
<td>ximija</td>
<td>dorogo</td>
<td>dikij</td>
</tr>
<tr>
<td>cold</td>
<td>chemistry</td>
<td>expensive</td>
<td>wild</td>
</tr>
<tr>
<td>топ</td>
<td>тип</td>
<td>зона</td>
<td>зиму</td>
</tr>
<tr>
<td>top</td>
<td>tip</td>
<td>zona</td>
<td>zimu</td>
</tr>
<tr>
<td>tank top</td>
<td>type</td>
<td>zone</td>
<td>winter</td>
</tr>
<tr>
<td>сотый</td>
<td>сити</td>
<td>мода</td>
<td>Митя</td>
</tr>
<tr>
<td>sotiy</td>
<td>siti</td>
<td>moda</td>
<td>Mitja</td>
</tr>
<tr>
<td>hundredth</td>
<td>city</td>
<td>style</td>
<td>Mitya</td>
</tr>
<tr>
<td>нота</td>
<td>нити</td>
<td>лоб</td>
<td>лип</td>
</tr>
<tr>
<td>nota</td>
<td>niti</td>
<td>lob</td>
<td>lip</td>
</tr>
<tr>
<td>note</td>
<td>threads</td>
<td>forehead</td>
<td>stick</td>
</tr>
<tr>
<td>рос</td>
<td>рис</td>
<td>шок</td>
<td>щит</td>
</tr>
<tr>
<td>ros</td>
<td>ris</td>
<td>šok</td>
<td>ščit</td>
</tr>
<tr>
<td>grew</td>
<td>rice</td>
<td>shock</td>
<td>shield</td>
</tr>
</tbody>
</table>
For the unpalatalized word-initial consonants, I chose words with the back vowel [o] after the consonant. For the palatalized word-initial consonants, I chose words in which the front vowel [i] followed the consonant. The word-initial sample gave me sixteen consonants in word-initial position in both unpalatalized and palatalized alternations, which sample was valid for the purpose of hearing whether Thomas could produce these unpalatalized and palatalized sounds in an authentic Russian way.

3.3 Morphosyntax

Thomas was initially willing to read simple word lists out loud to provide me with samples for the phonology inquiry, but when I asked him for more extensive recordings of his speech so that I could examine his vocabulary and morphosyntax, he became extremely reluctant, so I backed off. Eventually I found a way around this problem. I learned that he had recorded himself speaking Russian with a Russian friend online while playing a video game, and he gave me permission to listen to this recording to analyze his speech for any problems. In addition, over a period of almost two years, I occasionally heard him make various minor errors in his Russian, and I jotted many of these examples down. This was an extremely slow and unpredictable process, but over time I accumulated a random collection of various errors in his speech that proved useful. My methodology was thus not planned ahead of time or organized, but in a roughshod way I was nevertheless able to collect enough data to analyze the state of his Russian.

In addition to errors that I detected in his speech, I also discovered errors in writing samples that I collected from him, as well as in several written grammar tests that I administered to him as part of my efforts to tutor him.
Collecting samples from his speech, his writing, and his grammar tests allowed me to document a variety of his errors and to look at the state of his Russian from several angles. I will set forth my observations of his abilities and his errors in the Findings and Discussion section in Chapter 4 below.

3.4 Semantics and Pragmatics

Here I used the same methodology as for morphosyntax.

3.5 Revitalization through Reading

3.5.1 Introduction

Thomas initially learned how to read and write in Russian, using both print and cursive script, from his mother during the summer of 2010, shortly after he turned three years old. Between the ages of four and nine, he often read from a favorite Russian book written for children in elementary school, and after the age of six, he started reading three verses per day out loud from the Russian Book of Mormon. By the time we started this project, those three verses per day were probably the only consistent reading he was doing in Russian, and that reading revealed some problems, such as with the placement of stress, as I described above.

I hypothesized early on that reading authentic Russian texts would help Thomas to maintain and improve his Russian. I faced a huge problem with this, however, because I could not find anything in Russian that Thomas actually wanted to read. My early efforts to revitalize his Russian seemed to be going nowhere, but near the end of March 2020, I experienced a breakthrough.
3.5.2 Smeshariki Scripts

*Smeshariki* is a popular Russian cartoon show that Thomas watched for years as a child. He spent endless hours watching and rewatching episodes of this show throughout his childhood, and he loved it, so it held a secure place in his affections and in his memory. Late in 2018, I started transcribing and translating episodes of *Smeshariki* for use by my American students of Russian. By March 2020, when I started working with Thomas in earnest, I had accumulated dozens of these cartoon scripts.

I organized each script into two columns. In the left column I transcribed the Russian verbatim, and in the right column I provided my own translation into English. Moreover, I bolded the stressed vowel for each Russian word that contained two or more syllables. Each episode was about six minutes long, and most of my scripts were about three or four pages, containing around 500-700 words of Russian text. I also identified the respective cartoon characters that spoke each line so that students could follow the dialogue. These cartoon episodes can be watched for free on YouTube. There are 215 such episodes in the original 2D format dating from 2003–2012. These are the episodes that Thomas grew up on, and in late March 2020, the idea occurred to me to give these scripts to Thomas to read.

I asked Thomas if he would be willing to read my *Smeshariki* scripts out loud to himself to help his Russian, and he agreed. After I gave him the first script, I left him alone in his room and closed the door so that he would not feel self-conscious. I did not offer him any advice, nor did I bother him. When he was finished, he simply brought the script back to me, and I did not ask many questions beyond what his favorite part was. He seemed genuinely happy to have read that script, and I suspected that he not only learned something by reading it, but also felt good

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1 Here I use the non-scientific but conventionalized transcription of the show title.
about himself for reading it. I believed that this script resonated with him and evoked fond memories.

I tried to give him a new script every day. After almost a week of this, I changed the routine a little by giving him a script from a live comedy show called *Ural Dumplings*, followed by scripts of scenes from *Finding Nemo* and *The Incredibles*. My intention was to provide him with variety to maintain his interest. I asked him if the scripts were helping, and he said yes but added that he preferred the *Smeshariki* scripts, so I went back to giving him *Smeshariki* scripts. Apparently the cartoons from his childhood possessed a special nostalgic influence over him, so using them for his reading practice seemed a good method for getting him to read authentic Russian. Appendix 1 at the end of this thesis contains the reading schedule that Thomas followed.

### 3.5.3 The Learner’s Edition of the Russian Book of Mormon

In addition to the *Smeshariki* scripts, I ordered online a copy of the “learner’s edition” of the Russian Book of Mormon, in which the stress is indicated for all the words, and our family started using this book for our nightly family scripture study.

### 3.6 Revitalization through Listening

Part of my methods included having Thomas watch some Russian-language videos, both on DVD and on YouTube, but I quickly realized that Thomas, like many heritage speakers, still possessed a high level of listening comprehension, so I ended up not focusing much on it. I mention it here, but most of this thesis will examine other aspects of Thomas’s Russian.

The listening comprehension efforts started with Thomas watching a video about Japan by a Russian travel blogger named Anton Ptushkin. Thomas later watched that same blogger’s video about Saudi Arabia. For each video, Thomas watched about fifteen minutes per day for a
few days. One other effort our family made in the area of listening comprehension was to watch

*The Peanuts Movie* together in Russian translation.

Aside from these few videos, Thomas also continued to watch a couple of Russian YouTubers playing video games, namely Sasha Zotova and RusGame Tactics. Thomas also acquired some of these video games himself and often turned on the Russian audio track while he played them.

### 3.7 Revitalization through Grammar Lessons

#### 3.7.1 Grammar Instruction

I spent by far the greatest amount of time and effort on individual tutoring lessons between me and Thomas. After three months of focusing on reading practice, I shifted to overt grammar instruction. I knew from my own teaching experiences, as well as from comments made by colleagues, that most students do not respond well to much grammar instruction. For example, Brown and Larsen-Hall (2012: 87) report that “meaningful input is probably the most critical component of second language acquisition,” but “grammar instruction cannot be considered to be meaning-bearing input.” They then discuss evidence that seems to show that whereas explicit grammar instruction appears to be effective in the short run (up to five weeks following instruction), its long-term efficacy (a year or more later) is more doubtful (90–95).

But I also knew from my own experiences as an L2 learner of Russian, as well as from teaching students who have high aptitude, that grammar study, if a student can absorb it, can sometimes be an effective shortcut to learning a language quickly. I gambled that Thomas had a mind for grammar, so I ignored the general wisdom of many language instructors and attempted to teach Thomas grammar by simply explaining it to him. The topics we covered and the dates when we covered them are listed in Appendix 2.
3.7.2 Testing

Some of my efforts to teach Russian grammar to Thomas involved administering written tests to him. I created these tests myself. Some of them were created exclusively for Thomas, whereas others were tests that I had used with my first-year Russian students at Utah Valley University. I report my findings from this testing in the next chapter along with my findings from other sources.

3.8 Revitalization through Writing

“Typically, oral sills are better among heritage language learners, whereas written skills are better among L2 classroom learners” (Gass, Behney & Plonsky 2020: 566). In the case of Thomas, my examination of his writing skills will focus on the narrow topic of his spelling of Russian words, not on the broader issue of how well he writes in general.

Thomas resisted my early attempt in the middle of July 2020 to get him writing again, but suddenly his attitude changed on July 23, so on that day I showed him how to write his name in Russian cursive [W1]. After that, he was eager to relearn how to write in Russian.

3.9 Revitalization through Speaking

See above under 3.3 for how I was finally able to collect some authentic speech samples. In addition to those samples, my wife and I made a more concerted effort to speak with Thomas in Russian at home. Moreover, we hosted a talkative Russian friend in our home for several weeks during the summer of 2021, and she provided abundant practice for Thomas. Thomas also gained practice in conversational Russian by occasionally talking with a Russian friend online. Thus, the methodology for revitalizing Thomas’s speech was not organized or structured,

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2 Appendix 3 shows a list of coded sources of his language productions. These sources will be cited in the text by their assigned code within brackets.
but he had many opportunities to practice speaking Russian, and these occasions allowed me to hear his speech and note its features. I recorded many of my observations in my research journal.
Chapter 4: Findings and Discussion

4.1 Introduction / Road Map

As I worked with Thomas on his Russian, I paid attention to what he was still capable of doing, as well as to his occasional errors, and I documented many of these observations in a research journal. This was an extremely slow, sporadic, unpredictable process that stretched out across nearly two years. I observed these strengths and errors as I overheard him speaking in Russian to me or others, and I also gathered evidence from our tutoring sessions, specifically from the writing samples he produced, the speech sample he recorded during the video game with his friend, and the written grammar tests and quizzes that I administered to him.

Here I loosely organize the features of his Russian into the three categories of phonology, morphosyntax, and semantics/pragmatics. I describe both his errors and his strengths, though there is an inherent bias toward paying more attention to his errors, becauseremedying problems in his Russian was a main purpose of my study. Some findings could arguably belong to more than one category, and some notable items I have set off in a separate category of their own. I have marked each specific evidentiary finding with a bullet at the beginning of the discussion for it. Some bulleted items are very short, while others run to multiple paragraphs.

4.2 Phonology

4.2.1 Pronunciation

Thomas was twelve years old at the time I recorded the spoken word samples that I describe above, and to me he sounded like a normal Russian boy of that age. I could not detect any accent in his Russian, nor could I discern any meaningful difference between his pronunciation and that of his mother. My wife told me that she also could not discern any deficiencies in his pronunciation. To her he sounded like a normal Russian boy.
When I initially reviewed the recording of the word pair «шест-шесть» (šest = ‘pole,’ šest’ = ‘six’), my ear detected no problems, but the Praat waveform showed that my son’s consonant burst on the final palatalized [t̥] was relatively small in amplitude compared to my wife’s, though it was larger than for his unpalatalized [t]. This observation made me wonder if his English was transferring into his Russian, because a word-final [t] in English is not accompanied by a burst of fricative energy the way a palatalized word-final [t̥] in Russian is.

But I knew that I could not make any firm conclusions based on a single item of data, so I examined the other recordings I had made and realized that there was no anomaly. His fricative burst for that particular word was indeed subtle, but it was distinctly audible, and my ears and the Praat waveform clearly registered the difference between his palatalized [t̥] in šest’ (‘six’) and his unpalatalized [t] in šest (‘pole’). His palatalized [t̥] was a genuine Russian [t̥] sound.

See the Praat waveforms and spectrograms in Figures 1 and 2 below.
Figure 1

Praat Waveform and Spectrogram of Thomas’s Mother, an L1 Speaker of Russian
left: «шест» - šest (‘pole’)
right: «шесть» - šest’ (‘six’)
Figure 2

Praat Waveform and Spectrogram of Thomas, a Heritage Speaker of Russian
left: «шесть» - šest ('pole')
right: «шесть» - šest’ ('six')
I had been thrown off by the picture of my wife’s waveform, where the amplitude lines were clearly greater. But upon listening to her recording more carefully, I could hear that she had released her final palatalized [tʲ] with greater force, which probably explained the markedly greater amplitude in her Praat waveform compared to Thomas’s. Moreover, I had to remind myself how sensitive Praat is. A tiny difference in the force with which a consonant is released by two different speakers could easily result in a visible difference in their respective waveforms without necessarily indicating a problem with pronunciation. In addition, comparing Thomas’s palatalized [tʲ] to his unpalatalized [t] was probably more relevant than comparing his palatalized [tʲ] to Katya’s palatalized [tʲ], because comparing Thomas to Thomas involved fewer uncontrolled variables, such as those relating to personal differences between speakers. I ultimately concluded that the initial recordings of the words in Table 1 contained no evidence of attrition in Thomas’s pronunciation.

When I later reviewed the recording of Thomas saying <психиатрическая помощь> (‘psychiatric help’), I could not hear the initial letter <п> [p], nor did I see clear evidence of an initial [p] on the Praat spectrogram and waveform. I wondered briefly if this was evidence of transfer from English, in which <ps> at the beginning of a word is pronounced as [s], as in the word “psychology.” In Russian, <пс> at the beginning of a word is pronounced as [ps]. But this transitory suspicion evaporated when I listened to the sample from his mother and could hardly hear any [p], nor could I hear a clear [p] in my own sample, even though I had deliberately (or so I thought) pronounced a [p]. Russian lips might come together to pronounce a [ps] sound, but that does not necessarily mean that the [p] will be distinctly audible.

Moreover, Praat had distinctly recorded a rising F2 formant line during the second <о> in <помощь> (‘help’), indicating palatalization as the tongue transitioned from an unpalatalized
[m] sound in the middle of the word to the palatalized [ʃ] sound at the end of the word. I had not even been looking for this when I made the recording, but it served as another subtle piece of evidence that Thomas was not having any problems with palatalization. His F2 formant line was behaving the way it could be expected to for an L1 Russian speaker. I concluded that there is no evidence of attrition in that sample either.

In all eight of the word pairs that I recorded for the word-final samples, which were the most relevant to my inquiry for reasons already stated above, the F2 formant lines clearly followed the expected pattern of a high F2 line accompanying palatalization and increased frication for the release of a palatalized consonant, especially a plosive or a fricative. Moreover, the expected patterns in the F2 formant lines, both for palatalization and for consonant release burst, were also clearly demonstrated in the earlier recording of the pairs «мат-мать» (mat = ‘obscene language’; mat’ = ‘mother’) and «мят-мять» (mjat = ‘crumpled’; mjat’ = ‘to crumple’). The evidence from these samples shows no attrition whatsoever in Thomas’s Russian pronunciation.

The word-initial samples continued to show the expected pattern of a high F2 formant for palatalization and high fricative energy where there was a release burst. I generally found the word-final samples more helpful, because they more clearly showed the rising F2 during the vowel before the word-final palatalized consonant, but the word-initial samples were nevertheless consistent with the other samples as to the F2 formant line patterns for palatalization and release burst.

One word-initial sample was especially helpful, the unpalatalized [ʃ] vs. palatalized [ʃʲ] in the pair «шок-щит» (šok = ‘shock’; ščit = ‘shield’), because it clearly showed the higher fricative energy in the palatalized [ʃʲ] compared to the unpalatalized [ʃ]. The same was true for
the pair «топ-тип» (top = ‘top’ [as in the toy]; tip = ‘type’), which confirmed the extra frication of a release burst from a palatalized [tʲ]. The release energy was greater in the word-initial pairs than in the word-final pairs, probably because the consonant is leading into a stressed vowel rather than merely closing off a word. The high fricative energy was also evident in the [zi] sound within the pair «зона-зиму» (zona = ‘zone’; zimu = ‘winter’).

Thus, all three sets of unpalatalized-palatalized pairs showed Thomas’s pronunciation to conform to expected Russian patterns, with no discernible evidence of mispronunciation.

Having reached this early conclusion in March 2020, I no longer did any research as to Thomas’s pronunciation, though I continued to pay attention to it just in case something caught my ear. But nothing about his phonetics ever did, so I shifted my search for attrition to other aspects of his Russian. My later review in September 2021 of the data that I had collected in February and March 2020 only confirmed my initial conclusions about the integrity of Thomas’s pronunciation.

4.2.2 Phonetic Spelling

Having concluded that Thomas is still capable of native-like pronunciation, pretty much the only phonological errors that I observed were spelling errors caused by his tendency to spell words phonetically, a sign of his limited reading experience in Russian and his lack of formal schooling in Russian. I list specific items below.

4.2.2.1 Vowel Reduction—<O> vs. <A>

• [W11] Thomas sometimes writes <a> instead of <o>, usually because of vowel reduction, whereby an unstressed [o] is pronounced as [a]. This is a common problem for heritage speakers (see, e.g., Kagan, Akishina & Robin 2002: 24–25), though in fact it is a potential problem for everyone who speaks Russian (see, e.g., Розental’ 1996: 19). For
example, he once wrote *«микровалновка» instead of «микроволновка» (‘microwave’). On the other hand, in another place he wrote *«словоря» instead of «словаря» (‘dictionary’), writing an <o> where he should write an <a>, contrary to the typical error, and vowel reduction cannot explain his error here. It is simply a spelling mistake.

- [W13] In one place he misspells «рождество» (‘Christmas’) as *«рождество», which is yet another instance of his misspelling unstressed <o> as <a>.

4.2.2.2 Vowel Reduction—<E> vs. <И>

- [W13] Sometimes Thomas interchanges <е> and <и>, such as by writing *«видио» instead of «видео» (‘video’). The unstressed <е> [je] reduces to the sound of <и> [i]. He does this again by writing *«видио игрь» instead of «видеоигры» (‘video games’), and note also his uncertainty regarding whether to write a compound term as one word or two. He also writes *<Верджинин> instead of <Вирджини> (‘Virginia’). The stress in this word comes on the second <и>. Hence the phonetically accurate misspelling, though I would have expected his error in this particular instance to go the other way—writing <и> instead of <е>, as he usually does, rather than <е> instead of <и>.

4.2.2.3 Vowel Reduction—Unstressed Vowels in Adjective and Pronoun Endings

- [T13, T14] I gave him two worksheets that required him to fill in adjective endings for adjectives that I had written within sentences for context. His task was to fill in the blanks that I had left for the endings. On the first test, he correctly answered eighteen out of twenty-four, for a score of 75%. On the second test, out of twenty-seven items, he made three errors and left four items blank, though of the four he left blank, I could see that he had answered two of them correctly before erasing them, and a third contained the correct final sound, so I scored him as getting twenty-two out of twenty-seven answers correct, or 81.5%.
Thus, on these two tests he did not perform as well as he had on previous tests, but upon closer examination, I noticed that all of his errors involved either an orthographic mistake or a phonetic ambiguity. In every instance, the final sound within his response, usually a consonant, was correct. His mistakes arose mostly from unstressed vowels that would have been reduced to a schwa or some other minimal vowel sound in ordinary speech.

In other words, if Thomas had been reporting his responses orally rather than in writing, it is possible that a native speaker listening to him would not have marked him wrong on anything. His errors were as follows. He writes *«новова» instead of «нового» (‘new’ in genitive singular), both of which are phonetically identical [novəvə]. In three instances he writes <ом> instead of <ым> in unstressed positions, thereby producing a prepositional case ending instead of an instrumental one, but the phonetic difference between the two is very small—[əm] versus [im] or [im]. In another instance he writes <оми> instead of <ыми> in an unstressed position, involving the same problem with <о> and <ы>—[əmi] versus [imi] or [imi]. In two instances he writes <оя> instead of <ая> in an unstressed position, which would probably sound like [əjə] either way. And in two instances he writes <ой> instead of <ей> in an unstressed position following an always-unpalatalized [j] sound.

• [T19] On an exam that tested gender, I gave him credit for an item that required him to write the letter <е> in a blank to complete the pronoun «ваше» (‘your’). He erased his answer, so technically he left the item blank, but I could clearly see the correct answer that he had erased. Moreover, above the blank he wrote: «не знаю какая буква, но звучит как “А”» (‘I don’t know which letter, but it sounds like “A”’). The unstressed <е> in «ваше» (‘your’) reduces to a schwa [ə], which Thomas interpreted as requiring the letter <а> in writing.
• [T19] In answer to an item on another written exam, he mistakenly wrote «новоя» instead of «новая» (‘new’), but above the word he wrote <a> with a question mark. And in the next item, he correctly wrote «красное» (‘red’) but wrote <a?> above each of the last two letters. Here again he is displaying the typical confusion of heritage speakers regarding reduced vowels. His mind deals with Russian words primarily phonetically, unlike American L2 students of Russian, who learn Russian orthographically. He was similarly confused on a later item requiring the word «эта» (‘this’). He got it correct, but also wrote an <o> over the <a> and then wrote an additional <a> above the word with a question mark by it, reflecting his uncertainty regarding the interplay between phonetics and orthography.

4.2.2.4 Vowel Reduction—<Я> vs. <И>

• [W10, W13] «нравится» (nravitsja = ‘it is pleasing’; compare gusta in Spanish):
Thomas invariably writes this word as «нравится», even when he is referring to multiple things that he likes, which would require the verb to be pluralized to «нравятся» (nravjatsja = ‘they are pleasing’; compare gustan in Spanish). The stress in «нравится» is on the <a> [a] in the first syllable. An unstressed <я> [ja], such as in the second syllable, reduces to an <и> [i], making «нравится» and «нравятся» phonetically indistinguishable.

4.2.2.5 The Letter <Ц>

• [T1, T2] Thomas sometimes writes <ица> instead of <иться> or <итъ>—all of which sound identical [iˈtsə]. This error is likely to occur at the end of reflexive verbs.

• [W15] Thomas wrote, «У меня есть дела лучше чем *пытаца узнать что люди про меня думают» (‘I have better things than to try to find out what people think about me’). His spelling of «пытаться» as *«пытаца» (‘to attempt, to try’) is yet another example of spelling words phonetically. Incidentally, Thomas also did not use any
commas in his sentence. Russian requires the use of commas to set off clauses (see, e.g., Fennell 1961: 155; Pulkina 1992: 515).

4.2.2.6 Voiced vs. Devoiced Consonants

• [W13] Sometimes Thomas interchanges <д> [d] and <т> [t], such as by writing *«тринатцать» instead of «тринадцать» (‘thirteen’) or *«пятннатцать»3 instead of «пятнацать» (‘fifteen’). In consonant clusters in Russian, the final consonant almost always governs the voicing for all consonants in the cluster, with rare exceptions like <тв> [tv] and <св> [sv], where no assimilation occurs in either direction. So when the unvoiced <ц> [ts] follows the voiced <д> [d], the <д> devoices and sounds like [t], which Thomas writes as <т>, as he did for “thirteen” and “fifteen.”

• [W14] In a handwritten note, Thomas misspelled the word «сдохли» (‘they died’) as *«здохли», turning the <с> [s] into a <з> [z], which accurately reflects how Russians pronounce the word with a voiced consonant cluster at the beginning.

4.2.2.7 Palatalization

• [W13] Thomas misspells «учусь» as *«учюсь» (‘I learn’). This is probably evidence of his Russian ear, because Russians pronounce the letter <ч> as a palatalized sound [tʃ]. Again, without the advanced literacy skills that come with formal education or extensive reading, he writes what he has heard instead of what he has seen, so when he hears palatalization in the pronunciation of the letter <ч>, he writes the letter <ю> [ju] instead of the letter <у> [u] after it. And in this instance he apparently forgot my overt grammar lesson (touche to pedagogy scholars) about the spelling rule that forbids the letter <ю> from following immediately after the letter <ч>.

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3 This word contains a second spelling error as well, the <ь> in the middle of the word, but this error is purely orthographic, not related to spelling words phonetically.
• [W13] He writes *«интернэту» instead of «интернету» ('the Internet'), using <э> [e] instead of <е> [je] to more accurately reflect how Russians pronounce this word.

• [W13] He once wrote “BYU” phonetically in all caps as «БИУАЙЮ». This is an interesting example of how he reflected palatalization in his phonetic spelling.

• [T19] In a written exam, he correctly spelled all four forms of «чей»—«чей» «чье» «чьи» «чьи» (čjej, čja, čjo, čji—‘whose’). The <ъ> in the feminine, neuter, and plural forms often throws American students off, but somehow Thomas spelled these words perfectly.

I was not sure where he had acquired his knowledge of how to spell these words, so I asked him, and he said that he had judged the spelling of these words by their sounds. He said that without the <ъ>, the words would not have been “palatalized,” but he could hear that the word was “palatalized,” so he inserted the <ъ> into «чье» and «чья». I asked about «чье», and he said that he did not know how he knew to put the <ъ> in that word, though I assume that it was for the same reason that he put it in «чье» and «чья».

When he referred to the words being “palatalized,” he meant that he could hear the extra palatal consonant [j] before the vowels <я> [ja] and <е> [jo], which already have [j] in them.

In other words, what he was saying was that without the soft sign <ъ>, «чья» would have sounded like [t͡ʃʲa] instead of [t͡ʃʲja], and «чье» would have sounded like [t͡ʃʲo] instead of [t͡ʃʲjo]. And «чье» would have sounded like [t͡ʃʲi] instead of [t͡ʃʲji]. The fact that Thomas could hear the difference between [t͡ʃʲa] and [t͡ʃʲja], [t͡ʃʲo] and [t͡ʃʲjo], or [t͡ʃʲi] and [t͡ʃʲji] shows the sensitivity of his ear to Russian pronunciation.

Thomas also told me that I was the one who had taught him about <ъ> representing a breathy additional [j] sound before letters like <я> [ja] and <е> [jo], so my overt grammar
instruction from more than a year before had done some good after all, notwithstanding the
general wisdom that the explicit teaching of grammar is usually ineffective.

4.2.2.8 Colloquial Speech vs. Formal Writing

- [W13] Thomas writes the abbreviated word «б» [b] instead of the complete word «бы»
[bi] (both being the same word and indicating the subjunctive mood, translatable into English as
‘would,’ ‘could,’ or ‘should’). This abbreviation is heard all the time in colloquial Russian
speech, but in writing it is more likely to be seen only in poetry when a poet needs to cut out a
syllable. Otherwise it seems too casual for most writing. Again, Thomas appears to be writing
based on what he hears.

- [W13] Similarly, he writes the abbreviated word «чтоб» (shtob) instead of the
complete word «чтобы» (both words being the same word, which means ‘so that’).

4.3 Morphosyntax

4.3.1 Word Order

- [W13] He once wrote the phrase «с друг-другом», which should appear as «друг с
другом» (‘with each other’). This is a telling error, because in my judgment, most L1 speakers
of Russian would be highly unlikely to commit this error. The correct phrase «друг с другом»
(‘with each other’) is extremely common and is used by all kinds of people regardless of
educational level, so it is practically ubiquitous, and I personally have never heard a Russian
make the error that Thomas makes here. Again, this might be the result of transfer from the
English phrase “with each other,” where the word “with” comes at the beginning (the Russian
word «с» means ‘with’ in this phrase). Also note that Thomas uses an unnecessary hyphen,
further evidence of incomplete literacy skills.
• [W10] Thomas has a tendency to place some words in front of verbs to act as adverbial phrases, whereas American students of Russian would more likely put the words after the verbs, such as at the end of the sentence, according to English word order. This is a recurring pattern for Thomas, and I see it as evidence of his intact Russian grammar. For example, he uses the clause «ты мне позволяешь с вами быть» (‘you allow me to be with you’). He puts the words «мне» (‘me’) and «с вами» (‘with you’) before the verbs «позволяешь» (‘you allow’) and «быть» (‘to be’), respectively, which is okay in Russian here but in English would not be correct. Moreover, American L2 learners of Russian would not likely use this order.

• [T17] One section on a test asked students to translate three simple sentences into Russian involving the verb «жить» (‘to live’). This section proved so difficult for my American students that I threw it out. Thomas aced it, but one of his answers is notable. For the item that asked students to translate “You (ты) live in Moscow (Москва),” the few students who got it right, and my answer key itself, kept the same word order as the English: «Ты живёшь в Москве». But Thomas wrote, «Ты в Москве живёшь», thereby inverting the word order to put the adverbial prepositional phrase “in Moscow” in front of the verb rather than following it, a nonstandard order in English, except perhaps in poetry.

According to a first-year Russian textbook (Golosa: Book One, 2012), Russians often put adverbs in front of the verbs they modify. Thomas’s doing so is evidence of his Russian grammar being intact.

On the other hand, in the next two items, Thomas in his Russian response put the adverbial phrase at the end of the sentence, following the verb, to translate “You live in New York” and “I live in California.” His placement of adverbial phrases on this test
was not internally consistent, though all three of his responses in this section were grammatical.

- [W10] In a written sentence, Thomas used the subordinate clause «которые мне о тебе нравится» (‘which I like about you’). The word order is again notable, because most American L2 students of Russian would probably not insert «о тебе» (‘about you’) between «мне» (‘to me’) and «нравится» (‘is pleasing’). Thomas’s word order is evidence of intact Russian grammar.

4.3.2 Inflections and Declensions (Cases)

4.3.2.1 Issues of Inflection Class Assignment

- [W13] Thomas once wrote «в *евом доме» (‘in his house’). The correct wording is «в его доме» (‘in his house’). Thomas writes a <в> instead of a <г>, probably because in the word «его» (‘his’), the <г> letter is pronounced as [v] instead of as its usual [g], and the letter that usually makes the [v] sound is <в>. A plausible explanation for the <м> is that the ending {ом} is often used for masculine singular adjectives in the prepositional case, and the masculine word «доме» (‘house’) is in the prepositional case, so Thomas was apparently tacking the adjectival ending <ом> onto the possessive pronoun «его» (‘his’) to correspond to the masculine noun «дом» (‘house’) in its prepositional declension—«доме».

The problem is that the possessive pronoun «его» (‘his’) never declines for any reason, no matter how it is being used, and it is one of the most common words in Russian, so it is encountered all the time. Therefore, in theory Thomas should have intuitively known not to put the letter <м> at the end of «его» (‘his’).

Just out of curiosity, ten months later I handed him a piece of paper with “in his house” written on it in English, and I asked him to translate this phrase into Russian. He wrote «в доме
его» (‘in his house’), which is grammatical. Writing the nonstandard *«евом» instead of the standard «его» is analogous to another nonstandard word that many Russians use: *«ихний» instead of the standard «их» (‘their’) (incidentally, the nonstandard «ихний» is standard in Ukrainian).

• [W13] In the same writing sample, Thomas writes the phrase «девочка, которую зовут *Амилию» (‘the girl who they call Amelia’). He puts the name “Amelia” into the accusative case instead of leaving it in the nominative, maybe because the name follows a transitive verb. Maybe there is some transfer here of English word order, which expects direct objects to follow a transitive verb, so he puts the word following the verb into the direct-object case, the accusative case. But he also correctly uses this case with the word that precedes the verb as well.

• [R31] While speaking to an adult L1 speaker of Russian, Thomas said «до *четыре» (‘up to four’). He left the number four in the nominative case, but he should have put it into the genitive («до четырёх»). Minutes later he said «от пяти до восьми» (‘from five to eight’), which was grammatically perfect, despite involving two more numbers in the genitive case.

• [R33] During a board game, I asked how many lives I had lost when a monster defeated me, and Thomas immediately answered «две» (‘two’ in its feminine form), which is grammatically standard («две жизни» = ‘two lives’ in accusative case). But then he doubted himself and said, «двух, два» (‘two, two’—in genitive plural and then in accusative masculine/neuter, respectively), both of which are not standard. This incident was an interesting example of Thomas answering correctly when he answers immediately
and without conscious thought, but becoming confused and making errors once he starts to consciously think about grammar.

A minute or two later the exact same question came up again—how many lives had been lost. Now when Thomas answered, he said «два» (‘two’ in masculine or neuter form), which is not standard, but instantly he doubted himself and changed the word back to «две» (‘two’ in feminine form), which is standard.

- Thomas made one error by using the genitive ending «ы» instead of the prepositional ending «е» to replace the «а» at the end of the word «Флорида» (‘Florida’). This particular error was an isolated anomaly, however, because in two other similar words, «Москва» (‘Moscow’) and «Юта» (‘Utah’), he correctly used the prepositional ending «е». His errors are not always consistent.

- [T9] In one instance, he did not change «молоко» (‘milk’) into the genitive case in a sentence in which it was negated.

- As an example of standard usage indicating intact grammar, Thomas made correct use of the accusative case to express a quantity of time when he said «пару недель назад» (‘a couple of weeks ago’).

### 4.3.2.2 Nonstandard Inflection Patterns

- [R5] While speaking with a Russian friend online, Thomas said *«огурцем» instead of «огурцом» (‘cucumber’). Singular nouns in instrumental case with a stem ending in the letter <ц> can be problematic, not only because of mobile vowels, but also because of a possible but unpredictable shift in stress that can trigger a spelling rule, resulting either in a stressed <о> or an unstressed <е> after the letter <ц>.
• [R26] Thomas said the word *«учителев» instead of the more grammatical «учителей» (‘teachers’ in genitive plural). He is apparently overextending a general rule (the genitive plural ending for most masculine nouns) to a specific instance in which the rule does not in fact apply (masculine nouns ending in <ь>). Here the base form is <учитель> (‘teacher’ in nominative singular), putting it within the specific instance rather than the general rule.

4.3.2.3 Inflection Issues Arising from Gender

• [V5] During the video game conversation, Thomas asks his friend what the word «рубина» (‘ruby’ in genitive singular) means, mistakenly thinking that he was using this word in its nominative form, which in fact is «рубин». Thomas then uses this word several more times, declining it as if it were a feminine noun ending in <a>. His declensions all follow the correct pattern for a feminine singular noun ending in <a>, but because he has a mistaken idea of the nominative singular base form, his use of the word is nonstandard.

In another spot, the roles reverse as Thomas uses Russian to define a Russian word from Minecraft that his friend is not familiar with. Referring to «лазурит» (‘lazurite’), Thomas explains: «Это как бы алмаз, только потемнее» (‘This is like diamond, only a little darker’). Ironically, notwithstanding the fact that Thomas correctly says the nominative singular base form «лазурит» (‘lazurite’) and even correctly defines it, seconds later he misuses the same word when he puts it into the genitive case but declines it as if it is a feminine noun ending in <a>, *«лазуреты». Note also that he changes the <и> in «лазурит» (‘lazurite’) to <е>, which error he did not make with «рубин» (‘ruby’). As with «рубин» (‘ruby’), he has mistaken the genitive singular of a masculine word for the nominative singular of a feminine word. But with «лазурит» (‘lazurite’) he adds an extra layer to the error, because he correctly produces the
nominative base form, which is a masculine word ending in a consonant, but then somehow in the genitive case treats the word as if it is a feminine noun ending in <a> [a].

This is significant because in my judgment, it is not the kind of error that most of my American L2 learners of Russian would likely make. American students usually decline Russian nouns by thinking of the nominative singular base form, which they use as their starting point, and then they consciously apply grammar rules to that base form to transform it into other cases. If an American student has the correct base form of a regular noun and properly applies the correct grammar rule, then the resulting oblique form will be correct.

By contrast, Thomas’s Russian brain in this instance does not seem to be going through such a conscious process of grammar application, because he apparently is not sensing the grammatical inconsistency between the word «лазурит» ('lazurite’ in its standard nominative singular masculine form) and *«лазуреть» (the same word but in a nonstandard genitive singular feminine form). When he declines it, his brain reconceptualizes the base form before applying declension rules, despite the fact that he knows the correct base form.

- [T8] When putting the word «кровать» ('bed') into the prepositional case, he changed <ъ> to <е> instead of to <н>, which would have been correct if this word were masculine, but this word is feminine. Thomas’s error could be seen as an example of overgeneralization, the application of a general rule to a specific case that happens to be an exception to that rule, a common error for children learning their native language (Yule 2017: 197) or for novice students learning a language as an L2 (Ortega 2009: 117).

- [T8] Thomas made the exact same error with the word «Казань» ('Kazan,’ a city in Russia), but he had probably never even heard of Kazan before taking this test, so he cannot be faulted for applying the general rule instead of the exception. His answer, <е>, would have been
correct if Kazan were a masculine noun, but there is no rule to help a person resolve whether Kazan is masculine or feminine. As a general rule with some exceptions, gender for all nouns ending in <ь>, whether masculine or feminine, simply has to be memorized for each word.

- [T9] Similarly, he used <е> instead of <и> to change the word «дверь» (‘door’) into the prepositional case.

4.3.2.4 An Unpredictable Subcategory of Inflection Class

[T8] Thomas made an error by adding <е> to «шкаф» (‘closet’ or ‘wardrobe’) when he should have added <у>. Normally his answer would have been correct, and in non-locational instances it is correct, but there are some masculine nouns that take a stressed <у> ending in the prepositional singular instead of the normal <е> when a location is involved, and there is no way to know which nouns fall into this category other than to be familiar with each one of them.

4.3.3 Forming Plurals

One area of recurring problems was the formation of plurals, especially regarding neuter nouns, as described below.

- [T3] On a test involving how to form plurals of nouns, he made only one error by adding <а> instead of <ы> to «стол» (‘table’). But this error is understandable, because some masculine words do add <а> instead of <ы> to form the plural («дома» = ‘houses’).

- [T6] On another test, while attempting to pluralize the words «телце» (‘small body’) and «солнце» (‘sun’), he changed the <е> at the end of the word to <и> instead of to <а>. He was probably overextending the plural rule for masculine and feminine nouns with a palatalized ending to neuter words ending in <е>.
At the end of the word «зеркало» (‘mirror’), he changed <о> to <ы> instead of <а>, this time apparently overextending the plural rule for masculine and feminine nouns with an unpalatalized ending to neuter nouns with an unpalatalized ending.

For the word «платье» (‘dress’), he changed the <е> to <и> instead of to <я>. Again he was probably applying the plural rule for masculine and feminine nouns with a palatalized ending to neuter words with a palatalized ending.

Just out of curiosity, I administered this test to Thomas again a little later—the exact same test, with no changes [T7]. He again aced the genders portion but made four errors on the plurals portions. Much to my surprise, however, only one of his previous errors was repeated, namely for the word «зеркало» (‘mirror’). This time he correctly formed the plurals of «телце» (‘small body’), «сердце» (‘heart’), and «платье» (‘dress’), but made mistakes on three other words that he had answered correctly the first time around.

He added <ы> instead of <и> to the word «карандаш» (‘pencil’). His response was phonetically correct, but there is a spelling rule that forbids <ы> after <ш>. This was likely another example of phonetics trumping orthography for a heritage speaker with limited literacy and no formal schooling.

He added <а> instead of <и> to the word «плащ» (‘raincoat’), probably because he was assuming that this word, like many other single-syllable masculine nouns, required the <а> plural instead of the more common <и>. There is no rule indicating which masculine nouns take <а> instead of <ы> or <и>. You just have to know each word that follows this special pattern.

He made the exact same mistake with the word «лось» (‘moose’), replacing the letter <ъ> with <я> instead of <и> (the letter <я> [ja] here being the grammatical equivalent of <а> [a] for palatalized endings.
For the words «плащ» (‘raincoat’) and «лося» (‘moose’), I suspect that he was making a hypercorrection. Perhaps, having learned his lesson about the <a> and <я> plurals for «тельце» (‘small body’), «сердце» (‘heart’), and «платье» (‘dress’), he simply overapplied this new knowledge to «плащ» (‘raincoat’) and «лося» (‘moose’), even though he had answered these two items correctly on the previous test.

In all, Thomas correctly answered fifty out of fifty-seven items about forming noun plurals, or 87.7%. Note also that Thomas did not know ahead of time which words would be tested and therefore had no opportunity to study other than to try to recall the basic rules that I had reviewed with him, so the grammar tests he took amounted to general knowledge tests.

• [R37] Thomas once referred to New Orleans in Russian as *«Новые Орлеаны»* (plural), whereas he should have said «Новый Орлеан» (singular). This is a clear case of transfer from English, because apparently the English plural marker <s> made him think of “Orleans” as a plural word, so in Russian he added the plural marker <ы> to the word «Орлеан» to translate “Orleans.”

4.3.4 Verbs

4.3.4.1 Verbal Aspect

• [R27] While speaking to his mother in Russian, Thomas said, «В школу ходить не буду» (‘I won’t be going to school’)—using the multidirectional imperfective form of the verb “to go”), after which he immediately corrected himself by saying, «идти не буду» (‘I won’t be going to school’—using the unidirectional imperfective form of the verb “to go”). I believed that he had been correct the first time and had not needed to correct himself, because he was referring to making multiple trips to school and back, and he was using the verb “go” in its sense of attending school. The unidirectional form
would have been appropriate if he had been referring to a single trip to school and had been emphasizing the literal, physical going more than the general sense of attending.

Verbs of motion in Russian can be complicated, requiring a choice not only between the imperfective and perfective aspects of the verb, but also between two different forms of the imperfective aspect, a multidirectional and a unidirectional form (Gor, Cook, Malyushenkova & Vdovina 2009). The hesitation revealed that Thomas was having some trouble with verbs of motion, which is common for heritage speakers (see, e.g., Andrews 2001). Incidentally, problems with verbs of motion for heritage speakers are usually due to incomplete acquisition rather than language attrition or L2 influence (Pavlenko 2010).

- [R27] Thomas said, «Не перебарщивай» (‘Don’t overdo it’—using the imperfective aspect of the verb). He then immediately corrected himself by saying, «Не переборщи» (‘Don’t overdo it’—using the perfective aspect of the verb). My own judgment told me that he had spoken correctly the first time, because the negation of an imperative usually requires the imperfective aspect of the verb. But on second thought, I remembered that the perfective can be correct even in a negative command when the purpose is to give a gentle warning or reminder, akin to “make sure you don’t . . . ,” especially when used together with the word «смотри» (‘look’ in imperfective aspect and imperative mood) (Wade 1992: 305–306). This was evidence that Thomas can struggle with verbal aspect. I suspect that he initially defaulted to the imperfective aspect because that is the standard, then questioned himself when his intuition told him that the perfective can also be possible, but his mind was not clear enough on the matter to tell him for certain which aspect to prefer for what he wanted to communicate.

- [R28] Thomas’s mother asked him whether he would mind if she opened a window, and he responded, «Если хочешь открыть, открывай. Если не хочешь
 открыт, не открывай». ('If you want to open it [perfective aspect], open it [imperfective aspect]. If you don’t want to open it [perfective aspect], don’t open it [imperfective aspect].’) I initially questioned his use of verbal aspect, but my wife said that either aspect for the second verb in the first sentence was acceptable, so this is evidence of Thomas’s intact grammar as to aspect.

• [T16] I gave Thomas a test section on verbs of motion involving twelve items in which he had to select the correct response from among two or three options. Thomas aced this section with a perfect 100%, though on one item he initially made a wrong selection before crossing it out and choosing the correct option. Verbs of motion (Andrews 2001: 525) and verbal aspect (Isurin & Ivanova-Sullivan 2008: 74) sometimes give heritage speakers trouble, so this exam reassured me that Thomas’s internal grammar on these topics is still intact.

I must add, however, that the exam was pretty straightforward. Thomas occasionally struggles with verbs of motion and verbal aspect when the situations are more nuanced, such as when to use the unidirectional verb «идти» ('to go') with an adverb like «всегда» ('always'), which usually triggers the multidirectional «ходить» ('to go'), or his using a phrase like *«идти в интернет» ('to go on the Internet'), where idiomatic Russian (according to my wife) requires the pair «заходить» / «зайти» (both meaning ‘to go into’) in that situation.

4.3.4.2 Conjugations and Other Derivations

• [R34] Thomas hesitated when attempting to read the word «избрал» ('he elected'). He tried out the stress on each of the two syllables, but he was not sure which one took the stress. The stress goes on the <a> in the second syllable, but there is also a past passive participle, «избранный» ('elected,' ‘chosen’), in which the stress goes on
the <и> in the first syllable. He has probably heard both of these words during his life, and this input has informed his intuitions, but not enough to bring him up to the level of an L1 speaker whose acquisition is complete.

- [R34] Thomas was unfamiliar with the word «трепещите» (‘tremble’ or ‘shake’ in its imperative form), so my wife had to tell him where to put the stress and what the word meant. Incidentally, almost two months later I wrote the word «трепетать» (‘to tremble,’ ‘to shake’ in its infinitive form) and asked him if he knew it. He said it looked familiar, and although he was not completely sure what it meant, he read it out loud correctly, with the stress on the last syllable. When I told him the meaning, the word immediately clicked in his mind, and his facial expression seemed to say, “Oh, yeah, I know that word.”

As with «избранный» (‘elected,’ ‘chosen’) and «избрал» (‘he elected,’ ‘he chose’), Thomas’s brain was at least subconsciously familiar with both «трепещите» (‘tremble’ in the imperative) and «трепетать» (‘to tremble’ in the infinitive), and apparently his mind did connect the two, but dealing with different forms of the same word created some vagueness, which in turn led to hesitancy and a lack of certainty. Thomas’s Russian often seems to lie beneath the surface in his mind. He possesses much knowledge and has good recognition memory, but he sometimes struggles with his recall memory.

- [V7] Thomas sometimes, though not always, conjugates «-овать» (‘-ovat’) verbs incorrectly. I heard this error several times, though I did not record all the specific words in which it occurred. These verbs have a slightly irregular conjugation pattern in which the morpheme {ова} [ovə] (or sometimes {ева} [jevə]) becomes {у} [u]. For example, the infinitive...
«пробовать» (‘to try,’ ‘to sample’) is conjugated in the third-person singular as «пробует» instead of following the typical conjugation pattern to become *«пробовает», which is how Thomas often conjugates verbs of this kind.

While speaking with a Russian friend online, Thomas correctly conjugated the third-person singular of this particular verb, which surprised me after I had heard him conjugate such verbs incorrectly several times. Why did he conjugate correctly here but not in those other instances? My speculation is that here he was directly recalling the third-person singular of a word that was familiar to him, without any cognitive processing of grammar patterns, whereas in the other instances his brain was attempting to apply a grammar rule to process words that he knew only in non-conjugated forms, which led him to overapply the regular pattern to an irregular category.

I cannot determine whether this error is evidence of incomplete acquisition or attrition, but it is perplexing, because his input has definitely included verbs of this type. For example, in one of his Smeshariki episodes, «Танцор диско» (‘the Disco Dancer’), an episode that he has watched countless times ever since he was a small child, the verb «танцевать» (‘to dance’) occurs several times in conjugation, and I am sure that Thomas has heard verbs of this type, which are common, on many occasions throughout his life.

4.3.4.3 Verbal Adverbs (Gerunds)

• [R37] While reading out loud, Thomas was confused by the verb «помыв» (‘having washed’), so my wife explained to him the concept of verbal adverbs (aka gerunds). Here is another little gap in Thomas’s knowledge of Russian grammar, and an understandable one, because verbal adverbs, like participles, are most often encountered in writing (Wade 1992: 361, 388), and Thomas does not read much in Russian.
4.3.5 Code Switching

• [V1–V9] During the online video game session with his Russian friend, Thomas engaged in a lot of code switching. Examples of English words that Thomas directly transferred into Russian, and which other Russians also directly transfer into Russian, include the following: “meme” («мем», pronounced a little differently as [mʲɛm] instead of the English [mim]⁴), “Minecraft,” “redstone,” “YouTube” (which Thomas pronounces with an unpalatalized [t], as do many Russians, but note that many other Russians pronounce this word with a palatalized [ɫ]), “speed run,” “video,” “Skype,” “boom,” “okay,” “Fortnite rage” (though Russians online seem to use each of these two words independently rather than together as a unified phrase, whereas Thomas uses them together as a phrase), “YouTuber,” “pitbox” (which means nothing to me, but his Russian friend seemed to understand it), “hash tag” (pronounced (xɛʃ ɛg) because of the lack of [æ] in Russian, except for in some extremely subtle instances that only Russian linguists would be consciously aware of), and “POV” (point of view).

A few other examples, however, definitely represent Thomas’s own personal transferring of English words into Russian that most Russians would probably not transfer, such as the following: “face cam” (though I suspect that this term will soon be fully transferred into Russian by most Russians based on what I have observed on the Internet), “plot twist,” “sadness” («сэднис»), “epic,” “funny meme” (but with “meme” pronounced the English way as [mim] instead of the Russian way as [mʲɛm], “to edit” (which Thomas Russifies to *«эдитировать» [editirovat’]), and “duplicate” (in which he pronounces the [u] vowel as a palatalized Russian [ju]).

⁴ Technically this is more an example of a cognate than of code switching, but the distinction between the two blurs quickly upon reflection.
In one place he transfers the following three English sentences back-to-back with a ridiculously deliberate Russian pronunciation: “Zoom in on face. Nobody cares. Funny meme.” His Russian friend repeats the Russified “funny meme” phrase, after which Thomas concurs with a Russified “mega funny” [mʲɛɡə fani]. Later Thomas produces a phrase that would have been incomprehensible to pre-Internet, pre-texting Russians: “funny meme XD LOL funny,” with “LOL” spoken as a one-syllable word rather than as a three-letter, three-syllable acronym.

A few transferred words I did not recognize at first. Here I transcribe them and offer some guesses as to what Thomas is saying: rekretirovayu (‘I recreate’?—and note also that this is another example of his recurring grammar error in which he conjugates <овать> verbs without changing the morpheme {ова} to {у}), lagat’ (the verb ‘to lag’ but grammatically Russified, used when the video game was running slowly), and fixi (‘fixes’?—with a Russian plural marker {и} [i] instead of the English {es}).

4.3.6 Evidence of Language Attrition

• [R26] Thomas often puts a present-tense or future-tense verb clause after the word «чтобы» (‘so that’), whereas standard Russian requires the past tense when the subject of the subordinate clause is different from the subject of the main clause. I noticed this error several times. I once even did a brief grammar lesson with him to teach him how to use «чтобы» (‘so that’) correctly, which resolved the problem temporarily, but later he returned to the error, thereby confirming the finding of Brown and Larson-Hall (2012) that explicit grammar instruction often produces only short-term results.

For a while I thought that Thomas must have never acquired this feature of Russian grammar as a child, but later I reviewed an old video of him speaking Russian fluently when he was four years old, when Russian was still his dominant language, and in that video he used this
grammar construction correctly a couple of times. His mistaken use of «чтобы» (‘so that’) is probably the clearest and most indisputable evidence that I have of a specific example of attrition rather than incomplete acquisition in Thomas’s Russian.

This error is also evidence of transfer from English. In English it sounds fine to say, “John will do X so that Mary will do Y.” But in Russian you have to say the equivalent of, “John will do X so that Mary did Y,” even if Mary’s doing Y will occur in the future (see Pulkina, 1992; Wade, 1992; Offord, 1993). I believe that this convoluting of tenses in Russian—using the grammatical past tense to express a semantically future event—is what throws Thomas off as to this construction. The fact that the English way of handling this type of construction is simpler, in that English does not convolute the verb tenses, probably explains the tendency to transfer the English construction into Russian (see also Hakuta, 1976, for comparable examples of transfer from Japanese into English by a heritage speaker).

4.3.7 Miscellaneous

• [R4] Thomas regularly misuses the preposition «с» [s] (‘with’) when identifying the instrument by which an action is performed, as in “I write with a pencil”; “she attacked him with a knife”; “he was eating with a fork.” In Russian the instrumental case performs this function by itself, without the preposition (Pulkina, 1992; Wade, 1992; Offord, 1993).

True as that is, sometimes things get confusing, because Russians do use the preposition «с» (‘with’) with the instrumental case, and sometimes the distinction between those phrases where the preposition should not be used and those where it should be used is highly nuanced, such as in the phrase «мыть руки с мылом» (‘to wash hands with soap’), which appears to violate the basic rule but is in fact grammatical. My wife explained that in her mind, the instrument of washing is water, which in the example cited is not stated but is understood. The
water is “with” the soap in the sense of being together with it, but the soap is not the instrument of the washing, so the use of the preposition «с» (‘with’) is justified here.

Many American students of Russian as an L2 make the error of transferring English grammar into Russian when they are learning the instrumental case, causing them to overuse the preposition «с» (‘with’). Thomas, despite being an L1 speaker of Russian, displays the same misuse of «с» (‘with’), a likely case of transfer from English.

• [W13] In a free-writing exercise for which I asked Thomas to write about himself and various activities that he enjoys, he begins by stating, «Мне *тринацать с половиной лет» (‘I’m thirteen and a half years old’). I have already discussed his misspelling of «тринадцать» (‘thirteen’), but this sample is significant for an additional reason—it shows his comfort with phrasing words in a Russian way: *«тринацать с половиной лет» (literally ‘thirteen with a half years’). This construction using “with” to express a half or any other partial quantity to qualify other units stated as wholes can cause confusion for some American students, or at least takes some getting used to, but it is natural for Thomas and is evidence of intact grammar.

• [W13] He writes «не далеко» instead of «недалеко» (both mean ‘not far’). Even L1 Russian speakers often struggle to remember whether certain terms should be written as one compound word or as separate words (see, e.g., Розенталь, 1972). I have not seen my first-year American students struggle with this much.

• [V1, V6] In a couple of places during the video game conversation, Thomas seems to omit the preposition «в» (‘in,’ ‘at’) before the word «игру» (‘game’) when he seems to say, *«играю игру» (‘I am playing the game’) and *«игру играть» (‘to play the game’). But in a couple of other places I clearly hear the preposition [V7, V9]. In addition to being a morphosyntactic feature, this might also be further evidence of Thomas’s native-like phonology,
because Russians often pronounce the letter <в> (which can sound like [v] or [f]) so delicately that it becomes practically inaudible.

• [T17] I was surprised on one written test to discover an entire section that Thomas had deliberately left completely blank. He did not know the grammar of how to derive a patronymic from a first name, and he refused to guess.

4.4 Semantic and Pragmatic Features

• Thomas uses the word <если> (‘if’) when he should use <ли> (‘if,’ ‘whether’), such as when he once said, «Хочу знать, *если дверь открыта» instead of «Хочу знать, открыта ли дверь» (‘I want to know if the door is open’) (see Pulkina, 1992; Wade, 1992; Offord, 1993). American students of Russian as an L2 make this error often, as does at least one adult L1 Russian speaker I know who has lived in the United States for a long time. The error is a clear example of transfer from English, both as to translating the word “if” with «если» instead of with «ли» and as to using the English subject-verb word order instead of inverting the subject and verb in the subordinate clause according to standard Russian.

• [W10] At the end of a written sentence, Thomas tacks on a flippant slang phrase, «что вообще офигеть» (roughly ‘which is totally crazy’), thereby using the verb infinitive «офигеть» (‘to be amazed or stunned’) as an interjection, similar to how his Russian uncle uses the verb «обалдеть» (‘to be surprised,’ ‘to be stunned,’ ‘to lose one’s wits’) as an interjection to express surprise. Similarly, Thomas writes «ты просто *охринеть офигенная» (roughly ‘you are just totally cool’). Note that his misspelling of «охренеть» is yet another instance of his phonetic spelling by which he uses an <и> [i] instead of a <е> [je].

• [W11] In one writing sample he uses the colloquial word «нету» (‘no’) numerous times instead of the more formal «нет» (‘no’). This is not an error, but my American students of
Russian would not likely make that word choice to communicate that meaning, especially in writing.

- [W13] In another sample he writes «его имя Саша» (‘his name is Sasha’) instead of «его зовут Саша» (‘they call him Sasha’). Both are grammatically correct and semantically accurate, but I usually hear L1 Russians use the latter more than the former.

- [R31] Thomas said «*изучать по-японски» (‘to study in Japanese’). Thomas did not know that he needed to say either «японский» (‘Japanese’) or «японский язык» (‘the Japanese language’) after the verb «изучать» (‘to study’), because it is not grammatical to use the adverbial term «по-японски» (‘in Japanese’) after the verb «изучать» (‘to study’), which requires the specifying of a direct object. He seems to not understand the precise scope of the meaning and usage of the term «по-японски» (‘in Japanese’).

- [R31–R32] Again while speaking to an adult L1 Russian speaker, Thomas attempted to say “his name is” in Russian. Thomas automatically said «его называют» (‘they call/name him’), but immediately he cut himself off, apparently sensing that something was amiss. He quickly self-corrected by saying «его имя _____» (‘his name is _____’), which was indeed more accurate. Thomas needed the phrase «его зовут» (‘they call him’), but it slipped his mind, so he substituted «его называют» (‘they call/name him’), whose meaning is clear, but this construction is rarely used for saying what a person’s name is, though on one or two occasions I have heard an L1 speaker use it this way.

This type of error is unlikely to come from an American student in a first-year Russian course, because American students learn «зовут» (‘they call’—compare ‘llamar’ in Spanish) early on and come across «называют» (‘they call/name’) later, and American students are taught
how to use the two terms and to distinguish between them. Thomas’s word choice here is a simple example of how heritage speakers, thanks to a larger vocabulary than that of L2 students, can draw upon a store of similar words when they cannot recall a particular term. It is also an example, for the same reason, of how heritage speakers can sometimes make errors that L2 learners of Russian are unlikely or unable to commit.

• [R34] After reading the word «очи» (an archaic term for ‘eyes’), he paused and thought about it, then turned to my wife and asked if that word was the plural form of «око» (‘eye’), and she told him that it is. By contrast, he was not familiar with the word «коли», an older form of «если» (both meaning ‘if’).

• [V7] In one place Thomas says «это зачем» to mean ‘this is why’ at the end of a statement, whereas idiomatic Russian requires the phrase «вот почему» (‘here is why’— «зачем» and «почему» are near synonyms, both translatable as ‘why’). Thomas’s error here is interesting to me in two ways.

First, his use of «это» (‘this is’) instead of «вот» (‘here is’) is a clear instance of transfer from English. My American students of Russian tend to transfer “this is why” into Russian rather than “here is why,” and in this respect Thomas is like my American students. But they use the word «почему» (‘why’), whereas Thomas uses the word «зачем» (‘why’). In this respect Thomas is more like heritage speakers, whose errors sometimes reflect their more extensive vocabulary, because the availability of similar terms in a heritage speaker’s mind can lead to errors that L2 students are less likely to commit.

• [T17] On September 6, 2021, I gave Thomas the complete Unit 1 exam that I had given to my Russian 1010 class at Utah Valley University. Part 1 was a vocabulary test involving thirty words relating to greetings, nationalities, and family members, and Thomas scored 100%
correct. Part 2 asked students to match Russian names with nicknames, and here Thomas answered only eleven out of twenty and left the other nine blank. For these nine items, he did not know which nicknames had the same meaning as their corresponding full names.

Part 3 tested the basic distinction between formal and informal, the classic t/v distinction in several languages. Here Thomas reported that «здравствуйте» and «здравствуй» (each one meaning ‘hello’) are both formal, when in fact the second form is informal. But the word itself connotes a high level of propriety, regardless of whether you are “on vi” (the formal ‘you’) or “on ti” (the informal ‘you’) with the other person.

- [T18] On a vocabulary quiz about family words, he scored eighteen out of twenty-two. He mixed up “nephew” with “grandson” and “niece” with “granddaughter.” Here is another random, unexpected discovery of a small lacuna in his knowledge of Russian.

4.5 Findings from Reading

4.5.1 Effects of the Smeshariki Scripts

On March 31, 2020, near the beginning of our revitalization efforts and just ten days after I started giving Thomas Smeshariki scripts to read out loud every day, I recorded the following entry in my research journal [R2]:

I have noticed that since he started reading the Smeshariki scripts over a week ago, he seems to be reading the Book of Mormon every evening more clearly, more audibly, and with more confidence. My impressions are not exactly empirical or measurable, but a change for the better definitely seems to have occurred this past week since he started reading Smeshariki scripts out loud to practice his reading and pronunciation.

* * *

I had not expected to see results so quickly, but it was undeniable that the previous inaudible mumbling had stopped.
4.5.2 Effects of the Learner’s Edition of the Book of Mormon

Shortly after noting the apparent positive effects of the *Smeshariki* scripts, I ordered online a copy of the “learner’s edition” of the Russian Book of Mormon, in which the stress is indicated for all the words. I had suggested earlier to Thomas that I could buy this book for him, but to my surprise, he adamantly refused. Here again I was seeing the role of his individual psychology coming through. Russian was his native language, and in his mind, that meant that he should be able to speak and understand and read and write Russian flawlessly, with no extra effort on his part and no special helps. He had perfectionistic and unrealistic expectations of himself.

Not wanting to discourage an already sensitive Russian speaker, I backed off at first, but after witnessing the success of the *Smeshariki* scripts, I decided to buy the learner’s edition anyway and simply present Thomas with the accomplished fact. This was one of the few instances when I exerted a little pressure and hijacked his initiative.

When the learner’s edition arrived and the time came for family scripture study before bed, I was careful not to treat this book as if it were exclusively Thomas’s. Instead, my wife and I also read from this edition when it was our turn to read. We were all doing the same thing, and Thomas was just like the rest of the family, with no special attention drawn to his need for extra help. He was still a little resistant at first when we handed him the book, but by now he was softening up, so he gave the new edition a try.

For the most part, the previous frustration and embarrassment from struggling with where to place the stress vanished instantly. Now he could read Russian just as smoothly as my wife and I could, and he never needed to ask us for help. He also no longer balked when his turn came to read a verse out loud during family scripture study.
4.6 Other Notable Items

- [W10] Thomas wrote a brief letter to his mother at my request on August 6, 2020. He opens his letter by addressing his mother in a humorous way: «Ёу, мам». This is humorous because Thomas is using Russian letters to write the English words “Yo, mom.” One interesting note is his use of the Russian letter <ё> [u] at the end of the first word. The letter <ё> by itself makes the sound [jo]. By adding the Russian <у>, Thomas captures the [u] sound typical of American diphthongs. I myself would probably not have thought to add the <у> to capture the [u] sound, because <ё> alone could reasonably represent the English word “yo.”

- [W11] Thomas completed an English-to-Russian translation exercise consisting of ten sentences that he translated on November 12, 2020. His translation is flawless as far as semantics and grammar are concerned. His only errors consist of phonetic spelling mistakes.

- [W11] In one writing sample he spells a word correctly in one place but then misspells the same word in the very next sentence. I see no systemic error here. It appears to be just a typo or the illogical result of a momentary mental lapse.

- [W12] In the writing sample involving eight short answers to questions in an exercise book, Thomas’s Russian is absolutely flawless. He even uses the genitive plural after a negated verb, which can be tricky for some American students.

- [W13] He omits the <ь> from «друзья» in one writing sample, but in another writing sample [W7] where he copies lines from a Smeshariki episode, he writes this word correctly.

- [W13] He writes «*пятьнадцать» instead of «пятнадцать» (both mean ‘fifteen’), an error already discussed as to his phonetic interchanging of <д> and <т>. But note also that he fails to remove the first <ь>, which comes at the end of «пять» (‘five’) but is lost in the middle of «пятнадцать» (‘fifteen’).
• [W13] He writes the phrase «по Русский» (‘in Russian’) when he should write this as «по-русски». Apparently there is some transfer from English in his use of a capital letter in *«Русский» (‘Russian’), which should not have been capitalized in Russian the way it is in English.

• [W13] In various places he writes a small capital <Б> instead of the lower-case <б>.

• [T10] On July 18, 2020, he took a tricky two-part quiz about how the 7-letter and 5-letter spelling rules affect adjective endings, and he correctly answered all twenty-seven items (100%). Two days later on July 20, I gave him a quiz to see if he understood how to apply all three of the major spelling rules. He scored 100% on this one too, but there are two answers where a wrong answer was scribbled out before the correct answer was written in.

• [T12] The next day, July 21, I gave him a list of thirty-six words, one of which was a phony word that I made up, and I asked him to circle the words that violated one or more of the three major spelling rules. He correctly circled seven words and put a check mark by the words that did not violate any spelling rules. Interestingly, he refused to do anything to the phony word, which contained four ridiculous spelling-rule violations. So as far as real words were concerned, he scored 100%.

• [T19] On October 9, 2021, I gave Thomas the Unit 2 exam that I had given my Russian 1010 students at Utah Valley University. He scored 97.5%, plus he correctly answered six of the ten extra credit items, so his final score was 103.5%. He got a perfect 25/25 on the clothing vocabulary section. He missed half a point on the plurals section, because he wrote *«синии» instead of «синие» (siniye—‘blue’).
Thomas correctly chose the neuter pronoun «оно» (‘it’) to replace the irregular noun «имя» (‘name’), which often confuses students because it is neuter but looks like it should be feminine.

In the extra credit section where I threw tricky questions at the students for bonus points, Thomas would sometimes rewrite the question to make it grammatically consistent with the answer that made sense to him. For example, one item stated, «Вот это син____ паспорта» (‘These here are blue passports’). The trick was to realize that паспорта is a masculine plural noun with an irregular plural ending, not a feminine singular noun, so the student should put the plural adjective ending in the blank, not the feminine singular ending. Thomas, apparently not knowing the plural of this noun, simply crossed out the <a> at the end as if it were a mistake, which returned the word to its masculine nominative singular form, which he did know, and then in the blank he wrote the masculine singular adjective ending.

The next trick question stated, «Вот мои чёрн____ пальто» (‘Here are my black overcoats’). The trick here was to recognize that пальто is indeclinable, so there is a subtle ambiguity as to whether the question is referring to one overcoat or more than one. The hint that gives away the answer is in the plural possessive pronoun мои (‘my’), which prompts the attentive student to write a plural adjective ending in the blank space. Thomas simply crossed out the <и> in мои, replaced it with a <ё> to make the word neuter singular, and then filled in the blank with a neuter singular adjective ending that corresponded grammatically with the word пальто in the neuter singular.

4.7 Additional Comments about the Speech Sample from the Video Game

First, when I ignore the silly teenage slang and multiple incomplete statements in this sample and focus on the complete sentences, Thomas’s grammar appears fundamentally intact.
His adjectives are in the proper form considering the nouns they modify (e.g., masculine, feminine, neuter, plural). His verb conjugations are almost all correct. Most reassuring is that his declensions, which are one of the most difficult aspects of Russian for American students, are almost all correct. His vocabulary is adequate not only to understand his friend without any trouble, but also to produce his own responses.

On the other hand, upon further reflection I realize that his incomplete statements cannot be ignored. First of all, there are so many of them. Multiple times he launches into a sentence, only to cut himself off in the middle of it and then not complete it. Sometimes he seems unable to retrieve a particular word that he needs; other times he seems to get tripped up by grammar that he is unsure of. His friend’s Russian also gets a little choppy because of the fast-changing nature of the video game, but when his friend does speak, he quickly and smoothly declares his thoughts. Thomas, by contrast, freezes up much more frequently, and the fast-changing nature of the video game cannot explain all of these instances.

Of course I cannot prove what he would have said but did not say, but I have the impression that the lack of evidence is itself strong evidence—he simply cannot fully communicate the way he wants to. What he says in the speech sample is mostly accurate, but there seems to be so much that he does not say because he cannot say it. Moreover, I suspect that his perfectionism compounds the problem further by causing him to avoid trying to say anything that he is not sure about.

4.8 A Vulgar but Insightful Conversation

[R19] Thomas once gave me his opinion about a bad word, «хёрня» (xʲirˈnʲa), saying that it was not all that bad even though it was a swear word. The way he talked about it gave me the impression that he was drawing upon his past experiences with the Russian language and upon
his intuitive sense of Russian words to make an informed and reasonably grounded judgment
about the relative severity of this particular swear word.

A Google search of this word revealed various comments from Russians about it, and they were surprisingly divided and inconsistent in their characterizations, some claiming that it was definitely «мат» (‘obscene language’), others claiming that it was not. Its root «хер» [xʲɛr] was apparently an archaic name for the letter <х> [x]. Some of the comments cited this fact as evidence that the word is not obscene, but other comments insisted that this root is indeed obscene.

In sum, there is indecision among native speakers as to how offensive this word is, and Thomas’s ambivalent judgment of it reflects that general indecision. I also noted that Thomas not only knows this word intellectually, but feels this word intuitively. Thomas once told me that Russian swear words offend him more than English swear words, because he feels the Russian more deeply.
Chapter 5: Conclusions

5.1 Overview

With Thomas’s consent and cooperation, I had set out to understand and preserve his Russian, and as I write this thesis more than two years later, I conclude that on net balance we succeeded. In February 2020, I was deeply concerned that Thomas was losing his Russian, especially because he was almost never saying anything in Russian anymore to me or my wife. But as Thomas and I wrapped up the bulk of our efforts late in 2021, Thomas was frequently speaking Russian to me and my wife and some family friends.

In addition, his attitude had turned around completely. No more did he clam up and avoid using Russian as if it were something unpleasant for him. Instead, he was willing to read and speak Russian with us, and he was also willing to ask questions and listen to our explanations and corrections. Russian was something enjoyable for him, and also something that he was proud of. This result represented a complete turnaround. Thomas’s Russian still has problems, but by and large his Russian is intact, and he can use it to communicate.

Several turning points stand out. The first was at the outset, when I got the idea to give him Smeshariki scripts. I cannot measure how much those scripts helped, but I feel that they were tremendously influential. His reading out loud during family scripture study improved within a week after he started reading those scripts. A second turning point came about a month into our efforts, when one day, out of the blue, he spoke some complete sentences to me in Russian on his own initiative and told me that he thinks he needs to speak Russian more. This was a key shift in his attitude and motivation. A third turning point occurred that same day when he discovered a new YouTuber, Sasha Zotova, and started watching her livestreams. That gave
him authentic input to listen to, and I believe that he was more likely after that to turn on the Russian audio track when he played video games.

The shift in focus to grammar instruction about three months into the project was a key development. I am sure that Thomas did not retain everything I taught him, but he retained a lot, and I think that the focus on grammar got him thinking consciously about his language use, which helped him to correct himself and gave him more confidence as he started to plug some holes in his morphosyntax.

Another vital development occurred as I gradually broke down his perfectionism, after which he became more teachable and adaptable and willing to try. Another small but significant turning point occurred almost five months into our project when he stopped procrastinating his reading assignments. This seemed another key shift in attitude and work ethic. Around the same time, our family watched a movie in Russian together and had a discussion about Thomas’s name and his Russian relatives. I believe that these family connections boosted his motivation and helped keep Russian a positive experience for him. Connections with Russian friends served the same purposes.

His recording the video game session with his friend was a huge turning point that came almost a year into the project and produced much valuable data that I had not been able to gather earlier.

For me, the bottom line is that he speaks Russian with me and my wife again, especially when I do my part by speaking Russian to him. I doubt that he will ever get his fluency up to speed so long as he has so little Russian in his daily environment outside the home, but the crisis of late 2019 and early 2020 seems to be behind us.
5.2 The Hypotheses and Research Questions

Regarding the hypotheses and research questions that drove this study, I provide the following conclusions.

First, my hypothesis that Thomas’s Russian would display some of the problems typical of heritage speakers of Russian was correct, and below I break this statement down into more specific components.

My hypothesis that his phonology would display weaker palatalization, especially in word-final consonants, turned out to be wrong. My broader suspicion that his phonology in general would show signs of impairment was also wrong. His Russian pronunciation, when judged by L1 speakers like my wife or a Russian friend, or when judged by my own ear and by the more objective measurements of Praat, is still authentically Russian. By this I mean that he can still produce the sounds of Russian the way L1 speakers in Russia can.

I add, however, that he probably does not sound completely Russian because of his sometimes non-Russian diction, his limited vocabulary, his occasional grammatical errors, and his impaired fluency. Perhaps it would be most accurate to say that he does not have an accent in the strict phonetics/phonology sense, but he displays a sort of heritage-speaker dialect in the morphosyntactics/semantics/pragmatics sense. In this sense he has an “accent” of a non-phonological kind. But regarding phonology, when he listens to a native Russian saying a Russian word and he tries to mimic the pronunciation in an authentic Russian way, he can do so, which is more than I can do even after more than a quarter of a century of study and practice as an L2 learner. Thomas confirms the pronunciation advantages of heritage speakers.

My hypothesis that his grammar and syntax would show at least some errors typical of Russian heritage speakers was correct. Although most of his grammar is remarkably intact, he
makes some errors that L1 speakers in Russia probably would not, such as his incorrect conjugations of <овать> and <евать> verbs, his transferring of various English words and sometimes even grammar structures into Russian, his frequent spelling mistakes resulting from learning words phonetically rather than orthographically, his occasional case errors, his weak grasp of numbers in the oblique cases, his trouble with the plural of neuter nouns in the nominative case, and his confusing of the gender of some nouns.

Sometimes he makes errors when he draws upon his store of similar Russian words while trying to speak fluently, which results in some errors that beginning American students simply cannot make, because they lack the vocabulary to make them, such as his use of «называть» (‘to call, to name’) when he momentarily forgot the more common «звать» (‘to call’). He consistently commits a couple of errors that are common among American students of Russian as an L2, such as his overuse of the preposition «с» (‘with’) with the instrumental case, or his incorrect use of «если» instead of «ли».

In addition to these errors, he also displays some morphosyntactic errors that reflect gaps not only in his grammar, but also in his cultural knowledge. For example, he is unable to create unfamiliar patronymics by applying a grammar rule, though he can correctly produce patronymics that are familiar to him. His minor confusion regarding levels of formality is another such cultural error rather than a strictly grammatical one. In addition, I am sure that there are many cultural references, such as to movies or historical events, perhaps even to certain foods or holidays or well-known musical items, that would be completely lost on Thomas simply because he did not grow up and go to school in Russia.

My secondary hypothesis that I could help him to recover his Russian through personal tutoring at home was generally correct, though with the caveat that his Russian still differs from
that of L1 speakers who were born and raised in Russia and were therefore able to acquire
Russian completely.

As far as I can tell, he never suffered much attrition in his ability to read Russian. His
difficulty with knowing where to put the stress on words as he read was more likely a case of
incomplete acquisition, because the vocabulary he encountered in the Russian Book of Mormon
and the Russian Doctrine and Covenants went beyond what he ever used in ordinary speech.

His ability to write using Russian cursive initially seemed to have suffered almost
complete attrition, but on the other hand, he relearned cursive so quickly that his knowledge of
how to write must have remained close to the surface in his memory and simply needed a little
priming of the pump to revitalize it. After filling out just two worksheets [W2, W3] during the
course of two consecutive days, he was able to write cursive again. Unlike most Russians
educated in Russia, however, Thomas prefers printed letters to cursive when he writes by hand.
Then again, like most people in our contemporary world, whether Russian or American, Thomas
rarely writes by hand. When he writes in Russian, he is usually typing on a keyboard.

Some of his writing errors are not the phonetics-vs.-orthography errors mentioned above,
but are simple misspellings. In these, however, we are probably observing one symptom of a
problem common among heritage speakers, namely their lack of literacy. Overall he writes well,
though that is true for his English also. His writing ability is not merely a foreign-language skill,
but a more general aptitude that would likely show itself in any language that he learns.

I never detected any significant deficiencies in his listening comprehension, though he
almost certainly does not understand Russian as well as L1 speakers his age in Russia, because
his vocabulary is more limited, and he hears so little Russian around him. But in terms of the
raw ability to hear and process the basic meaning of statements made by L1 speakers of Russian, Thomas remains highly proficient.

As for his speaking, Thomas has suffered a noticeable decline, especially in his fluency. He often cannot automatically recall the words that he needs in order to say what he wants to say. He frequently pauses to think about how to formulate his statements. Sometimes he simply cannot think of how to express some ideas. My personal tutoring did not restore him to full fluency. That being said, however, he can communicate adequately with me and my wife, as well as with his Russian friend in Russia or with a friend of ours here in the U.S.

5.3 Some Comments about Psychological and Other Factors

I did not study the issue of psychological factors in this thesis project, but I can state here in hindsight that some psychological factors were critical in my efforts to revitalize Thomas’s Russian. Despite some initial resistance, his motivation to participate in this study later proved to be strong, reflected not only in his desire to keep his Russian, but also in his work ethic. I cannot count the hours we spent together or the time he put into reading Russian texts out loud to himself or in listening to Russian YouTubers or in speaking with his Russian friend online or with our family friend when she lived with us for a while during the summer of 2021. Without this tremendous effort on his part, I doubt that he would have succeeded as well as he has.

His attitude toward Russian is positive. His many trips to Russia over the years have been pleasant experiences for him, creating positive associations. Having family and friends in Russia whom he loves but who cannot speak English provided him not only motivation, but also the strongest kind of positive associations, which go much deeper than merely a series of fun trips abroad. He loves Russia, the Russian language, and the Russian people whom he knows.
The Russian part of him is a source of much joy in his life and a core part of his identity, which I believe has facilitated his ability to keep what Russian he still possesses.

This revitalization project deeply impressed me with the importance of psychological factors surrounding language acquisition and learning, whereas at first I was focused exclusively on the nuts and bolts of the language itself—phonology, morphosyntax, semantics, and pragmatics. A good revitalization effort should include significant cultural and psychological components in addition to an intellectual, linguistic component.

Another conclusion that I did not hypothesize about is that timing is crucial. It seems a cruel irony that most heritage speakers suffer language attrition when they are least likely to have the intellectual and psychological maturity they need to preserve their heritage language on their own through independent study and practice, namely between about five years old and puberty. Their apathy or rebellion usually continues through high school, and when they finally start studying their heritage language as adults in college, they often discover that they must struggle as much as the traditional L2 students. In hindsight, I wish that I had understood language acquisition and learning better when Thomas was a small child and that I had been more diligent after he turned five.

I must add that there is much value in stubborn tenacity on the part of both teacher and student. So many times during the first year, I nearly abandoned this project, because I could not collect much data and could not see any results from my efforts while time was slipping away from me month after month, but I pressed on. Many parents give up when they should instead keep trying. And Thomas also pressed on, which was absolutely critical, because he is the one person ultimately responsible for keeping his Russian.
5.4 Emphasizing Ability

It can be misleading to tally up all the errors that I detected and merely list them, because the list can create the false impression that Thomas’s Russian truly is grammatically deficient. One problem with cataloguing errors is that all of his correct usages can be taken for granted and overlooked. I have tried to make note of his many strengths as well as his errors, but I feel that I must also point out that Thomas’s grammar does not contain some fundamental errors that are commonly found in the Russian of heritage speakers.

For example, with the sole exception of «*с друг другом» (‘with each other’), I found no evidence of word-order problems in Thomas’s Russian. On the contrary, sometimes Thomas’s word order reflects the grammar of a monolingual L1 speaker who acquired Russian completely. Another problem that I looked for but did not find was a failure to grasp the basic concepts of verb tense and aspect, a common problem for heritage speakers but one that Thomas does not display, at least not so that I would notice it.

Thomas also does not confuse his parts of speech the way some heritage speakers do. When he uses verb infinitives as interjections in illogical places in sentences where the words cannot function as verb infinitives and do not even seem to work grammatically with the words around them (e.g., «охренеть», a rough slang word expressing surprise, or «офи́геть», a slightly milder slang word meaning the same thing), he does so deliberately as a smart-alecky, humorous use of anthimeria or catachresis (aka abusio), and moreover, he does so in a genuine Russian way—compare the use of the verb «обалдеть» as an interjection, a mild slang word also used to express surprise. These are not mistakes, but creative usages of Russian that intentionally depart from speech that is considered standard or proper. Moreover, L2 learners would not likely produce such usages on their own, whereas when Thomas gets creative with the Russian
language and goes beyond grammar rules, he does so in an authentic Russian way that reflects his comfort with Russian and his strengths in harnessing its capabilities.

Though it is possible to put together a list of nitpicky, technical errors in Thomas’s Russian, as I have done in this thesis, I feel confident that the list of what Thomas can do correctly in Russian far exceeds the list of his errors and deficiencies. His Russian is not as fully developed as it would have been had he always lived in Russia, but it is fundamentally intact.
Appendix 1—Reading Schedule

Round One—Smeshariki and Other Scripts
2020.03.21—«Проверка (квантограббер)» (‘The Test [The Quantograbber’), Parts 1 and 2
2020.03.23—«Край земли» (‘The Edge of the Earth’)
2020.03.24—«Бабочка» (‘The Butterfly’)
2020.03.26—«Ля» (‘La’) and «Бутерброд» (‘The Sandwich’)
2020.03.27—«Уральские пельмени: Бла Бла Шаттл» (Ural-Mountain Dumplings—’Blah Blah Shuttle’)
2020.03.28—an excerpt from «В поисках Немо» (Finding Nemo)
2020.03.30—an excerpt from «Суперсемейка» (The Incredibles)
2020.03.31—«Комната смеха» (‘The Laughter Room’)
2020.04.01—«Герой Плутона» (‘The Hero of Pluto’)
2020.04.02—«Библиотека» (‘The Library’)
2020.04.03—«Индийский чай» (‘Indian Tea’)
2020.04.04—«Сила воли» (‘Willpower’)
2020.04.06—«Не может быть» (‘It Can’t Be’)
2020.04.08—«Большой куш» (‘The Big Jackpot’) and «Партия будет доиграна» (‘The Game Will Be Played to the End’)
2020.04.10—«Последняя радуга» (‘The Last Rainbow’) and «Полоса невезения» (‘A Streak of Bad Luck’)
2020.04.12—«ОРЗ» (‘Острое респираторное заболевание’) (‘ARD’ [Acute Respiratory Disease’]) and «Смысл жизни» (‘The Meaning of Life’)
2020.04.14—«Страшилка для Нюши» (‘A Scary Story for Nyusha’) and «Телеграф» (‘The Telegraph’)
2020.04.15—«Секрет Гудини» (‘Houdini’s Secret’)
2020.04.17—«Торжество разума» (‘The Triumph of Reason’)
2020.04.18—«Танцор диско» (‘The Disco Dancer’) and «Сладкая жизнь» (‘The Sweet Life’)
2020.04.20—«Эрудит» (‘The Erudite Person’)
2020.04.21—«Событие века» (‘The Event of the Century’)
2020.04.22—«Самое главное» (‘The Main Thing’)
2020.04.23—«Комната страха» (‘The Fear Room’)
2020.04.24—«Тайное общество» (‘A Secret Society’)
2020.04.25—«Теория относительности» (‘The Theory of Relativity’)
2020.04.28—«Щедрое небо» (‘The Generous Sky’) and «День рождения Нюши» (‘Nyusha’s Birthday’)
2020.04.29—«-41˚ С» (‘-41˚ C’)
2020.04.30—«Сувенир» (‘The Souvenir’)
2020.05.01—«Фаталисты» (‘Fatalists’)
2020.05.02— «Самообороны без противника» (‘Self-Defense without an Opponent’)
2020.05.05— «Тайна древних сокровищ» (‘The Secret of Ancient Treasures’)
2020.05.06—the first four and a half minutes of Star Wars: The Last Jedi
2020.05.08—«Невидимка» (‘The Invisible One’)
2020.05.09—«Невоспитанный клон» (‘The Ill-Mannered Clone’) and «Шахматы» (‘Chess’)
2020.05.12—«Лабиринт» (‘The Labyrinth’)
2020.05.13— «Завтрак из шести букв» (‘A Breakfast of Six Letters’).
2020.05.18—«Смерч» (‘The Tornado’)
2020.05.20—«Линии судьбы» (‘Lines of Fate’)
2020.05.22—«Большие гонки» (‘The Big Races’)
2020.06.10—«Кто первый?» (‘Who Is First?’)
2020.06.15—a brief excerpt of «Снупи в кино» (‘The Peanuts Movie’ [literally ‘Snoopy in the Cinema’])

Round Two—Smeshariki and Other Scripts
2020.06.17—«Проверка (квантограббер)» (‘The Test [The Quantograbber’]), Part 1
2020.06.18—«Проверка (квантограббер)» (‘The Test [The Quantograbber’]), Part 2
2020.06.21—«Край земли» (‘The Edge of the Earth’) and «Бабочка» (‘The Butterfly’)
2020.06.23—«Ля» (‘La’)
2020.06.24—«Бутерброд» (‘The Sandwich’)
2020.06.26—excerpt from «Суперсемейка» (‘The Incredibles’)
2020.06.27—«Комната смеха» (‘The Laughter Room’)
2020.06.29—excerpt from «В поисках Немо» (‘Finding Nemo’)
2020.07.08—«Герой Плутона» (‘The Hero of Pluto’)
2020.07.09—«Библиотека» (‘The Library’)
2020.07.13—«Индийский чай» (‘Indian Tea’)
2020.07.14—«Сила воли» (‘Willpower’)
2020.07.15—«Не может быть» (‘It Can’t Be’)
2020.07.16—«Большой куш» (‘The Big Jackpot’)
2020.07.17—«Партия будет доиграна» (‘The Game Will Be Played to the End’)
2020.07.18—«Последняя радуга» (‘The Last Rainbow’)
2020.07.20—«Полоса невезения» (‘A Streak of Bad Luck’)
2020.07.21—«ОРЗ» (Oстрое респираторное заболевание) (‘ARD’ [Acute Respiratory Disease])
2020.07.23—«Страшилка для Нюши» (‘A Scary Story for Nyusha’)
2020.07.25—«Телеграф» (‘The Telegraph’)
2020.07.27—«Секрет Гудини» (‘Houdini’s Secret’)
2020.07.28—«Торжество разума» (‘The Triumph of Reason’)
2020.07.29—«Танцор диско» (‘The Disco Dancer’)
2020.07.30—«Сладкая жизнь» (‘The Sweet Life’)
2020.07.31—«Проверка (квантограббер)» (‘The Test [The Quantograbber’]), Parts 1 and 2 (third time this year)
2020.08.03—«Эрудит» (‘The Erudite Person’)
2020.08.04—«Событие века» (‘The Event of the Century’)
2020.08.05—«Самое главное» (‘The Main Thing’)
2020.08.10—«Тайнное общество» (‘The Secret Society’)
2020.08.11—«Теория относительности» (‘The Theory of Relativity’)
2020.08.12—«День рождения Нюши» (‘Nyusha’s Birthday’)
2020.08.13—«Щедрое небо» (‘The Generous Sky’)
2020.08.14—«-41˚ C» (‘-41˚ C’)
2020.08.17—«Сувенир» (‘The Souvenir’)
2020.08.18—«Фаталисты» (‘Fatalists’)
2020.08.19—«Самооборона без противника» (‘Self-Defense without an Opponent’)

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2020.08.20—«Невидимка» ('The Invisible One')
2020.08.21—«Невоспитанный клон» ('The Ill-Mannered Clone')
2020.08.27—«Шахматы» ('Chess') and «Лабиринт» ('The Labyrinth')
2020.09.02—«Завтрак из шести букв» ('A Breakfast of Six Letters')
2020.09.04—«Смерч» ('The Tornado')
2020.09.05—«Линии судьбы» ('Lines of Fate')
2020.09.07—«Большие гонки» ('The Big Races')
2020.09.08—«Кто первый?» ('Who Is First?')
2020.09.10—«Снупи в кино» (The Peanuts Movie [literally ‘Snoopie in the Cinema’])
2020.09.28—«Тайна древних сокровищ» ('The Secret of Ancient Treasures')
2020.09.30—«Уральские пельмени: Муж и жена в самолёте» (Ural Dumplings: ‘Husband and Wife on a Plane’)

**Round Three—Smeshariki and Other Scripts**
2020.11.09—«Без никого» ('Without Anyone')
2020.11.10—Mimimishki: «На связи» ('In Communication')
2020.11.11—excerpt of Кавказская пленница (The Captive of the Caucasus)
2020.11.12—interview with Russian cyclist Yevgeniya Maximova (first half)
2020.11.16—interview with Russian cyclist Yevgeniya Maximova (second half)
2020.11.27—«Спокойной ночи» ('Good Night')
2020.11.30—«Мастер и земляника» ('The Master and Wild Strawberries')
2020.12.05—«Снотворец» ('The Dream Maker')
2020.12.07—«Добро, зло, и девочки» ('Good, Evil, and Girls')
2020.12.19—«Лёд» ('Ice')
2020.12.21—«Великий мимикратор» ('The Great Mimicker')
2021.01.30—Уральские пельмени: «Три поросёнка и Красная Шапочка» (Ural Dumplings: ‘The Three Little Pigs and Red Riding Hood’)
2021.02.02—Уральские пельмени: «Авто для дочери» (Ural Dumplings: ‘A Car for His Daughter’)
2021.02.06—excerpt from «Снупи в кино» (The Peanuts Movie)
2021.05.15—«Приятные новости» ('Pleasant News')
2021.05.22—«Моя прелесть» ('My Precious')
Appendix 2—Grammar Instruction

2020.06.15—noun genders, the eight basic endings for regular nouns in nominative case
2020.06.16—unpalatalized and palatalized sounds, the three consonants that are always unpalatalized, the three consonants that are always palatalized, the ten vowels paired into two groups of five each based on whether they are unpalatalized or palatalized
2020.06.17—review of noun genders and the six consonants that are exclusively either unpalatalized or palatalized, introduction of the eight letters that trigger the three main spelling rules
2020.06.18—review of spelling rules
2020.06.19—overview of what declensions (cases) are and how they are used
2020.06.22—accusative case
2020.06.23—prepositional case
2020.06.24—genitive case
2020.06.25—dative case
2020.06.26—instrumental case
2020.06.27—review of regular noun endings in nominative case as to gender and plural
2020.06.29—unpalatalized-stem adjectives in nominative case for all three genders and plural; review worksheet for basic noun endings
2020.07.09—more drills with noun declensions; soft-sign singulars and plurals in nominative case; some drills with plurals for the other cases, but I had to back off of the genitive plural so as not to overwhelm him
2020.07.13—quiz on noun endings in various cases; genitive plural, especially of feminine nouns ending in <я>, with special focus on those ending in <ья>; Thomas did exceptionally well with these after I taught him the relevant rule
2020.07.14—quiz on the nominative plural; review of the eight letters that trigger the three main spelling rules, but this time in three groups: hushers (<жчшщ>), velars (<гкх>), and the affricate <ц>
2020.07.15—review of the seven-letter rule, with a quiz afterward
2020.07.16—review of the seven-letter rule again
2020.07.17—brief quiz on the seven-letter rule; introduction to the five-letter rule
2020.07.18—quiz on the seven-letter and five-letter rules; introduction to the eight-letter rule
2020.07.20—quiz on all three main spelling rules; quiz on how to apply the rules
2020.07.21—review of the eight letters that trigger spelling rules; review of which letters have to be changed to other letters following these eight trigger letters; then another quiz using a list of words to test spelling rules; review of this list together
2020.07.22—worksheet on adjective endings for unpalatalized adjectives
2020.07.23—another adjectives worksheet
2020.07.25—review of all six categories of adjectives (four categories of unpalatalized adjectives, two categories of palatalized adjectives)
2020.08.10—tentative entry into the genitive plural of nouns (the most complex of all the declension patterns); started with the <ов> ending for masculine nouns ending in a non-husher unpalatalized consonant, finished with the <ей> ending for masculine nouns ending in a husher
2020.08.11—review of yesterday’s genitive endings; then introduction to genitive plural of masculine nouns ending in <ц>; discussion of Russian names
2020.08.12—genitive plural of nouns ending in <й>
2020.08.13—review of all previously covered genitive plural forms; then genitive plural of masculine nouns ending in the soft sign <ь>
2020.08.14—review of all previously covered genitive plural forms; then genitive plural of feminine nouns ending in <а>
2020.08.17—genitive plural of feminine nouns ending in <я>
2020.08.18—review of yesterday’s topic
2020.08.19—review of all previously covered genitive plural forms; then the genitive plural of feminine nouns ending in <ь>
2020.08.20—review of all previously covered genitive plural forms; then the genitive plural of neuter nouns ending in <о>
2020.08.21—review of all previously covered genitive plural forms; then the genitive plural of neuter nouns ending in <е>
2020.09.02—verbal aspect
2020.09.04—numbers in nominative case, including which cases those numbers trigger in the following nouns that those numbers are quantifying
2020.09.05—review of yesterday’s lesson
2020.11.17—writing exercise from a textbook
2020.11.20—verbs of motion
2020.11.27—review of verbs of motion
2020.11.30—review of single-digit numbers and the cases they trigger
2020.12.05—the ten nouns that end in <мя>
2020.12.07—comparative adjectives, especially the irregular short forms
2020.12.11—quiz on how to decline <имя>
2020.12.19—review of how to decline <имя>; quiz on how to decline <время> and <племя>, which follow the same pattern (but I let him use a cheat sheet)
Appendix 3—Data Sources, Coded
(Not all of these are cited in the text.)

W = writing samples that Thomas produced
T = written tests that Thomas took
S = random speech that I overheard and then documented in the research journal; or feedback
from Thomas about others’ speech
V = speech recorded as part of the video game session

W1 = 2020.07.23—Thomas wrote his name <Томас> (‘Thomas’) in cursive
W2 = 2020.07.27—worksheet from the Mezhdunami textbook about how to write
W3 = 2020.07.28—second worksheet from Mezhdunami about how to write
W4 = 2020.07.29—copied 23 words from «Танцор диско» (‘The Disco Dancer’)
W5 = 2020.07.30—copied 68 words from «Сладкая жизнь» (‘The Sweet Life’)
W6 = 2020.07.31—copied 75 words from «Проверка (квантографбер)» (‘The Test (The Quantograbber)’)
W7 = 2020.08.03—copied 69 words from «Эрудит» (‘The Erudite Person’)
W8 = 2020.08.04—copied 109 words from «Событие века» (‘The Event of the Century’)
W9 = 2020.08.05—copied 107 words from «Самое главное» (‘The Main Thing’)
W10 = 2020.08.06—letter to his mother listing ten things he likes about her
W11 = 2020.11.12—ten translated sentences from English to Russian
W13 = 2021.01.25—free-writing exercise about things he likes to do
W14 = 2021.08.08—wrote *«здохли» instead of «сдохли»
W15 = 2021.08.26—random note written on his own initiative, which I photographed

T1 = BYU Russian 201, winter 2019—in-class translation quiz
T2 = BYU Russian 201, winter 2019—in-class worksheet
T3 = spring 2020—quiz 1 on noun genders and plurals
T4 = spring 2020—quiz 2 on noun genders and plurals
T5 = spring 2020—quiz 3 on noun genders and plurals
T6 = spring 2020—quiz 4 on noun genders and plurals, 1st take
T7 = spring 2020—quiz 4 on noun genders and plurals, 2nd take
T8 = spring 2020—quiz on accusative case
T9 = 2020.07.13—quiz on case endings
T10 = 2020.07.18—quiz on 7-ltr and 5-ltr spelling rules
T11 = 2020.07.20—quiz on all three spelling rules
T12 = 2020.07.21—quiz on words that violate spelling rules
T13 = 2020.07.22—quiz 1 on adjective endings
T14 = 2020.07.23—quiz 2 on adjective endings
T15 = 2020.07.25—quiz 3 on adjective endings
T16 = 2021.05.29—portion of UVU Russian 1020 exam on verbal aspect, spring 2021
T17 = 2021.09.06—UVU Russian 1010 Unit 1 Exam, fall 2021
T18 = 2021.09.18—UVU vocab quiz on family words, Russian 1010, fall 2021
T19 = 2021.10.09—UVU Russian 1010 Unit 2 Exam, fall 2021
R = the research journal, followed by the page number (e.g. R10 = page 10)

V1 – V9 = video game transcript, pages 1–9
References


Gor, Kira, Svetlana Cook, Vera Malushenkova & Tatyana Vdovina. 2009. Verbs of motion in highly proficient learners and heritage speakers of Russian. The Slavic and east European journal 53(3). 386–408.


