

Compositional Telicity and Heritage Russian Aspect*

Oksana Laleko

University of Minnesota

1. Introduction

Despite an increasing interest in and a growing body of linguistic work on the restructuring of aspect in heritage grammars, the issue remains excitingly complex both from the point of view of general theoretical linguistics, for we still haven't quite reached a consensus about aspect, and from the point of view of an emerging field of heritage language studies, for we don't know much about heritage grammars. In striving to contribute to the literature on both battlegrounds, the present study addresses the interaction between lexical and grammatical aspects, with a specific focus on the role of aspectual compositionality in the use of the perfective and imperfective forms by heritage speakers of Russian in controlled experimental environments. The issue of aspectual compositionality has not received systematic attention in previous studies of aspectual restructuring, focused by and large on individual verbs; nevertheless, the implications of this work could be relevant, on the one hand, for the study of the intricate relationships between lexical (or lexico-compositional) and viewpoint aspects cross-linguistically, while on the other hand contributing to our understanding of the systematic processes that ultimately shape a unique linguistic system that we call a heritage grammar.

1.1 Heritage grammars and heritage speakers

Heritage grammars, often described as divergent, reduced, or incomplete, albeit natively acquired linguistic systems, have proven to be a vast resource for current linguistic work, including work on aspect (Polinsky 1996, 2008; Montrul 2002, Pereltsvaig 2004, Jia & Bayley 2008, *inter alia*). Despite some lack of agreement in the literature with respect to the exact underlying cause of the divergence of heritage grammars, ascribed either to arrested development or attrition, the term *heritage speaker* is used rather consistently to refer to an individual whose L1 has at a young age been replaced with a more dominant L2 under particular sociolinguistic circumstances, such as migration to another

country, insufficient contact with other speakers of the L1, lack of formal instruction and literacy skills in the L1, societal pressures that favor the L2 over the L1, and many others. The linguistic outcome of these circumstances is the emergence of systematic constraints or patterns that distinguish heritage speakers from the speakers of the corresponding full-fledged baseline varieties, due to total or partial restructuring of various areas of the grammar. In a language like Russian, where aspect is undoubtedly one of the central categories in the verbal domain, such restructuring is particularly worthy of attention.

1.2 The perfective-imperfective contrast in Russian

Unlike English, which does not formally encode the perfective-imperfective contrast on verbs, Russian makes a morphological distinction between a situation viewed “in its entirety,” marked by a perfective aspect, and a situation viewed with regard to its “internal temporal consistency,” for which imperfective verb forms are used (Comrie 1976: 12-24). Depending on how the situation is to be viewed, from the outside or from the inside (hence the term *viewpoint aspect*, Smith 1991), Russian verbs may surface in various forms: the perfective forms generally signal “single, completed actions” while the imperfective forms mark processuality and habituality (Dickey 2000:12).

Morphologically, the perfective verbs are most typically formed from the imperfective stems via prefixation (e.g., *pisat*’.IMP – *napisat*’.PF ‘write’) or suffixation (e.g., *prygat*’.IMP – *prygnut*’.PF ‘jump’), although some verb stems are perfective by default (e.g., *kupit*’.PF ‘buy’). Most Russian verb stems, however, are by default imperfective (e.g., *chitat*’.IMP ‘read’). Additionally, the imperfectives can also be derived from the perfective stems, usually via suffixation (e.g., *lit*’.IMP – *nalit*’.PF – *nalivat*’.IMP ‘pour’).

1.3 Previous studies of aspect in heritage Russian

Early observational studies have shown that heritage Russian speakers often express aspectual distinctions in ways different from those used by the monolingual speakers (Polinsky 1995, 1996, 1997). Generally speaking, the production ‘errors’ tend to fall into one of the following three types: (i) use of a form with the opposite aspectual value from the one that would have occurred in its place in baseline Russian (BR); (ii) use of a form with the same aspectual value as in BR but marked differently via the aspectual morphology, such as a missing, superfluous, or ‘wrong’ prefix or suffix; (iii) use of periphrastic constructions to express aspectual meanings, whereby verbal aspectual marking is often absent altogether.

In accounting for the systematic production errors of the first type, Polinsky (1996, 1997) proposed that the restructuring of aspect in heritage Russian could be related to telicity, or the internal lexical meaning of verbs. This idea was

formally developed in Pereltsvaig (2002, 2004) as the Lexical Aspect Hypothesis. According to this model, verbal aspectual morphology in heritage Russian encodes lexical-semantic properties of individual verbs, rather than viewpoint aspect *per se*: verbs that have an inherent endpoint (telos) occur with the perfective morphology, and verbs without such endpoint surface as morphologically imperfective.

1.4 Aspectual compositionality

Following the work of Verkuyl (1993, 1999), who has argued convincingly for the central position of the VP (rather than the verb alone) in construing temporal structure, a number of other studies have shown that aspectual meanings are not inherent to the verb itself, but are rather determined compositionally (Ramchand, 1997; Kratzer, 2004, *inter alia*). The conventional classification of verbs into four aspectual classes, two atelic (states, activities) and two telic (accomplishments, achievements), has been shown to be problematic for certain predicates, particularly activities and accomplishments, known for their variable telicity effects: in the words of Dowty (1979: 61), “I have not been able to find a single activity verb which cannot have an accomplishment sense in at least some special context.” Instead, it has been argued that telicity (or in Verkuyl’s terms, terminative aspectuality) “crucially concerns the quantificational information expressed by an [object] NP,” and this quantificational information “is presented as a whole in the predicate VP” (Verkuyl 1999: 80). The contrasts in (1) illustrate this point for the English verbs *drink* and *eat*, both traditionally classified as activity verbs, yet both able to yield atelic (1a) or telic (1b) interpretations, depending on the nature of the internal argument. Indefinite bare plurals and mass nouns in the direct object position contribute to the atelic interpretations of the predicates, whereas predicates containing objects that denote some specified quantity, in English often also associated with definiteness, are interpreted as telic.

- (1) a. John drank wine/ate apples.
 b. John drank a glass of wine/ate two apples/ate the apples.

The idea that aspect is a property of verb meaning (and that all verbs are inherently marked as telic or atelic) has more recently been called into question in the literature on Slavic aspect as well. For example, Slabakova (2005: 333) points out that “the bulk of Slavic roots are neutral with respect to telicity in the lexicon,” or [α]-telic, and argues that the aspectual interpretations for such predicates in Slavic are construed with the help of the verbal prefixes (preverbs), rather than direct objects. This results in a salient parametric difference between English and Slavic in the encoding of (a)telicity within the VP.

If certain classes of verbs are not fully lexically specified for telicity, heritage speakers should receive little or no relevant lexical information from such [α]-telic verbal roots about aspect. What, then, determines aspectual marking for predicates of variable telicity in a heritage grammar? This question is addressed in an experimental study described in the next section.

2. The Study

This study is part of a larger project on aspectual compositionality in heritage Russian. In exploring a possible correlation between verbal aspectual marking and particular properties of verbal internal arguments, I focus here on two related questions: first, whether the interaction between grammatical and lexical aspects in heritage Russian may extend beyond the lexical properties of individual verbal roots and into larger linguistic units (VPs), and second, whether (and in what respects) the patterns of such distribution differ from what we observe in the monolingual Russian data.

The approach undertaken here is different from that of the earlier work on heritage Russian aspect in several ways. In addition to shifting the locus of attention from individual verbs to verbs in context, the study places its main emphasis on controlled experimental tasks rather than spontaneous production. In doing so, it expands the scope of the investigation from errors to the overall patterns of aspectual distribution in the heritage data, as compared to the monolingual data, in an attempt to capture the more general tendencies that could be taken to reflect a particular state of development in a heritage grammar as a linguistic system.

2.1 Participants and methodology

Nine heritage speakers of Russian participated in the study (mean age =24, mean age of arrival to the US =5.5). The control group consisted of nine monolingual speakers of Russian, tested in Russia (mean age =33). All heritage speakers were fully proficient in English, their primary language, and used Russian infrequently and in limited contexts. In contrast, the monolingual speakers used only Russian and no other languages in all everyday communication; their knowledge of English was minimal, although sufficient for the experiment.

Both groups completed two experimental tasks. In the first task, the participants were presented with 20 VPs in English and asked to give their Russian equivalents. Each VP consisted of an [α -telic] verb plus a direct object of either some specified or unspecified quantity (henceforth [+Q] and [-Q], respectively). There were a total of 10 verbs, which were kept constant, 10 [+Q] arguments, which included DPs with definite and indefinite articles and quantifiers (e.g., *a sandwich*, *the house*, *two letters*), and 10 [-Q] arguments,

which included bare plurals and mass nouns (e.g., *books, milk*). In the second task, the participants were asked to construct one original Russian sentence for each VP from the first task, for a total of 20 sentences. The items were presented in a random order in each task; other activities were held in between tasks.

2.2 Hypotheses and predictions

Because the heritage speakers of Russian are fully competent in English, their primary language, the contextual factors that are relevant for English, such as the cardinality of the direct object, may trigger a preference for particular aspectual marking on the verb within the VP. For variable telicity predicates, where the verb itself is not lexically marked as unambiguously telic or atelic, heritage speakers may use the perfective morphology predominantly in the presence of internal arguments of some specified quantity and the imperfective aspectual marking, conversely, with mass and indefinite plural DPs in the same position. Such correlation would be consistent with the English value of the telicity parameter, where the direct object is crucial for the aspectual interpretation of a VP, rather than with the Slavic value of the same parameter, where the internal argument is traditionally viewed as having no bearing on the aspectual interpretation of a predicate (e.g., Slabakova 1999). The latter assumption also predicts no similar restrictions on the distribution of the perfective and imperfective forms in the monolingual data, which should be able to co-occur freely with [+Q] and [-Q] arguments.

2.3 Results and Discussion

First, the results for the group of heritage speakers will be discussed. Here, the main hypothesis of the study was borne out fully. Both tasks revealed a strong preference for the perfective morphology in compositionally telic contexts, while the imperfective forms were strongly preferred when the predicates were compositionally atelic. The overall results for the heritage group, averaged over the two tasks, are shown in Fig. 1.

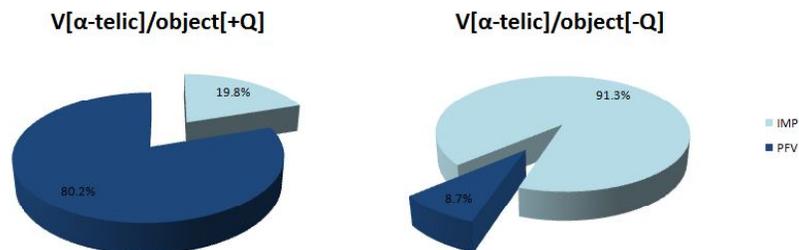


Figure 1. The distribution of perfective and imperfective forms in heritage Russian.

The results for the individual tasks are as follows: on the first task, 73.3% of the predicates with [+Q] objects occurred as perfectives and 26.7% as imperfectives. The reverse pattern was attested when the target verbs were followed by [-Q] arguments: 87.2% of such predicates were imperfective and only 12.8% perfective. On the second task, the pattern was repeated: 87.8% of compositionally telic predicates occurred with the perfective marking and the remaining 12.2% were imperfective. Compositionally atelic VPs were, in contrast, predominantly imperfective: 95.4% versus only 4.6% perfective. These findings support the main hypothesis of the study in suggesting that there exists a correlation between the aspectual morphology and telicity in a compositional sense for [α]-telic verbs in heritage Russian. That is, when no lexical information is available on the verbal root itself, the internal argument does play a role in the choice of verbal aspectual form for heritage speakers. This correlation is initially suggestive of a possible interference from English, the contact language; however, data from the monolingual speakers need to be examined before such a conclusion can be reached.

The overall results for both groups are summarized in Fig. 2.

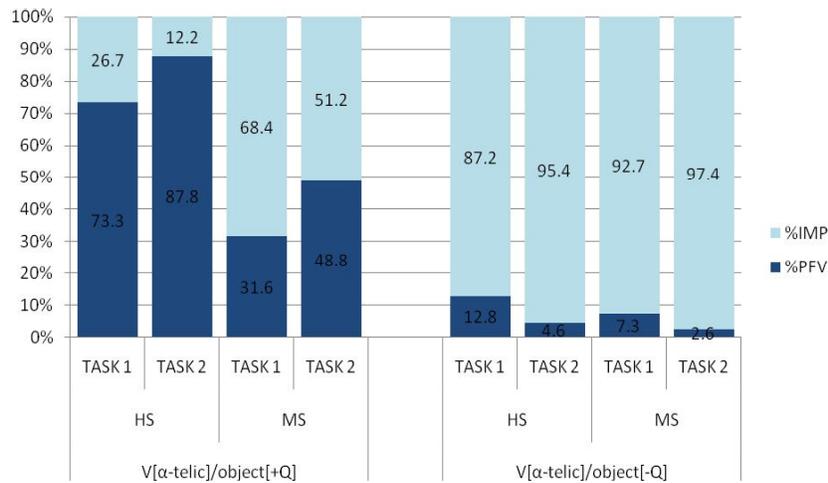


Figure 2. The overall results for heritage speakers (HS) and monolingual speakers (MS) on two experimental tasks.

The distribution of the aspectual forms in Fig. 2 yields some interesting generalizations. First, consider the results from the two groups of speakers side by side. The most striking observation is that the patterns observed in the heritage data do not hold in the monolingual data as far as compositionally telic predicates are concerned. That is, in contrast to the heritage speakers, who prefer

the perfective marking in this condition, the monolinguals do not favor perfectives in the context of [+Q] objects. In the sentence construction task (Task 2), approximately half of all target verbs receive the perfective marking while the other half are imperfective. Also it should be noted that the imperfectives were actually preferred in [+Q] contexts on the first task (bare VP elicitation) for monolinguals, again in sharp contrast with the heritage speakers; however, this difference between the groups can be attributed to an additional independent factor. In Standard Russian, the imperfective aspect is conventionally used as a default citation form for verbs. It is not surprising that the monolingual speakers, familiar with this formal convention through education and access to the standard dialect, generally prefer the imperfective forms for bare VPs, and that the heritage speakers, in the absence of formal schooling and lack of exposure to the standard dialect, do not follow this convention. Nevertheless, when this confounding factor is removed and the verbs no longer surface in citation forms (Task 2), the difference between the two groups in the [+Q] object condition is still remarkable.

The second striking observation is that no such difference exists in the [-Q] object condition. With compositionally atelic predicates, heritage speakers pattern together with the monolinguals in preferring the imperfective forms. Under the hypothesis of the present study, such preference is predicted for the group of heritage speakers: [-Q] object triggers the imperfective aspect on the verb. However, a larger principle seems to be involved in the distribution of the aspectual forms with compositionally atelic predicates, one that prevents the occurrence of perfectives in these contexts in Russian and neutralizes or overrides any possible differences between the two groups.

In her study of the parametric differences in the encoding of telicity in English and Slavic in L2 acquisition, Slabakova (1999) found that Bulgarian learners of English patterned with native speakers in all atelic contexts, but considerably differed from them in judging and matching telic sentences. These findings, coupled with the results presented here, point to an intricate complexity in the relationships between (a)telicity and (im)perfectivity in the Slavic languages – namely, lack of uniformity across telic and atelic contexts. While telic predicates allow for both perfective and imperfective aspectual marking, only imperfectives are compatible with the atelic readings; perfective forms appear to be excluded from the atelic contexts altogether. Verkuyl (1999), among others, notes that the perfective prefixes in Slavic impose certain restrictions on the interpretation of the internal argument NPs: “in spite of the absence of quantificational information, the NP will be interpreted as pertaining to a specified quantity” (p. 129). That is, the prefixes take scope over entire VPs rather than individual verbs. In avoiding the perfective aspectual marking in compositionally atelic contexts (with few exceptions, which will be discussed below), both groups of speakers demonstrated sensitivity to such scopal effects of the Russian perfective prefixes.

After careful examination of the sentential contexts in which the target atelic predicates occurred with perfective morphology in the data, a consistent pattern emerged: every instance pointed to a reinterpretation of the bare plural object from [-Q] to [+Q]. In the absence of definite and indefinite articles in Russian, bare plurals like *books* are formally ambiguous between the generic indefinite and concrete definite readings; it was almost certainly the latter reading that the speakers intended in the few seemingly perfective-atelic instances in the data. All such examples from both groups cannot be listed here due to space restrictions; however, the sentence in (2) below, produced by a heritage speaker in Task 2, is perhaps the most straightforward illustration of an explicit substitution of the target [-Q] VP *read books* with a [+Q] VP *read these books* through the addition of an overt determiner:

- (2) Vam nuzhno prochitat' vot **eti knigi** do zavtra.
 you need read.PFV particle these books till tomorrow
 'You need to read these books for tomorrow' (target VP: *read books*)

Before turning to the concluding remarks, one additional finding of the study will be addressed in this section. What initially appears as a slight imperfective bias in the heritage data, 55.6% out of all verb forms used, turns out to be a perfective bias in comparison with the group of monolingual speakers. In order to make the comparison more accurate, I will focus on the data from the sentence construction task, setting the bare VPs in the first task aside (in doing so, I once again exclude the independent factor responsible for the large number of imperfective verbs in citation forms in the monolingual data). In sentences, 55.1% of all verbs were imperfective in the heritage data and 73.0% in the monolingual data. That is, even though the heritage speakers overall used slightly more imperfective forms than perfective forms, they did not use nearly as many imperfective forms as did the monolingual speakers: only 27.0% of the target verb forms in sentential contexts were perfective in the monolingual data, compared to 44.9% in the heritage data. This finding supports a recent observation made in passing in Polinsky (2008): "it seems that heritage speakers use a greater number of perfective forms (at least in spontaneous production)" (p.19) and warrants further investigation.

3. Conclusion

The goals of this study were two-fold: first, to examine the restructuring of the aspectual system of heritage Russian at the phrasal level of VP, and second, to attempt to contribute to the ongoing debate on the complex interactions between the lexical and viewpoint aspects in Russian, an issue far from settled in the literature of Slavic aspect. This section will summarize the overall conclusions

of the study, insofar as they relate to the above two lines of research, and outline some possible directions for future work.

The distribution of the aspectual forms in the heritage Russian data supports the idea that contextual factors, particularly internal arguments, are relevant for the occurrence of aspectual morphology with verbs of variable telicity. When constructing sentences out of VPs with [+Q] objects, heritage speakers strongly preferred the perfective aspectual marking, while speakers of Russian in the control group paid no attention to the direct object on the same task, producing a nearly equal number of perfective and imperfective forms. This mismatch points to an interesting difference between the heritage grammar and the grammar of the corresponding baseline language – one that mirrors the parameterized difference with respect to the encoding of telicity at a phrasal level between English and Russian.

The results of this study further bear on what has for a long time been one of the central problems in the literature on Slavic aspect – the relationship between the viewpoint aspect and the (a)telicity of verbal predicates. In atelic contexts both heritage speakers and monolingual controls strongly preferred imperfective forms. This restriction on the occurrence of perfectives with compositionally atelic predicates questions the idea that grammatical aspect in Russian is fully independent from lexical aspect. The data on the distribution of compositionally atelic predicates supports the opposite view, as perfective aspectual morphology in Russian does not occur with this group of predicates in the monolingual data.

Further, the difference in the distribution of aspectual forms with compositionally telic and atelic predicates provides a convincing argument for the asymmetrical nature of compositional aspectuality. While compositionally telic predicates are compatible with various construals of a situation, compositional atelics only allow for the viewing of a situation “from the inside,” the viewing that highlights its internal temporal structure.

These findings have several implications for future studies of aspectuality at a phrasal level, including further research on aspect in heritage grammars. The first, and perhaps most obvious, conclusion is that data from the corresponding baseline varieties can be critical for uncovering the patterns of systematic restructuring in a heritage grammar, for some of these patterns, especially those not manifested in errors, may not be easily detectable otherwise. Second, differences in restrictions on the occurrence of the perfective and imperfective forms with compositionally telic and atelic predicates may help bridge the gap between the literature that conflates the lexical and viewpoint aspects in Slavic into one single notion and the literature that distinguishes them as two independent categories. It is hoped that more work on aspect in heritage languages will soon follow to help bring major insights into the overall makeup of the aspectual system and complex interactions within that system.

Notes

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Oksana Laleko
University of Minnesota
Linguistics, 233 Nolte Center
315 Pillsbury Dr. SE
Minneapolis, MN 55455
olaleko@umn.edu