

Word Order Production in Heritage Russian: Perspectives from Linguistics and Pedagogy

Oksana Laleko, State University of New York at New Paltz
Irina Dubinina, Brandeis University

Abstract. This chapter examines the use of canonical and non-canonical word order patterns in production data from heritage language speakers and monolingual speakers of Russian. We show that while heritage speakers display a greater use of canonical constructions and a reduced reliance on non-canonical word order in comparison to the monolingual controls, they do not exhibit across-the-board difficulties in the use of non-canonical orders. Despite a general reduction of word order flexibility, heritage language speakers converge with monolinguals in constructions that involve the movement of verbal objects (object-fronting), with both groups similarly attuned to the syntactic effects of grammatical weight (i.e., constituent size). At the same time, the two groups differ in their use of constructions that involve the placement of verbal modifiers. In these contexts, heritage speakers are still guided to a large extent by grammatical weight, while native speakers are more likely to forego the weight factor to achieve information-structural cohesion. Overall, grammatical weight emerges as a stronger predictor of movement in the heritage language, as compared to the baseline: light constituents are more likely to be dislocated from their base positions than heavy constituents. We discuss the results in relation to their linguistic and pedagogical implications and formulate some practical suggestions to facilitate mastery of word order principles by heritage Russian learners.

1. Introduction¹

Whether in the classroom or “in the wild” (Polinsky & Kagan, 2007), heritage language speakers (HSs) have firmly entered the realm of scholarship in linguistics and in language pedagogy. As early naturalistic bilinguals, these speakers grow up hearing and often speaking the language of their heritage, but the linguistic knowledge of the heritage language does not enter into a stable trajectory of continued development past their childhood years. Coupled with or supplanted by another, more

¹ The following abbreviations are used in this chapter: ACC—Accusative, DAT—Dative, DO—direct object, GEN—Genitive, HS—heritage speaker, INF—infinitive, IO—indirect object, INS—Instrumental, LOC—locative, NOM—Nominative, NS—native speaker, SG—Singular, SVO—Subject, Verb, Object, PREP—prepositional.

dominant, language, it undergoes significant changes that culminate in systematic differences between heritage and baseline grammars. These differences have over the past few decades become a steady focus of linguists and language educators. Recent years have seen a spike of interest in cross-linguistic studies of the formal linguistic properties of heritage grammars, yielding comprehensive accounts of such morpho-syntactic and semantic phenomena as the expression of grammatical relations, agreement, binding, and relativization in the heritage language (see Benmamoun, Montrul, & Polinsky, 2013; Scontras, Fuchs, & Polinsky, 2015 for an extensive overview of existing studies). However, the discourse-pragmatic knowledge of HSs has not been studied quite as extensively. Within the literature on Russian as a heritage language, for example, only a few studies have systematically probed the extent of HSs' control of discourse-pragmatics. Nevertheless, the available evidence from such diverse linguistic phenomena as the use of verbal aspect to mark information-structural relations (Laleko, 2010, 2015), the pragmatics of requests (Dubinina, 2013), and pro-drop (Ivanova-Sullivan, 2014) demonstrates that differences between heritage and native speakers are by no means limited to the expression of grammatical distinctions. Systemic reorganization processes spanning across multiple areas of the heritage language also affect its pragmatic and discursive features. In fact, these effects seem strong even in near-native speakers who otherwise show native-like control of the core aspects of the heritage language (Laleko & Polinsky, 2017). These findings warrant further investigations into HSs' discourse-pragmatic knowledge, their awareness of the unique discursive properties manifested in their heritage language, and their understanding of how these properties interact with grammar-internal linguistic principles.

The use of word order is one particular domain in which these different aspects of HSs' discourse-pragmatic knowledge can be tested. As we hope to show in this chapter, comparing HSs and native speakers with respect to their discourse organization strategies can provide insights into the specific areas in which these populations are similar or differ, and these findings, in turn, can inform both theoretical language study and heritage language pedagogy. From the standpoint of theoretical linguistics, a systematic investigation of shifts taking place in heritage languages and recognition of particular areas in which their speakers do not display target-like performance may help identify stable and vulnerable domains in heritage language design, broaden our conception of natural language architecture, and inform our understanding of the mechanisms of language change. From the point of view of heritage language pedagogy, identification of challenges unique to heritage language learners is a necessary step towards developing appropriate methodological approaches to the teaching of word order principles in the target language.

The goals of this paper are two-fold. First, we analyze the use of canonical and non-canonical word order patterns in the production data from Russian HSs, compared to a group of monolingual speakers, and outline some similarities and differ-

ences between these two groups with respect to their use of word order. Second, we discuss some practical pedagogical applications of the obtained results. In particular, we show that HSs display an overall increase in the use of canonical constructions and a reduced reliance on non-canonical orders, but that their difficulties with non-canonical orders are not uniform across different types of non-canonical constructions. Despite a general reduction of word order flexibility, HSs converge with monolinguals in constructions that involve the movement of verbal objects (object-fronting), where both groups are similarly attuned to the syntactic effects of grammatical weight (i.e., the size of the moved constituent). At the same time, the two groups display differential performance in their use of constructions that involve the placement of verbal modifiers. Here, HSs are still guided to a large extent by syntactic weight, while native speakers are more likely to forego the weight factor to achieve information-structural cohesion.

The chapter is organized as follows. Section 2 offers a general overview of the principles that determine word order variation in Russian and surveys the findings reported in the existing literature on heritage Russian. Section 3 presents the results of our production study, which examines the use of word order in a corpus of narratives produced by heritage and baseline Russian speakers. Section 4 summarizes the findings and discusses the linguistic and pedagogical implications of these results.

2. Word Order in Russian

2.1 *Theoretical Preliminaries*

In terms of its word order typology, Russian is traditionally analyzed as a predominantly SVO language (Bailyn, 2012; Franks, 1995; King, 1995). In neutral contexts, the typical order of the main clausal constituents (the subject, the verb, and the object) in Russian is illustrated by the following example:

- | | | | | |
|-----|----------------------------|-----------|-----------|-------|
| (1) | Princ | poceloval | ljagušku. | S V O |
| | Prince-NOM | kissed | frog-ACC | |
| | ‘A prince kissed the frog’ | | | |

However, as commonly acknowledged by researchers, this basic order is subject to systematic contextual variation. As in other so-called “free” word order languages, different configurations of the main clausal constituents are attested in Russian, and each of the six grammatically available patterns may occur in particular contexts, depending on a number of syntactic and discourse-level factors (Bailyn, 2012; Holmberg, 1998; Kallestinova, 2007; Yokoyama, 1987, *inter alia*). These factors have been studied extensively in linguistic studies dealing with systematic variation in the use of word order by native monolingual speakers of Russian, which has given rise to

important theoretical generalizations. While we cannot attempt to offer a comprehensive overview of these findings here, in what follows we outline some of the key distinctions relevant to our study.

Within the Russian syntactic literature, a principled distinction has been drawn between *inversion* and *dislocation* as two different types of non-canonical word order constructions stemming from independently motivated movement processes (see Bailyn, 2002, 2004). In particular, inversion involves the reordering of the subject and the verb, sometimes also accompanied by the fronting of another constituent (such as the direct object). Consider the inverted Russian sentence in (2), which differs from the “default” canonical word order sentence shown in (1) above:

- | | | | | |
|-----|----------------------------|-----------|------------|-------|
| (2) | Ljagušku | poceloval | princ. | O V S |
| | frog-ACC | kissed | prince-NOM | |
| | ‘A prince kissed the frog’ | | | |

More generally, inverted constructions may be represented schematically by the configuration (XP) V S, where XP stands for any non-subject constituent, such as direct or indirect object or a modifying expression (e.g., an adverb or prepositional phrase). Regardless of the presence of this optional XP material, the crucial characteristic of inversion is the reversal of the subject and the verb with respect to their canonical positions: in constructions with inversion, the verb must precede the subject.

Unlike inversion, dislocation produces non-canonical constructions in which the subject and the verb are not reversed with respect to their default positions. Instead, another XP in the sentence undergoes leftward movement, resulting in the non-canonical XP S V order. For example, the sentence in (3) below illustrates a dislocation construction involving the direct object:

- | | | | | |
|-----|----------------------------|------------|------------|-------|
| (3) | Ljagušku | princ | poceloval. | O S V |
| | frog-ACC | prince-NOM | kissed | |
| | ‘A prince kissed the frog’ | | | |

Regardless of the underlying syntactic differences between inversion and dislocation, it is generally acknowledged in the literature that the occurrence of non-canonical orders cross-linguistically is triggered primarily by discourse factors, namely those related to the *information-structural* partition of the sentence into topic (given/old information) and comment/focus (new information) (Birner & Ward, 1998; Franks, 1995; King, 1995; É. Kiss, 1987)². In particular, the fronting of the object con-

² But see Bailyn (2002), where inversion is treated as an instance of syntactically-driven movement.

stituent illustrated in (2) and (3) above results in the interpretation of this constituent as the topic of the sentence, or what the rest of the sentence is about. As a result of this movement, the constituent occupying the sentence-final (or right-edge) position is interpreted as presenting new information, i.e., something that is said about the topic. This general pattern in constituent ordering is known as the “given-before-new” principle (Gundel, 1988). Applying this principle to the examples previously discussed, we can identify the fronted object *ljaguška* ‘frog’ as the topic in sentences (2) and (3). Accordingly, the constituents in the right-edge positions of (2) and (3), respectively, are most naturally interpreted as contributing different aspects of new information about this topic. The sentence in (2) constitutes a felicitous response to the question “Who kissed the frog?”, while the sentence in (3) stands as a possible response to the question “What did the prince do with the frog?” Both examples (2) and (3) may also serve as appropriate responses to the more general question “What happened to the frog?”

In addition to the topic-comment structure of the utterance, corresponding to the given-new distinction, the fronted position of the object in sentences similar to (2–3) has been examined in connection with a range of other linguistic factors not directly related to the information-structural considerations discussed above. In particular, the movement (scrambling) of objects and modifiers has been linked with such linguistic properties as definiteness, specificity, and the weight of the scrambled constituent; all these properties have been shown to correlate with the occurrence of scrambling cross-linguistically (de Hoop, 1996; Diesing, 1992; Hawkins, 1983, 1994; Holmberg, 1998; Mykhaylyk, 2011; Wasaw, 1997). Among these factors, the effect of grammatical (or syntactic) weight in particular has been identified as a primary contributor to word order variation outside of information-structural considerations. Understood in terms of the internal structure and relative complexity of the moved constituent, weight has been demonstrated to predict the position of the moved constituent in a sentence with respect to other constituents: in particular, *heavy* elements (such as full noun phrases, e.g., *a big red house*) tend to be placed after *light* elements (such as personal, possessive, or demonstrative pronouns, particles, and monosyllabic adverbs, e.g., *it, then*). The tendency for longer, more complex phrases to occur in clause-final positions, also known as the “end-weight” principle (Quirk, Greenbaum, Leech, & Svartvik, 1972), has been well-documented in corpus and psycholinguistic studies (Arnold, Losongco, Wasaw, & Ginstrom, 2000; Hawkins, 1994, 2014; Wasaw, 1997). Thus, sentences in which light constituents are placed before heavy constituents, as illustrated in example (4b) below, have been argued to occur more frequently in production and to have a lower processing cost than sentences that do not conform to this principle, such as the one shown in (4a) below:

- (4) a. I gave_{NP}[the valuable book that was extremely difficult to find]
 _{PP}[to Mary].
- b. I gave_{PP}[to Mary]_{NP}[the valuable book that was extremely
 difficult to find].

(Arnold et al., 2000, p. 31)

The “light before heavy” principle has also been documented in diachronic studies, including earlier stages in the development of English (a language that no longer displays substantial word order flexibility). In fact, insights from historical linguistics³ suggest that the weight factor is sufficiently robust in determining the position of the dislocated constructions and can compete with or override information-structural constraints. Corpus analysis and elicitation studies have similarly shown that both syntactic weight and discourse status strongly affect constituent order, and that their effects appear to be independent of each other (Arnold et al., 2000).

Given the strong evidence for considering the information-structural partition of the clause and grammatical weight as two key factors associated with word order variation from synchronic and diachronic perspectives, we argue that research on word order principles operating in heritage languages must examine both of these factors, as well as interactions between them, in order to establish a better understanding of word order typology in heritage languages in comparison to the baseline. For example, it is possible that HSs may adhere to one, but not both of these principles, or that the division of labor between these two principles may be carried out differently in the heritage language than in the baseline language. As a first step toward this larger goal, the present study analyzes the distribution of canonical and non-canonical constructions in the data from Russian HSs, with a special focus on the non-canonical constructions in relation to their syntactic type and grammatical weight. As we show further below, taking these factors into consideration reveals an observable difference between HSs and monolingual controls. However, first we turn to a brief overview of the relevant prior findings on the use of word order in heritage Russian.

³ The end-weight principle has been attested to cross-linguistically in studies of diachronic language change. As argued in Pintzuk (1996), the scrambling of complements in Old English was correlated with the size of the moved constituent, with heavier complements more likely to appear post-verbally than light elements, such as pronominals. Similar observations have been made for Old Icelandic, where at one point heavy objects were predominantly postverbal (i.e., came after the verb) even when they marked old information in discourse (Hróarsdóttir, 2009, p.78).

2.2 Previous findings on word order in heritage Russian

Research on word order in heritage Russian is extremely scarce. As discussed previously, the majority of existing work on heritage Russian has focused on the syntactic and morphological features of the heritage language. Within that literature, we were able to identify only a few preliminary insights into the use of word order patterns by HSs. The overall rigidification of word order has been noted in several studies, all pointing to the predominant use of the SVO pattern in heritage Russian and a considerable reduction in word order flexibility (Isurin & Ivanova-Sullivan, 2008, p. 99; Polinsky, 1995, p. 368, 2006, pp. 237–38). However, the specific manifestations of this general reduction in word order variation have not been discussed in depth, and all existing accounts have so far been limited to the discussion of the VS order (i.e., inversion). The status of inversion in heritage Russian, however, is not entirely clear. Some studies have attested to a relatively strong retention of the VS order even among the least proficient HSs (Polinsky, 2006, p. 237), while others reported infrequent use or complete absence of this pattern in the heritage language. For example, Ivanova-Sullivan (2014, pp. 105–10) found that HSs at different levels of proficiency significantly under-produced VS constructions in oral narratives (ranging between 5–8% of the corpus), compared to the monolingual controls (16% of the corpus), and that there was no effect of proficiency level within the heritage group on this difference. Similarly, in their survey of morphosyntactic features in heritage language production, Isurin and Ivanova-Sullivan (2008, p. 99) report only eight instances of the VS pattern in narratives elicited from six heritage language speakers (2.1% of all sentences in the heritage group, compared to 6% in the monolingual data and 1% in the L2 data). In a preliminary way, the authors suggest a link between the occurrence of the VS pattern and the length of exposure to Russian among both HSs and L2 learners (p. 100). However, the relatively small participant sample of the study does not lend itself to further analyses of the non-canonical constructions within the obtained data set.

2.3 Word order in pedagogy for Russian HSs

While recognized by researchers and language educators as a “national resource” (Brecht & Ingold, 2002; Peyton, Raynard, & McGinnis, 2001), heritage language learners often present a challenge to their schools and universities. They do not fit with traditional L2 learners, but usually cannot test out of their school’s language requirement because, despite their apparent fluency in speaking, they typically lack literacy skills (see Kagan, 2010 for a discussion). If the demographic pressure is sufficiently high, universities offer special courses for heritage learners. However, in most universities (and high schools) heritage learners of Russian are too few, and at best, they are offered academic exposure to Russian through independent studies with

language instructors, or at worst, they join beginning level foreign language classes, which cannot fully meet their academic needs (Carreira and Chik, this volume).

If heritage learners of Russian make it to university Russian language classrooms, instructors are often overwhelmed by the number of grammatical gaps in these students' linguistic knowledge and by the English calques that these learners so frequently produce. As a result, the largest percentage of pedagogical intervention in heritage learner classes is spent on improving learners' lexical and morphosyntactic knowledge, typically focusing on gender agreement, case endings, and verb usage. Little time is left for topics involving discourse-pragmatics knowledge, such as word order. Yet because heritage learners are capable of producing texts of significant length from the start of their formal instruction (oral at the beginning and written as they acquire literacy), word order quickly becomes a problematic area that is often not sufficiently addressed by instructors for the lack of time and, possibly, lack of materials. As heritage learners become more proficient writers and join advanced language courses, their lack of native control of discourse organization strategies becomes a major stumbling block in their linguistic development. In fact, instructors often struggle to define what exactly is "wrong" with a student's essay when grammar and lexical choices all seem correct, yet the narrative is simply not "right." To illustrate this point, let us consider some specific examples from heritage learner essays, presented in (5) below.

(5) Word order in heritage Russian: Examples from learner essays⁴

- a. Rasskazčik ponimaet, čto **smert'** **ego** ždēt **skoro**.
narrator-NOM understands that death-NOM him-ACC awaits soon
'The narrator understands that death awaits him soon.' (cf. 'skoro ego ždēt smert')
- b. On sobral drova i gvozdi i načal **molotkom rabotat'**.
he-NOM gathered wood and nails-ACC and began hammer-INS work-INF
'He gathered wood and nails and began working with a hammer.' (cf. 'rabotat' molotkom')
- c. I Mark **na Veronike ženilsja**.
and Mark-NOM on Veronika-PREP married
'And Mark married Veronika.' (cf. 'ženilsja na Veronike')

Apart from some occasional orthographic deviations, all of the sentences in (5) conform to the grammatical and lexical conventions of baseline Russian. At the same time, all of the examples are also characterized by subtle contextual infelicity, stemming from the placement of the bold-faced constituents at the right-edge position of

⁴ The transliteration of the examples reflects the original Russian spelling used by the learners.

the sentence or their internal ordering. In (5a), introducing the unfortunate outcome of the story (the subject of the subordinate clause “death”) would have called for the use of inversion in baseline Russian. Here, the VS order would have ensured that the newly introduced subject occupied the clause-final position that is appropriate at its first mention. In (5b) and (5c), the movement of the indirect object away from the clause-final position results in an unintended reading in which the predicate alone (and not its object) is interpreted as new information in discourse. As per the “given-before-new” principle discussed above, both pre-verbal objects are interpreted as given information, contrary to their actual discourse status.

Such subtle violations, related primarily to the choice of the appropriate (canonical or non-canonical) word order pattern, seem to continue to persist in heritage learners’ written and spoken production even after significant classroom exposure to the target language. To date, there are no textbooks that adequately cover the discursive functions of Russian word order for heritage learners.⁵ As a result, instructors often do not deal explicitly with pragmatic errors of the type shown in (5) above, focusing instead on the more immediately noticeable grammatical and lexical problems. The study introduced in Section 3 below is the first step toward understanding the principles that determine word order choices in HSS’ narratives. We hope that these findings, along with subsequent studies on this topic, will contribute toward the development of instructional resources for the teaching of word order to heritage Russian learners.

3. The Study: Word Order Production in Heritage Russian

3.1 *Goals of the present study*

This study expands the scope of the existing work in several ways. First, we examine the distribution of a wider range of non-canonical word order patterns in heritage language narratives. In particular, in keeping with the theoretical considerations discussed in Section 2.1 above, we focus on the use of inversion and dislocation, the two distinct types of movement illustrated in examples (2) and (3) above. While previous studies documented underuse of inversion in the production data from heritage Russian speakers, no investigations have yet been carried out to examine the use of dislocation in the heritage language data. Analyzing both types of non-canonical constructions in the same corpus of narratives allows us to draw generalizations about the relative prevalence of each word order type in heritage speakers’ production, as measured by its frequency of occurrence, and to determine the extent to which each of these non-canonical patterns is used in contextually appropriate ways. Second, we analyze factors linked to the occurrence of dislocation constructions in order to iden-

⁵ We are aware of only one monograph aimed at the acquisition of word order in Russian by traditional L2 learners of Russian (Krylova & Khavronina, 1988).

tify specific principles that affect the placement of different types of constituents (objects and modifiers) within the verbal complex. Third, in an attempt to obtain a more comprehensive understanding of the HS word order phenomenon, we analyze data from a larger sample of participants than those reported in previous studies. Finally, in addition to drawing several linguistic generalizations, we discuss our results in relation to heritage language pedagogy and offer some specific practical suggestions for optimizing the teaching of word order patterns in a heritage Russian classroom.

3.2 Participants and methodology

The study involved 21 heritage speakers (HSs) and 19 native speakers (NSs) of Russian. HS participants were recruited for the experiment through an advertisement at a college in the North Eastern U.S., and NSs were invited to participate through a network of acquaintances in Moscow and St. Petersburg. There is a gender bias in both groups: only 6 of 21 HSs are males (29%) and only 8 of 19 NSs are males (42%).

The NS group is very homogenous linguistically, consisting of monolingual Russian college students and recent graduates who have never spent any significant amount of time in a foreign language environment. The NS group is only slightly older than the HS group, with a mean age of 23.2 and a range between 19 and 32 years; such close proximity in age between the two groups allows us to control for any language change processes taking place in Russian.

HSs in the study are all college students between 18 and 22 years of age with at least some reading proficiency in Russian, with the mean age of 19,4 years. Of 21 HSs in this study, three were born in the U.S. to Russian-speaking parents, and one was born in Israel. The rest were born in the former Soviet Union (Azerbaijan, Belarus, Latvia, Russia, Ukraine, Uzbekistan), with the majority coming from Russia. All of the participants who were born in the former Soviet Union emigrated to the U.S. before the onset of schooling. Only two HSs reported acquiring both languages—Russian and English—simultaneously, and one participant reported speaking mostly English from birth. For the vast majority of HSs (18 participants⁶) Russian was the first language, but exposure to the home language was dramatically reduced with the start of schooling in the U.S. (either kindergarten or primary school). The mean age for the onset of English in this subgroup is 5,3 years. Most of HSs have not had any formal education in Russian (19 out of 21⁷) when they were growing up, but a vast majority of them had taken or were enrolled in a specialized beginning literacy

⁶ One participant comes from a Bukharian Jewish background and reports overhearing Bukharian at home. This participant claims to be able to understand Bukharian to some degree, but cannot communicate in this language. His parents speak only Russian to their children and occasionally Bukharian to each other.

⁷ One participant attended a Russian after-school literature/theater educational program for 5 years, and one participant acquired literacy in Cyrillic in a Russian kindergarten before emigrating but never maintained literacy skills in the U.S.

course for heritage speakers by the time of this study. Most of them indicated that their immediate families use mostly Russian for communication, albeit with some mixture of English. Only three participants indicated that their parents speak predominantly English with them.

For this study, the level of proficiency was determined based on the words per minute measure (see Kagan & Friedman, 2004; Polinsky, 2006, 2008 for validity of speech rate as a measure of proficiency in heritage speakers). The HS group is comparable to the NS controls on this measure: the HS mean rate is 89 words per minute and the NS mean rate is 95. Based on prior studies, we take these results to indicate that the HSs in our study have at least an intermediate level of proficiency in Russian.⁸ Speech rate serves as an indicator of the ease of lexical access and is correlated with grammatical knowledge and facility in constructing clauses (Polinsky & Kagan, 2007). Thus, although participants in this study did not take the oral proficiency test (OPI) typically used for research purposes in pedagogy, their mean speech rate indicates a fairly good ability to construct phrases and clauses, and therefore, use the language creatively.

The production study employed an established methodology to elicit oral narratives using the wordless book *Frog, where are you?* by Mercer Mayer (1969) (see Berman & Slobin, 1994 for an in-depth discussion of this methodology, its applications in language research, advantages, and limitations). Participants were given an opportunity to look through the pictures first to understand the story and ask questions if they did not understand something in the pictures. They were then asked to narrate the story based on the pictures in the book to the best of their ability as if they were telling a bedtime story to a child. Their recorded narrations were later transcribed and coded.

3.3 Results and discussion

The corpus of the production data analyzed here consists of 1,885 clauses, including 936 clauses produced by the heritage language speakers and 949 clauses in the native speaker group. Table 1 below presents the overall distribution of canonical and non-canonical word order patterns in the data for each population. The relevant percentages were calculated as follows. Clauses comprised of the predicate and at least one additional constituent (the subject, direct object, indirect object, or a verbal modifier⁹), were counted as representing the *canonical* word order pattern for Rus-

⁸ Also in line with the observations made in previous studies, the bilingual group exhibited a typical feature for HSs in that the variation in speech rate was greater than in the monolingual group: for HSs the lowest measure was at 44 words per minute and the highest was 141, while for NSs these measures were 61 and 128, respectively.

⁹ Sentential modifiers housed outside of the verbal phrase and modifying the entire clause (e.g., *Finally, the train has arrived*) were not considered in this analysis.

sian if they followed the word order shown in (6). Conversely, clauses were analyzed as *non-canonical* if the placement of at least one of the constituents differed from this default order in its position relative to the clausal predicate. This is exemplified in (7).

- (6) (S) (Modifier) V (DO) (IO) (Modifier)

Example: Mal'čik pošel iskat' ljagušku so svoej sobakoj.
 boy-NOM went look-INF frog-ACC with his-INS dog-INS

'The boy went looking for his frog with his dog'

- (7) {(DO) (IO) (Modifier)} V (S)

Example: I tut na mal'čika napali pčěly.
 and here on boy-ACC attacked bees-NOM

'And then the bees attacked the boy'

A small percent of clauses in each data sample either contained no predicate or consisted of a single predicate with no other constituents. These instances were excluded from further analyses; they are designated as "Other" in Table 1:

Table 1. Distribution of Canonical and Non-canonical Word Order Patterns in the Corpus

Participants	Canonical	Non-canonical	Other	TOTAL
NS	616 (64.91%)	303 (31.93%)	30 (3.16%)	949 (100%)
HS	666 (71.15%)	209 (22.33%)	61 (6.52%)	936 (100%)

As expected, both groups exhibited a strong preference for the canonical word order pattern exemplified in (6), with highly significant differences between canonical and non-canonical patterns observed in each group (616 vs. 303 in NSs; 666 vs. 209 in HSs): $\chi^2(1)=106.60$, $p<0.01$ for NSs; $\chi^2(1)=238.68$, $p<0.01$ for HSs. Consistent with our general prediction, HSs produced a significantly smaller number of non-canonical word order constructions than monolinguals: 209 vs. 303, $\chi^2(1)=17.26$, $p<0.01$. These results provide evidence for a reduction in the use of non-canonical patterns by HSs, thus validating the general observations made in previous work about a gradual rigidification of word order in heritage Russian. However, they do not allow us to evaluate the extent to which different types of non-canonical constructions present difficulty to HSs. A core question remains: are certain non-canonical patterns produced more frequently than others, and what factors are involved in their distribution?

In order to obtain a more comprehensive understanding of the general trend toward the reduction of non-default word order patterns, we further analyzed the data according to two additional criteria: the type of non-canonical construction involved in the non-default pattern (inversion or dislocation) and its contextual appropriateness (felicitous or infelicitous). These results are summarized in Table 2:

Table 2. Distribution of Felicitous and Infelicitous Word Order Patterns in the Corpus

	CANONICAL			NON-CANONICAL					
				Inversion			Dislocation		
	Fel	#Infel	Total	Fel	#Infel	Total	Fel	#Infel	Total
NS	615 (99.83%)	1 (0.16%)	616	127 (100%)	0	127	176 (100%)	0	176
HS	648 (97.29%)	18 (2.70%)	666	71 (91.03%)	7 (8.97%)	78	92 (70.23%)	39 (29.77%)	131

First, we will discuss the distribution of canonical and non-canonical word order patterns according to their syntactic *type*. As indicated previously, in both groups, the majority of clauses in the corpus were consistent with the canonical pattern represented in (6) above; further parallels can be observed between the two groups based on the general distribution of the remaining word order types. Constructions involving dislocation represented the second most frequently attested pattern in both populations, and inversion emerged as the least frequently used word order type. Differences between the occurrence of inversion and dislocation were found to be statistically significant in both groups: 127 vs. 176 tokens for NSs, $\chi^2(1)=7.92$, $p<0.01$; 78 vs. 131 tokens for HSs, $\chi^2(1)=13.44$, $p<0.01$. These results indicate that the overall distribution of word order types appears to reflect the same general pattern in both heritage and native speakers, despite a considerable underuse of non-canonical constructions by HSs.

Despite these general similarities, a closer examination of clauses representing the canonical and non-canonical word order constructions in our corpus in terms of their *contextual appropriateness* shows that a considerable proportion of non-canonical constructions in the heritage Russian data was characterized by pragmatic infelicity, and that such pragmatic errors were not distributed proportionately across the three word order types. To address the issue of contextual appropriateness, each clause in the corpus was coded as felicitous or infelicitous, relative to the context of

the story.¹⁰ The distribution of felicitous and infelicitous clauses in the narratives produced by heritage language speakers across word order types is shown in Figure 1 opposite; the examples in (8–10) illustrate the infelicitous use of each word order type in the analyzed corpus.

(8) Infelicitous use of dislocation

- a. #v reku oni upali
 into river-ACC they-NOM fell
 ‘Into the river, they fell’ (location introduced for the first time, cf. ‘oni upali v reku’)
- b. #on iščet v botinkax ljagušku
 he-NOM looking in boots-PREP frog-ACC
 ‘He is looking, in the boots, for the frog’ (location introduced for the first time, cf. ‘iščet ljagušku v botinkax’)

(9) Infelicitous use of inversion

- a. *Context:* iz dereva na ktorom sidel mal’čik vylezla
 from tree-GEN on which sat boy-NOM crawled out
 sova {...}
 owl-NOM
 ‘From the tree on which the boy was sitting came out an owl.’
- b. #i za nim poletela sova
 and after him-INS flew owl-NOM
 ‘...and after him flew the owl’ (subject recently mentioned, cf. ‘sova poletela za nim’)

(10) Infelicitous use of the canonical order

- a. #doxodit do dereva, gde pčěly živut
 reaches to tree-GEN where bees-NOM live
 ‘approaches the tree where the bees live’ (subject is new, cf. ‘gde živut pčěly’)

¹⁰ The judgments were made by two native speakers of Russian (including one speaker who is a teacher of Russian). Since the data were collected aurally and recorded, the original sound files were used in determining felicity judgments, which allowed the coders to take intonation and pitch into account. A third native speaker of Russian was consulted in the rare cases when the judgments of the two coders diverged (less than 2% of all clauses).

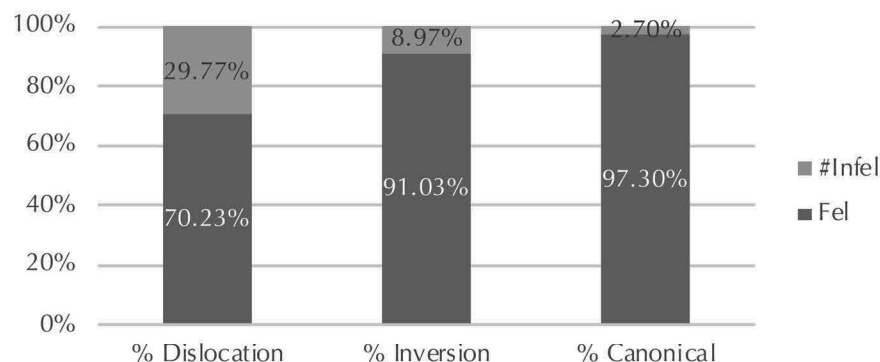


Figure 1. Distribution of felicitous and infelicitous clauses with dislocation, inversion, and canonical order in the data from HSs

The largest proportion of pragmatically infelicitous word order patterns in the HS group is attested with constructions involving dislocation, which also emerges as the most frequently used non-canonical word order pattern in both populations (Table 2). This result suggests that despite displaying a general awareness of the availability of the construction, HSs nevertheless fall short of using dislocation in a target-like way, possibly as a result of non-target-like principles governing its occurrence. Almost a third of all constructions that contain dislocated constituents (29.77%) in the HS group were characterized by infelicity. In comparison, the generally less frequently used non-canonical order, inversion, resulted in pragmatic errors less often (8.97%) in this group. In other words, it appears that HSs employ different strategies in their use of these two types of movement. Dislocation is used more frequently overall, but the rules governing its use seem to be applied more loosely. In contrast, inversion is generally avoided by HSs, but is more likely to be used appropriately when it does occur; the latter pattern indicates a more target-like control of principles that govern its use. Recall that inversion has been argued to be both well retained (Polinsky, 2006) and poorly retained/underused (Isurin & Ivanova-Sullivan, 2008; Ivanova-Sullivan, 2014) in heritage Russian. In our view, these previous accounts can be reconciled if frequency of use is teased apart from contextual appropriateness: the rules governing inversion seem to be better retained than those governing dislocation, but its complexity also makes inversion less frequent in bilingual production. If on the right track, our results also lend empirical support to recent theoretical proposals that distinguish between dislocation and inversion on independent grounds (Bailyn, 2002, 2004). Further studies, particularly those involving comprehension, are needed to determine the extent to which this differentiation

might stem from different representations for these constructions in the grammars of adult heritage speakers.

Turning again to the data in Figure 1, we see that just under 3% of all canonical sentences were used infelicitously by HSs. This finding, although initially not surprising, is non-trivial. Hypothetically, one may expect that the overall preference for the use of the default SVO pattern in HSs' narratives may lead to pragmatic infelicity considerably more often. For example, the infelicity of the SVO pattern might arise from the non-use of inversion or dislocation, particularly in contexts that specifically call for such constituent reordering in Russian (as in example (10) above). In these cases, the overuse of the default pattern could have triggered a more significant mismatch between the surface order of constituents within the clause and its information-structural partition, resulting in a greater number of pragmatic errors in the SVO condition. In our view, this finding is very significant. We suggest that the overall low percent of pragmatic errors in the use of the default order reflects a more global reorganization in the structure of discourse in the heritage language towards the alignment of the surface word order of clausal constituents with the communicative structure of the utterance. If this is the case, then this overall restructuring of discourse organization principles may go hand in hand with the emergence of new narrative strategies that yield a closer mapping between argument structure and information structure. Apart from word order rigidification, one possible outcome of such reorganization, one that we did not examine in this study, is a more visible role of prosodic marking in heritage language production (see Laleko & Polinsky, 2017 for a discussion). Indeed, in reducing their reliance on non-canonical orders, HSs may take advantage of the use of prosodic marking as a more economical strategy than syntactic movement in expressing the relevant information-structural distinctions. As early naturalistic bilinguals, these speakers have ample access to the relevant cues in the spoken input during the early stages of their linguistic exposure; it remains to be seen which prosodic features become part of their linguistic repertoire and how they are used in specific communicative contexts.

In sum, so far we have seen that HSs demonstrate a reduced use of non-canonical word order patterns, including dislocation (the movement of non-subject constituents to the left of the predicate) and inversion (the reordering of the subject and the predicate). Further analyses of the constructions in terms of their contextual appropriateness suggest that inversion and dislocation are not used identically by HSs. While generally infrequent, inversion is retained relatively well. In contrast, constructions involving dislocation induced the largest proportion of pragmatic errors in our data set. Given the scarcity of previous research on the use of dislocation in heritage language production, the exact source of difficulty with this construction is not entirely clear. As discussed in Section 2.1 above, the movement of objects and modifiers within clausal boundaries has cross-linguistically been shown to correlate with two key factors: the discourse-pragmatic status of the moved constituent (the

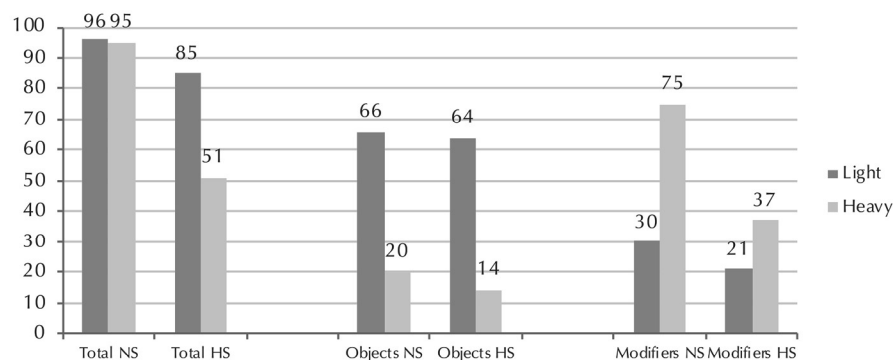


Figure 2. Distribution of light and heavy constituents in dislocation constructions

“given before new” principle) and syntactic weight (the “light before heavy” principle). We hypothesize that problems with the use of dislocation by HSs may stem from a non-target-like application of these principles.

In the remainder of this section, we limit our discussion to the role of syntactic weight in the use of dislocation by Russian HSs.¹¹ To this effect, we have analyzed each moved constituent within the dislocation constructions¹² occurring in our corpus according to the following additional criteria: the relationship of the moved constituent to the verb (direct or indirect *object* vs. temporal, manner, or locative *modifier*) and its grammatical weight (*light* or *heavy*). With respect to the latter criterion, the following assumptions were made for the purposes of this study (see Arnold et al., 2000, p. 29 for a discussion of operationalizing heaviness). Light constituents included personal or demonstrative pronouns (*ego* [him]), prepositional phrases consisting of a preposition and a single noun or a pronoun (*k nemu* [to him]), single-word adverbs and locative expressions (*tuda* [there]). Conversely, heavy constituents included full noun phrases (*etogo mal'čika* [this boy]) and complex modifiers that contained full noun phrases (*v bol'šuju banku* [into the big jar]). Figure 2 above presents the distribution of light and heavy constituents in dislocation constructions overall in the corpus, across objects, and across verbal modifiers.

¹¹ At this time we do not discuss the givenness-newness distinction any further in relation to our data. Given the nature of our elicitation task, this issue is complicated by the presence of visual cues during the story-telling activity. The availability of such cues, shared between the speaker and the listener, is a potential confounding factor that makes it difficult to unambiguously identify the information status of the relevant discourse entities, which in this case would be “discourse-new” and “hearer-old” (see Birner & Ward, 1998, p. 15) simultaneously.

¹² Data summarized in Table 2 includes the number and percent of clauses containing dislocation; Figure 2 above provides counts of dislocated constituents.

First, we examine the total number of dislocated constituents in our data, at this point without taking into consideration their syntactic status with respect to the verb (object or modifier). As Figure 2 shows, the overall counts of light and heavy constituents in pre-verbal positions are virtually the same in the native speaker group (96 vs. 95 tokens; $\chi^2(1)=0.005$, $p=0.94$); this remarkably equal distribution suggests that grammatical weight alone does not single-handedly predict constituent movement in baseline Russian. In contrast to the results obtained in the monolingual group, HSs display a statistically significant preference for the fronting of light constituents over heavy constituents (85 vs. 51 tokens; $\chi^2(1)=8.5$, $p<0.01$). Based on these overall patterns, grammatical weight emerges as a stronger predictor of leftward movement in the heritage language, compared to the baseline: in HS production, light constituents are more likely to be dislocated from their base positions than heavy constituents.

In order to examine how these overall patterns are manifested for different types of syntactic elements within the verbal domain, we further separated all of the dislocated constituents in our data into two groups, based on their relationship to the verb: objects (direct and indirect), as shown in example (11), and modifiers (temporal, locative, and manner expressions), as illustrated in (12) below:

- (11) On rešil do[ejě] io[v banočku] položit'
 he decided her-ACC in jar-ACC put-INF
 'He decided to put her in the jar'

- (12) loc[V etoj reke] oni posideli i ponjali...
 in this-DAT river-DAT they-NOM sat a while and realized
 'In this river they sat for a while and realized...'

With respect to object movement, the distribution of light and heavy elements was similar in the two groups overall, with light objects dislocated significantly more frequently than heavy objects both by NSs (66 vs. 20 tokens, $\chi^2(1)=24.60$, $p<0.01$) and by HSs (64 vs. 14 tokens, $\chi^2(1)=32.05$, $p<0.01$). These patterns are illustrated in Figure 2 above. The preference in both groups for light rather than heavy objects in pre-verbal position (as in (11)) suggests that the weight principle is equally strong in predicting object fronting in heritage and baseline grammars of Russian.

However, a markedly different pattern was obtained when the distribution of modifiers was considered. Native speakers exhibited a significant preference for the movement of heavy modifiers (as in (12)), which occurred in pre-verbal positions 2.5 times more frequently than light modifiers (e.g., *tam* [there]) (75 tokens vs. 30 tokens; $\chi^2(1)=19.28$, $p<0.01$). In contrast, HSs showed a quantitatively measurable reduction in the movement of heavy modifiers (37 tokens, less than half of what was observed in the monolingual group; $\chi^2(1)=12.89$, $p<0.01$) but no significant reduction in the use of light modifiers, compared to the monolinguals (21 tokens vs. 30 tokens,

$\chi^2(1)=1.58, p=0.2$). These data point to the underuse of dislocation with heavy modifiers specifically as the underlying cause of the overall differences between the two groups in the distribution of light and heavy constituents across dislocation constructions. The measurable reduction in the movement of heavy verbal modifiers in the heritage group can be attributed to these speakers' relatively stronger adherence to the weight principle, compared to the monolinguals. Specifically, heavy modifiers are less likely to be dislocated because the "light before heavy" principle requires them to remain in the right-edge position of the clause, regardless of their information-structural status.

In contrast to HSs, monolinguals seem to follow the heaviness principle less categorically; as a result, the occurrence of heavy modifiers in pre-verbal positions is much higher in this group, presumably due to a more prevalent influence of factors independent of weight. As discussed in Section 2.1, apart from weight, the fronting of objects and modifiers cross-linguistically is triggered by their discourse status along the "givenness-newness" distinction. Both of these factors have been shown to independently determine the placement of clausal constituents (Arnold et al., 2000), and it is likely that the relatively higher occurrence of movement with heavy constituents in monolingual production is a reflection of the latter principle. Conversely, a decrease in the movement of heavy constituents in the heritage group would follow from HSs' reduced sensitivity to information-structural constraints; these constraints appear less robust than they are in the native speaker group in determining the movement of heavy elements away from the right-edge positions. In the following section, we consider the linguistic and pedagogical implications of these findings.

4. Linguistic and Pedagogical Implications

As noted in the introduction, our study was motivated by two main goals: to examine the linguistic principles governing the occurrence of canonical and non-canonical word order patterns in heritage Russian and, by building on these findings, to offer some specific practical suggestions to help facilitate the teaching of word order to heritage learners in the classroom. In this section, we provide a unified discussion of the linguistic and pedagogical implications of the findings obtained in our study. The importance of research on heritage languages as a crucial source of empirical data for both linguistic theorizing and language pedagogy has been underscored in numerous studies (Benmamoun et al., 2013; Polinsky & Kagan, 2007); here, we discuss some specific ways in which connections between linguistics and pedagogy can be drawn on the basis of our data.

The observed pattern of results offers insights into several theoretical issues discussed in current linguistic work. As previously discussed, researchers have proposed a principled distinction between inversion and dislocation as phenomena that

are regulated by two distinct mechanisms (Bailyn, 2002). The results reported here appear to support this basic distinction on empirical grounds: inversion appears to be used with greater accuracy by HSs, albeit less frequently than by native speakers; the rules for dislocation, however, are considerably less target-like in the heritage language. Such differential treatment of the two types of movement by HSs may indeed be indicative of a different status of these constructions in heritage grammars, possibly related to different syntactic mechanisms involved. This distinction needs to be tested further in comprehension studies.

Further differences between native and heritage language groups emerged with regard to the speakers' adherence to grammatical weight as a factor triggering leftward constituent movement. Overall, HSs adhered more closely to the heaviness principle than the monolingual control group; within these results, a further difference was detected in the movement of verbal objects and modifiers. With regard to the movement of verbal objects, HSs demonstrated native-like results; with the movement of modifiers, they showed a greater reliance on syntactic weight than baseline speakers, who were more likely to disregard the "light-before-heavy" principle in order to accomplish their communicative goals. In fact, the monolingual ratings in Figure 2 above indicate that the movement of objects and modifiers in Russian is sensitive to two distinct factors: object-movement is governed primarily by syntactic weight, whereas modifier movement appears to be largely independent of this factor. Is it not surprising that HSs converge with monolinguals when relying primarily on syntactic knowledge (i.e., in object movement constructions), but display a difference when the syntactic weight principle is overridden by information-structural demands. A large body of linguistic literature has shown that syntactic knowledge in bilinguals is often stronger than discursive knowledge (see Sorace, 2011 for an overview and discussion); our results appear to be consistent with this overall pattern.

These empirical findings and theoretical hypotheses can be used to support the development of pedagogical approaches that address specific needs of HSs, especially those with a proficiency level which enables them to create with the language (e.g., ACTFL Intermediate and above). Since many heritage learners who come to language classes are already at least within the Intermediate proficiency range, they have a strong potential to reach higher levels of proficiency sooner than traditional L2 learners (Kagan & Dillon, 2004; Kagan & Kudyma, 2012). One specific area of linguistic knowledge where heritage learners could benefit greatly from pedagogical intervention is word order. First, since HSs seem to have a fairly strong control of the underlying principles of inversion, but underuse it in their speech, language instructors need to provide heritage learners with *greater exposure* to inverted constructions and to draw students' attention to the pragmatic meanings of these constructions. Sample assignments may include identification of sentences with inversion in short narrations and discussion of what these changes in word order signal to the listen-

ers/readers. In particular, students could be taught that inversion is particularly frequent in the introduction of new characters and therefore can often appear at the beginning of narrations, including jokes, fables, and fairy-tales. Alternatively, students could be asked to discover for themselves that the inverted word order is indeed the norm in this type of context through the process of comparing and analyzing the beginnings of several narrations. These assignments can be followed up by simple narration tasks where learners are specifically asked to introduce new characters in a story that they create themselves. Any wordless books with dynamic story lines (such as those by Mercer Mayer) or wordless cartoons (such as the Russian *Nu, pogodi!* (Kotenochnik, Tarasov, & Kotenochnik, 1969-2013) would be appropriate for such tasks.

Secondly, *explicit instruction* is needed to teach heritage learners rules governing dislocation, as this is where HSs seem to create more infelicitous constructions and deviate more dramatically from NSs. Instruction needs to target how dislocation contributes to the coding of information in Russian. Because there are different strategies for moving objects and modifiers in a sentence, and because HSs seem to have more difficulties using dislocated modifiers felicitously, more instruction is needed to target the movement of “heavy” modifiers. Instructors could first teach learners to recognize dislocated constructions and their role in marking old and new information. This can be achieved by providing students with multiple examples of dislocated constructions from short narratives by native speakers (the Russian National Corpus can serve as a readily available resource for creating such tasks) and by demonstrating how old and new information is marked in these examples. Then students can be presented with several variations in word order but identical propositional content and asked to identify sentences with non-canonical word order patterns. Next, students could be asked to examine a set of sentences (such as those in (13) below) and to explain how each sentence differs from the rest in terms of expressing new and given information:¹³

- (13) a. Oni kupili ètu knigu [v Moskve] [za desjat’ rublej].
 b. [V Moskve] oni kupili ètu knigu [za desjat’ rublej].
 c. [Za desjat’ rublej] oni kupili ètu knigu [v Moskve].
 ‘They bought this book [in Moscow] [for ten rubles].’

¹³ In (13a), both prepositional phrases occur in the right-edge position and are therefore most naturally interpreted as presenting new information; in (13b), the location is given and the price is new (cf. “It was for ten rubles that they bought this book in Moscow”); in (13c), the price is given and the location is new (cf. “It was in Moscow that they bought this book for ten rubles”).

In addition, learners can be asked to build contexts in which each sentence could be used or to create questions for which (a), (b), (c) would serve as appropriate responses. Finally, as with the instruction of inversion, students can be asked to produce short narratives based on wordless picture books or any other suitable material while paying specific attention to the markings of old and new information, and therefore to the placement of objects and modifiers. Alternatively, students may be given a narration with infelicitous word order patterns in dislocated constructions and asked to identify points in the story where it becomes difficult or impossible to orient oneself.¹⁴

Concluding with these pedagogical implications, our call to colleagues in both fields, linguistics and language pedagogy, is to find ways for collaboration and further investigation of heritage language phenomena that can inform classroom practices. As Russian remains one of several languages in the U.S. deemed critically important for national security and the economy, it is crucial to recognize that heritage speakers of Russian in the U.S. classrooms continue to represent a population of learners who can achieve high levels of language proficiency in relatively short time if exposed to curricula that are designed with these learners' needs in mind (Kagan, 2010). Targeting the key distinctions in word order patterns with regard to the marking of given-new information in discourse and basic syntactic principles involved in word order variation is one step in helping facilitate heritage learners' language development toward convergence with the native speaker baseline.

References

- Arnold, J., Losongco, A., Wasaw, T. & Ginstrom, R. (2000). The effects of structural complexity and discourse status on constituent ordering. *Language*, 76(1), 28–55.
- Bailyn, J. F. (2002). Inversion, dislocation and optionality in Russian. In G. Zybatow, U. Junghanns, G. Mehlhorn, & L. Szucsich (Eds.), *Current issues in formal Slavic linguistics* (pp. 280–293). Frankfurt: Peter Lang.
- Bailyn, J. F. (2004). Generalized inversion. *Natural Language and Linguistic Theory*, 22, 1–49.
- Bailyn, J. F. (2012). *The Syntax of Russian*. Cambridge: Cambridge University Press.
- Benmamoun, E., Montrul, S., & Polinsky, M. (2013). Heritage languages and their speakers: Opportunities and challenges for linguistics. *Theoretical Linguistics*, 39, 129–181.

¹⁴ Instructors should also pay close attention to the intonation contours, and especially sentence stress, when working with learners on these assignments (see Yokoyama, 1987 for an analysis of prosodic correlates of word order in Russian).

- Berman, R., & Slobin, I. (1994). *Relating events in a narrative: A cross-linguistic developmental study*. Hillsdale, NJ: Erlbaum.
- Birner, B. J. & Ward, G. (1998). *Information status and noncanonical word order in English*. Amsterdam: John Benjamins.
- Brecht, R. & Ingold, C. (2002). *Tapping a national recourse: Heritage languages in the United States*. Washington DC: ERIC Clearinghouse on Languages and Linguistics. Available from <https://eric.ed.gov/?id=ED464515>
- de Hoop, H. (1996). *Case configuration and noun phrase interpretation*. New York: Garland.
- Diesing, M. (1992). *Indefinites*. Cambridge, MA: MIT Press.
- Dubinina, I. (2013). *How to ask for a favor: An exploration of speech act pragmatics in heritage Russian* (doctoral dissertation, Bryn Mawr College, Pennsylvania). Retrieved from ProQuest Dissertations and Theses database at <https://search.proquest.com/docview/1402930561?pq-origsite=gscholar>
- É. Kiss, K. (1987). Configurationality in Hungarian, a “free” word order language. *Linguistic Inquiry*, 12, 185–215.
- Franks, S. (1995). *Parameters of Slavic morphosyntax*. New York: Oxford University Press.
- Gundel, J. (1988). Universals of topic-comment structure. In M. Hammond, E. Moravcsik & J. Wirth (Eds.), *Studies in syntactic typology* (pp. 209–39). Amsterdam: John Benjamins.
- Hawkins, J. (1983). *Word order universals*. New York: Academic Press.
- Hawkins, J. (1994). *A performance theory of order and constituency*. Cambridge: Cambridge University Press.
- Hawkins, J. (2014). *Cross-linguistic variation and efficiency*. Oxford: Oxford University Press.
- Holmberg, A. (1998). Word order variation in some European SVO languages: A parametric approach. In A. Siewierska (Ed.), *Constituent order in the languages of Europe* (pp. 553–598). Berlin: Mouton de Gruyter.
- Hróarsdóttir, T. (2009). OV languages: expression of cues. In R. Hinterhölzl & S. Petrova (Eds.), *Information structure and language change: New approaches to word order* (pp. 67–90). Berlin: Mouton de Gruyter.
- Isurin, L., & Ivanova-Sullivan, T. (2008). Lost in between: The case of Russian heritage speakers. *Heritage Language Journal*, 6(1), 72–104. Available from <http://www.heritagelanguages.org>
- Ivanova-Sullivan, T. (2014). *Theoretical and experimental aspects of syntax-discourse interface in heritage grammars*. Leiden: Brill.
- Kagan, O. (2010). Russian heritage language speakers in the U.S.: A profile. *Russian Language Journal*, 60, 213–228.
- Kagan, O., & Dillon, K. (2004). Heritage speakers’ potential for high-level of language proficiency. In H. Byrnes and H. Maxim (Eds.), *Advanced foreign language*

- learning: A challenge to college programs* (pp. 99–112). Boston: Heinle/Thomson.
- Kagan, O. & Friedman, D. (2004). Using the OPI to place heritage speakers of Russian. *Foreign Language Annals*, 36, 536–545.
- Kagan, O., & Kudyma, A. (2012). Heritage language learners of Russian and L2 learners in the Flagship Program: A comparison. *Russian Language Journal*, 62, 27–46.
- Kallestinova, E. (2007). *Aspects of word order in Russian* (doctoral dissertation, University of Iowa). Available from the Iowa Research Online website: <http://ir.uiowa.edu/etd/165/>
- King, T. H. (1995). *Configuring topic and focus in Russian*. Stanford, CA: CSLI Publications.
- Kotenochnik, V., Tarasov, V., & Kotenochnik, A. (Producers and Directors). (1969–2013). Nu, pogodi [Just you wait] [Cartoon series]. USSR/Russia: Sojuzmultfilm, Studija 13, Kristman Filmz, Pjatorochka.
- Krylova, O. A. & Khavronina, S. A. (1988). *Word order in Russian*. Moscow: Russkii Iazyk.
- Laleko, O. (2010). *The syntax-pragmatics interface in language loss: Covert restructuring of aspect in heritage Russian* (doctoral dissertation, University of Minnesota). Retrieved from U of M Libraries Digital Conservancy: https://conservancy.umn.edu/bitstream/handle/11299/92219/Laleko_umn_0130E_11152.pdf?sequence=1
- Laleko, O. (2015). From privative to equipollent: Incipient changes in the aspectual system of heritage Russian. In G. Zybatow, P. Biskup, M. Guhl, C. Hurtig, O. Mueller-Reichau & M. Yastrebova (Eds.), *Slavic grammar from a formal perspective* (pp. 273–286). Frankfurt am Main: Peter Lang.
- Laleko, O., & Polinsky, M. (2017). Silence is difficult: On missing elements in bilingual grammars. *Zeitschrift für Sprachwissenschaft*, 36(1): 135–163.
- Mayer, M. (1969). *Frog, where are you?* New York: Dial Books for Young Readers.
- Mykhaylyk, R. (2011). Middle object scrambling. *Journal of Slavic Linguistics*, 19(2), 231–272.
- Peyton, J. K., Ranard, D. A., & McGinnis, S. (2001). *Heritage languages in America: Preserving a national resource*. Washington DC: Center for Applied Linguistics, ERIC; McHenry, IL: Delta Systems.
- Pintzuk, S. (1996). Old English verb-complement word order and the change from OV to VO. *York Papers in Linguistics*, 17, 241–264.
- Polinsky, M. (1995). American Russian: Language loss meets language acquisition. In W. Browne (Ed.), *Formal approaches to Slavic linguistics*, Cornell Meeting (pp. 370–406). Ann Arbor, MI: Michigan Slavic Publications.
- Polinsky, M. (2006). Incomplete acquisition: American Russian. *Journal of Slavic Linguistics*, 14(2), 191–262.

- Polinsky, M. (2008). Gender under incomplete acquisition: Heritage speakers' knowledge of noun categorization. *Heritage Language Journal*, 6, 40–71. Available from <http://www.heritagelanguages.org>
- Polinsky, M. & Kagan, O. (2007). Heritage languages: In the 'wild' and in the classroom. *Language and Linguistics Compass*, 1(5), 368–95.
- Scontras, G., Fuchs, Z., & Polinsky, M. (2015). Heritage language and linguistic theory. *Frontiers in Psychology: Language Sciences*, 6(1545) 1–20. <https://doi.org/10.3389/fpsyg.2015.01545>
- Sorace, A. (2011). Pinning down the concept of 'interface' in bilingualism. *Linguistic Approaches to Bilingualism*, 1, 1–33.
- Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1972). *A grammar of contemporary English*. London: Longman.
- Wasaw, T. (1997). Remarks on grammatical weight. *Language Variation and Change*, 9, 81–105.
- Yokoyama, O. (1987). *Discourse and word order*. Amsterdam: John Benjamins.

lalekoo@newpaltz.edu
idubinin@brandeis.edu