

# L2 Acquisition of Coercion

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## 1. Introduction

The most striking difference between L1 and L2 acquisition is that while the former is typically successful, the latter seldom is. Research in L2 acquisition conducted during the late 1980s reveals that one of the linguistic properties that L2 learners generally fail to acquire is aspect (Coppieters, 1987). However, when it comes to aspect, the issue of ultimate attainment must be considered very cautiously, given that different pieces of aspectual information are computed by different components of the grammar and may even involve some extra-grammatical information such as world knowledge. More recent L2 research indicates that it is certainly not the case that L2 learners fail to acquire the entire aspectual system of the L2. In fact, they can successfully attain native-like competence with purely morphosyntactic aspectual properties (Kozłowska-Macgregor, 2002; Montrul & Slabakova, 2003; Slabakova, 2005; Gabriele, 2005; Keiko et al., 2007; Nossalik, 2009). What L2 learners seem to struggle with is the aspectual information that involves computation at external *interfaces* – areas where the linguistic module interacts with other cognitive modules such as the memory system or general world knowledge. Several studies confirm that L2 learners experience great difficulties with aspectual information computed at two external interfaces: the lexicon-syntax interface and the syntax-pragmatics interface (Slabakova & Montrul, 2002; Slabakova, 2005; Nossalik, 2009; Gabriele, 2009).

Put together, recent L2 findings partially support the *Interface Hypothesis* which maintains that while ‘narrow’ syntax and *internal* interfaces are spared from persistent non-convergence in L2 acquisition, *external* interfaces are prone to non-convergence (Tsimpili et al., 2004; Sorace & Filiaci, 2006). In particular, it shows that while L2 learners are able to attain native-like competence with purely morphosyntactic properties related to aspect, they experience considerable problems with aspectual information computed at the external interfaces. What is missing from the complete picture is how L2 learners handle the aspectual information computed at the *internal* interfaces – areas where syntax interacts with other linguistic modules (e.g., the syntax-semantics interface). If the Interface Hypothesis is right, L2 learners should experience no problems in acquiring these properties.

Continuing the general line of inquiry, in this paper I explore whether L2 learners can attain native-like competence with aspectual information computed at the syntax-semantics interface. Specifically, I investigate whether English learners of Russian as a second language can successfully acquire an aspectual operation that they lack in their L1 and that applies at the syntax-semantics interface. Following well-established semantic traditions, I call this post-syntactic operation *coercion* (Dowty, 1979; de Swart, 1998; Michaelis, 2004; Rothstein, 2004). As revealed by experimental results reported in this paper, English speakers experience no problems in acquiring the Russian type of coercion. These findings complete the missing gap in the L2 research on aspect by showing that the only aspectual properties that L2 learners struggle with are those computed at the external interfaces. Together with previous findings on L2 acquisition of aspect, they provide support for the Interface Hypothesis.

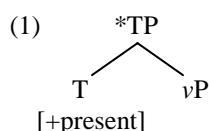
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\* I would like to express my gratitude to the participants of GALANA 4 conference for their questions and thoughtful remarks. All errors are mine.

## 2. Coercion

Linguists working on aspect standardly group verbal predicates into four aspectual classes (i.e., states, achievements, accomplishments and activities) depending on whether or not these predicates are dynamic/non-dynamic and telic/atelic. States describe static (non-dynamic) situations that lack any internal structure (e.g., *know*, *love*, *be happy*). Activities, on the other hand, are dynamic processes that are unlimited in time (e.g., *run*, *work*, *read books*). Accomplishments are dynamic processes that result in a change of state (e.g., *read the books*, *buy a sandwich*). And achievements are non-dynamic near-instantaneous events describing a change of state, for example, *arrive*, *find*, *die*, *recognize* (Vendler, 1967; Comrie, 1976; Dowty, 1979; Pustejovsky, 1991; Smith, 1997; Rothstein, 2004; among many others).

One of the major properties of English morphologically simple non-stative verbal predicates such as achievements, non-progressive activities and non-progressive accomplishments is that these predicates cannot receive an ongoing interpretation – an interpretation where an event unfolds simultaneously with the speech time (Cowper, 1998; Copley, 2002). This observation suggests that the derivation whereby a *vP* is merged directly under a *TP* filled with the [+present] feature as in (1) is illegitimate.<sup>1</sup>



Because of the constraint in (1), the present tense forms of simple (tense) activities, simple (tense) accomplishments and achievements cannot receive an ongoing event reading.<sup>2</sup> Hence, these verbs are ungrammatical with the adverbial *at this moment* that enforces such a reading. Consider the data in (2) that demonstrate this.

- (2) a. \**At this moment*, Mary plays piano. *activity*  
 b. \**At this moment*, Roxanne paints John's portrait. *accomplishment*  
 c. \**At this moment*, Susan finds some strange objects in her house. *achievement*

To receive an ongoing interpretation, English non-stative events must be inflected with the progressive marker *-ing* that occupies a *vP*-external *AspP*.<sup>3</sup> Hence, in English, only aspectually complex non-stative verbs, that is, verbs that contain a *vP*-external *AspP*, can receive an ongoing event interpretation, as shown in (3):

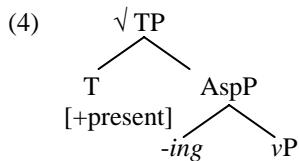
- (3) a. *At this moment*, Mary is playing piano. *activity*  
 b. *At this moment*, Roxanne is painting John's portrait. *accomplishment*

This observation implies that, unlike the structure in (1), the structure in (4), whereby a *vP* is merged under a *TP*<sub>[+present]</sub> but via an *AspP*, is perfectly legitimate.

<sup>1</sup> Following Travis (2010), I assume that states are simply VPs, meaning that they do not contain an extra *vP* shell. Consequently, they are not subject to the constraint in (1).

<sup>2</sup> In reality, achievements, being non-dynamic events, do not contain a *vP* shell in their basic syntactic structure (Travis, 2010). This means that the constraint that prohibits the *TP* with [+present] to merge onto non-stative predicates is more elaborated than in (1). I deliberately simplified this constraint, given that the distinction between achievements and accomplishments/activities is irrelevant to the present study.

<sup>3</sup> Since only dynamic verbs can be inflected with *-ing*, achievements do not have this option, unless coerced into accomplishments.



As extensively argued in Nossalik (2009), unlike English, Russian only has two types of non-stative verbal predicates that lack a vP-external AspP: achievements and accomplishments.<sup>4</sup> These verbs form a class of predicates that have been labeled *perfective* (PERF) verbs. A distinguishing property of perfective verbs is that, contrary to imperfective verbs, they are incompatible with the present tense as shown in (5).

- (5) a. \**V dannyj moment* Maša **zapoet** etu pesnju. *achievement*  
 At this moment Masha *za-sings*-PERF this song.  
 Intended: ‘At this moment, Masha is-starting-to-sing this song.’
- b. \**V dannyj moment* Maša **perečitaet** Petinu statju. *accomplishment*  
 At this moment Masha *rereads*-PERF Petja’s article.  
 Intended: ‘At this moment, Masha is-rereading Petja’s article.’

Russian perfective verbs are usually obtained by the process of prefixation, whereby a verbal root is inflected with an aspectual prefix.<sup>5</sup> This morphological process is highly idiosyncratic, in that there are 28 distinct verbal prefixes in Russian and each verbal root selects for how many and which among these prefixes it can combine with. To further complicate the matter, while a given verbal root can combine with up to 16 different prefixes, in general, only one among these prefixes preserves the original meaning of the root. Adding other prefixes results in various degree of idiosyncrasy, as demonstrated in (6).

- (6) a. *na-pisa-t’*-PERF “to write”  
 b. *do-pisa-t’*-PERF “to write up”  
*iz-pisa-t’*-PERF “to write all over”  
*za-pisa-t’*-PERF “to write down”  
*o-pisa-t’*-PERF “to describe”  
*pod-pisa-t’*-PERF “to sign”  
*pere-pisa-t’*-PERF “to copy”  
*pri-pisa-t’*-PERF “to add by writing”  
*ras-pisa-t’*-PERF “to paint all over”, “to register marriage”  
*v-pisa-t’*-PERF “to enter by writing”  
*vy-pisa-t’*-PERF “to copy out”

As can be seen from (6), the root *pisa-* “write” can take up to 11 prefixes. While all these prefixes render the verb perfective, only one of them, mainly *na-* does not alter the original meaning of the root. Thus, as we can see from (6a), *napisat’* just as *pisat’* means “to write”. In contrast, all other prefixes produce a meaning different from that of the root, as can be seen from the translations of the verbs in (6b). Despite this fact, all verbs derived by the prefixation are perfective and, hence, incompatible with the present tense.

Following Borer (2005), I assume that a perfective prefix occupies a vP-internal AspP. The reason why Russian perfective verbs are incompatible with the present tense is that merging them directly

<sup>4</sup> An anonymous reviewer has cast some doubts that morphologically simple imperfective activities are syntactically complex. Readers are referred to Nossalik (2009) for an extensive argument why morphological simplicity of these verbs should not be equated with their syntactic structure.

<sup>5</sup> There are other morphological processes that can derive PERF verbs in Russian. Since the verbs derived by these alternative processes are not tested in this study, I do not discuss them in this paper.

under a TP<sub>[+present]</sub> would violate the constraint in (1). The only way to make these verbs compatible with the present tense is by inflecting them with the aspectual suffix *-va* which, just as the English *-ing*, occupies the vP-external AspP. Hence, the sentence in (7) can receive an ongoing event interpretation because it has the structure in (4), not that in (1).<sup>6</sup>

- (7) *V dannyj moment* Maša **perečityvaet** Petinu statju. *accomplishment*  
 At this moment Masha rereads-IMP Petja's article.  
 'At this moment, Masha is rereading Petja's article.'

Note that because adding *-va* to perfective stems yields verbal forms that can receive an ongoing event interpretation, these forms have been labelled *imperfectives* (i.e., compatible with the present tense).<sup>7</sup>

We, thus, have arrived at the generalization that holds for both English and Russian.

- (8) Restriction on merging verbal predicates:  
 A vP cannot be directly merged under a TP<sub>[+present]</sub>.

It is the restriction in (8) that is responsible for the fact that, in both English and Russian, present tense forms of syntactically simple non-stative verbs cannot receive an ongoing event interpretation. Intriguingly, however, these forms are not completely banned from the languages under discussion. Instead of being ungrammatical, they undergo a semantic shift. This shift results from *coercion* – an operation that can alter the aspectual value of a verbal or nominal predicate obtained by syntactic composition.

According to de Swart (1998), coercion applies when there is a “conflict between the aspectual character of the eventuality description and the aspectual constraints of some other element in the context” (p.360). Importantly, the coercion that de Swart discusses can only modify the aspectual value of some verbal predicates. For instance, in English only some achievements can be coerced into accomplishments and, consequently, be inflected with the progressive marker *-ing* (e.g., *My cat is dying*. vs. *\*Mary is recognizing him*). Whether or not an achievement can be coerced depends on the context combined with world knowledge. Only achievements that allow for some preparatory stages as in the case of *die* can be coerced. Given the pragmatically determined nature of this type of coercion, researchers standardly assume that it applies at the syntax-pragmatics interface (de Swart, 1998).

In contrast, coercion that alters the aspectual value of non-stative predicates is not pragmatically but rather semantically driven. It is triggered by a semantic conflict between the present tense and non-stative predicates.<sup>8</sup> Hence, it applies at the syntax-semantics interface. It is a matter of debate whether or not this type of coercion triggers syntactic restructuring. Following Depraetere (1995) and Rothstein (2004), I assume that it does. It acts as a repairing strategy that saves the illegitimate derivation in (1), repeated in (9) for convenience. As a result, it affects all non-stative predicates, with no exceptions.

- (9) 
$$\begin{array}{c} *TP \rightarrow \text{coercion} \\ \swarrow \quad \searrow \\ T \quad \quad vP \\ [+present] \end{array}$$

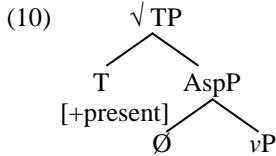
<sup>6</sup> Similarly to English achievements, Russian achievement verbs, being non-dynamic, cannot be inflected with the suffix *-va*.

<sup>7</sup> To reiterate, in Russian, the terms *perfective* and *imperfective* refer to verbal classes that behave in a certain way with respect to the present tense. Verbs that are compatible with this tense are labeled *imperfective* and those that are not are labeled *perfective* (Nossalik, 2009).

<sup>8</sup> Given space limitations, I will not discuss why present tense is incompatible with non-stative verbs. Readers are referred to Cowper (1998) for an extensive debate on this issue.

While syntactically simple non-stative verbal predicates undergo coercion for the same reason in both English and Russian (i.e., because of the prohibition in (8)), these languages choose different ways to repair the illegitimate structure in (9).

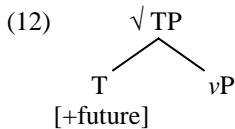
In English, this structure is repaired by inserting a phonologically null aspectual phrase (AspP) between the  $\nu$ P and TP (Rothstein, 2004). In other words, in English, the structure in (9) is transformed into the structure in (10), which is similar, although not identical, to the legitimate structure in (4).



A  $\nu$ P-external phonologically null AspP endows English verbal predicates with a habitual reading. This explains why the present tense forms of English non-stative verbal predicates are compatible with habitual adverbials, as demonstrated in (11).

- (11)
- |    |  |                       |
|----|--|-----------------------|
| a. | Susan <i>occasionally</i> finds some strange objects in her house. | <i>achievement</i>    |
| b. | Mary <i>seldom</i> plays piano.                                    | <i>activity</i>       |
| c. | Roxanne <i>often</i> paints John's portrait.                       | <i>accomplishment</i> |

In Russian, in contrast, the structure in (9) is repaired by changing the [+present] feature under the TP into [+future]. To put it differently, in Russian, the structure in (9) is transformed into the structure in (12):<sup>9</sup>



As a result of this coercion operation, the present tense forms of Russian perfective verbs receive a future tense interpretation, as shown in (13).<sup>10</sup>

- (13)
- |    |  |                       |
|----|--|-----------------------|
| a. | Maša <b>zapoet</b> etu pesnju.             | <i>achievement</i>    |
|    | Masha <i>za-sings-PERF</i> this song.      |                       |
|    | ‘Masha will start singing this song.’      |                       |
| b. | Maša <b>perečitaet</b> Petinu statju.      | <i>accomplishment</i> |
|    | Masha <i>rereads-PERF</i> Petja's article. |                       |
|    | ‘Masha will reread Petja's article.’       |                       |

To sum up, the structure whereby a  $\nu$ P is directly merged under a TP<sub>[+present]</sub> undergoes coercion in both English and Russian. However, these languages choose different means to repair this illegitimate

<sup>9</sup> Contrary to the present tense forms of perfective verbs, the present tense forms of imperfective verbs receive a present tense reading, as they are not subject to coercion. Their future is formed by combining the verb *byt'* ‘to be’ with an imperfective infinitive. Since this paper is dedicated only to verbs that undergo coercion, I leave Russian imperfective verbs out of the picture.

<sup>10</sup> Note that in English the present tense verbs can receive a *futurate* reading – a reading that asserts a future-oriented plan. However, unlike the present tense forms of Russian perfective verbs, English present tense verbs can obtain a futurate reading only in the case of planned events and only in the presence of a future-oriented adverbial (Copley, 2002). In Russian too, the present tense forms of imperfective verbs can acquire a futurate reading under the same conditions. Interestingly, just like in English simple tense futurate (Copley, 2002), in Russian imperfective futurate the temporal adverbial must be focused.

structure. While in English this structure is repaired by inserting a phonologically null aspectual phrase (AspP) between the  $\nu$ P and TP, in Russian it is repaired by changing the [+present] feature under the TP into [+future]. This is why in English the present tense forms of syntactically simple non-stative verbs receive a habitual interpretation, whereas in Russian they receive a future tense interpretation.

There is an important acquisition question that arises from this contrast. Can English native speakers learning Russian as a second language acquire coercion, provided that Russian uses a different type of coercion from that found in English? In particular, can they succeed in establishing that the present tense forms of Russian perfective verbs should have a future tense and not a habitual interpretation? Recall that according to the Interface Hypothesis (Sorace & Filiaci, 2006) English learners should be able to successfully acquire Russian coercion, given that it applies at the *internal* syntax-semantics interface. To see whether this prediction is borne out, I conducted an experiment, the details of which I present next.

### 3. Experiment

#### 3.1. Participants

50 subjects participated in the experiment: 40 L2 learners and 10 L1 native-controls. 17 of the L2 subjects and 4 native speakers were recruited through McGill University's classified ads, and the others through personal contacts.

All of the L2 participants were native English speakers, ranging in age from 20 to 37. They all had their first exposure to Russian in their early 20s. 36 of the L2 participants learned Russian in a North American University, in a formal classroom setting. 4 of the L2ers acquired Russian in Russia, in a mainly naturalistic setting. Except for 1 subject, even L2ers who learned Russian in a formal setting had spent some time in Russia, ranging from 1 month to 3 years. The majority of Canadian participants who took the test in Montreal ( $n = 25$ ) had some knowledge of French, ranging from basic to advanced. None of the L2ers were exposed to any Slavic language in their childhood.

The L2 subjects were classified into three proficiency groups, based on their performance on a Cloze test. 8 of the 40 L2 participants were classified as advanced (Adv), 22 as high intermediate (HI) and 10 as low intermediate (LI).

#### 3.2. Task

A computerized grammaticality judgment task was used. There were three choices of answers available: *Yes*, *No*, *Don't know*. The participants were specifically instructed to use *Don't know* only if they encountered some unfamiliar vocabulary.

To prevent unconscious misreading of ungrammatical sentences, whereby subjects, ignoring visual information that makes these sentences ungrammatical, misperceive them as grammatical, participants were also presented with audio recordings of the sentences they were reading, recorded by a Russian native speaker. The sentences were read in a neutral intonation pattern without focusing the adverbial, to avoid the futurate reading of the present tense forms that appeared with a future adverbial. For each sentence, participants had 30 seconds to reply. The test was designed in a manner that prevented the participants from going back and changing their initial answers.

#### 3.3. Stimuli

30 Russian sentences containing morphologically present tense forms of Russian achievement and accomplishment verbs were used.<sup>11</sup> To test whether L2 participants treated these verbs as incompatible

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<sup>11</sup> To block interference from English at the level of the  $\nu$ P-internal aspect, all perfective sentences contained quantity internal arguments. This was done to help L2 subjects assume the correct structure for Russian perfective verbs, in cases when they fail to use the Russian telicity-assigning mechanism. Consult Nossalik (2009) for more details.

with the present tense, 10 of the stimulus sentences appeared with the adverb *v nastojaš'ij/dannij moment* “at this moment” which imposes an ongoing event reading:

- (14) \**V nastojaš'ij moment* Petina komanda **proigraet** match. **PERF-ONG**  
 At this moment Petja's team loses-PERF match.  
 ‘At this moment, Petja’s team will lose the match.’  
Intended: “At this moment, Petja’s team loses the match.”

Another 10 stimulus sentences appeared with an adverb that gives rise to a future tense reading. These sentences were intended to check whether or not the L2 participants allowed for the verb’s interpretation to shift into the future, as they should:

- (15) *Čerez 10 minut* Petja **viučit** eto stixotvorenje naizust'. **PERF-FUT**  
 In 10 minutes Petja learns-PERF this poem by-heart.  
 “In 10 minutes, Petja will learn this poem by heart.”

And finally, 10 stimulus sentences tested whether or not L2 subjects shift the interpretation of Russian achievements and simple accomplishments into the habitual, as they would do with their English structural equivalents. To ensure the habitual reading of these sentences, they appeared with a habitual adverb (e.g., *často* “often”, *vsegda* “always”, etc.):

- (16) \**Policija reguljarno* **razisčet** etix prestupnikov. **PERF-HAB**  
 Police regularly searches-for-PERF these criminals.  
Intended: “The police regularly searches for (and finds) these criminals.”

Apart from testing the perfective verbs, I also tested their imperfective counterparts in all three conditions. Since these verbs do not involve coercion, they were included merely as control sentences. There were also 10 additional distracters.

Before we consider the main results, let me outline the predictions as related to the PERF-ONG, PERF-HAB and PERF-FUT conditions.

### 3.4. Predictions

Assuming the Full transfer/Full access Hypothesis (Schwartz & Sprouse, 2006), English learners of Russian are predicted not to experience any difficulties in establishing that the morphologically present tense forms of Russian perfective verbs cannot receive an ongoing event interpretation. Thus, given that the constraint in (8) holds in both English and Russian, they are predicted to get this knowledge “for free” from their L1. Hence, all L2 participants, regardless of their proficiency level, are expected to reject sentences as in (14). Note, however, that to exhibit such native-like behaviour, they must recognize that these verbs contain an aspectual prefix that renders them perfective. This is not always easy, especially for the verbs that acquire an idiosyncratic meaning in the process of prefixation.

Moreover, it should not be hard for L2 learners to establish how coercion works in Russian, meaning that the  $T_{[+present]}$  is replaced by  $T_{[+future]}$ , given the abundance of positive evidence, whereby the present tense forms of Russian perfective verbs always receive a future tense interpretation.<sup>12</sup> If so, this means that even the L2 participants belonging to low proficiency groups, should accept sentences as in (16).<sup>13</sup>

<sup>12</sup> The fact that Russian PERF verbs can only be used with future meanings is explicitly taught in an L2 Russian classroom setting.

<sup>13</sup> It is not clear whether having a simple tense futurate in English can facilitate acquisition of Russian coercion. Once again, unlike in the simple tense futurate, Russian present perfectives do not require a future-oriented adverbial.

Not only must L2 learners acquire the Russian version of coercion, they must also stop using the English one. In other words, they have to ‘unlearn’ or preempt their L1 option (Trahey & White, 1993). Otherwise, they will not be able to rule out ungrammatical sentences as in (15). As shown by Gabriele (2009), in the case of aspectual coercion, preemption is especially difficult and is significantly delayed as opposed to the acquisition of L2 coercion. Given these results, we expect the L2 participants to perform much better on the sentences in (16) as compared with those in (15).

### 3.5. Results

Table 1 reports the rates of acceptance of the ungrammatical sentences appearing in the PERF-ONG and PERF-HAB conditions as well as the grammatical sentences appearing in the PERF-FUT condition.<sup>14</sup>

Table 1

*Group results: PERF-ONG, PERF-HAB and PERF-FUT conditions, mean acceptances*

Condition	Controls (n=10)			Advanced (n=8)			High Int (n=22)			Low Int (n=10)		
	M	SD	%	M	SD	%	M	SD	%	M	SD	%
*PERF-ONG	0	0	0	0.5	0.45	5	2	0.62	20	3	0.82	30
PERF-FUT	9.9	0.32	99	9	0.58	90	7.82	1.02	78.2	6.9	1.83	69
*PERF-HAB	0.2	0.25	2	1.1	0.72	11	3.1	0.93	31	6.8	0.56	68

As we can see from this table, contrary to the prediction outlined in the previous section, L2 participants sometimes misanalysed the PERF-ONG sentences as grammatical. In fact, as determined by a one-way ANOVA, both the high intermediate and low intermediate participants made incorrect judgments significantly more often than the native and advanced subjects ( $F = 37.26$ ;  $df = 3, 46$ ;  $P < 0.001$ ).

To compare the results of the PERF-ONG condition with the results of the PERF-HAB and PERF-FUT conditions, a two-way ANOVA was performed on accuracy scores obtained from all three conditions. It detected a group effect ( $F = 167.135$ ,  $df = 3, 138$ ;  $P < 0.001$ ), a condition effect ( $F = 39.709$ ,  $df = 3, 138$ ;  $P < 0.001$ ), and significant interaction between groups and conditions ( $F = 16.004$ ,  $df = 3, 138$ ;  $P < 0.001$ ). According to the results of Scheffe’s post hoc test, only the advanced participants performed indistinguishably from the native controls. Moreover, the performance of the low intermediates diverged significantly from the performance of the high intermediates. These results can be clearly observed in Figure 1 that presents the results in terms of accuracy.

<sup>14</sup> Given space limitations, I will not discuss participants’ performance on imperfective verbs. Note, however, that just as expected the subjects accepted these verbs with an ongoing and habitual adverbial and rejected them with a future tense adverbial.

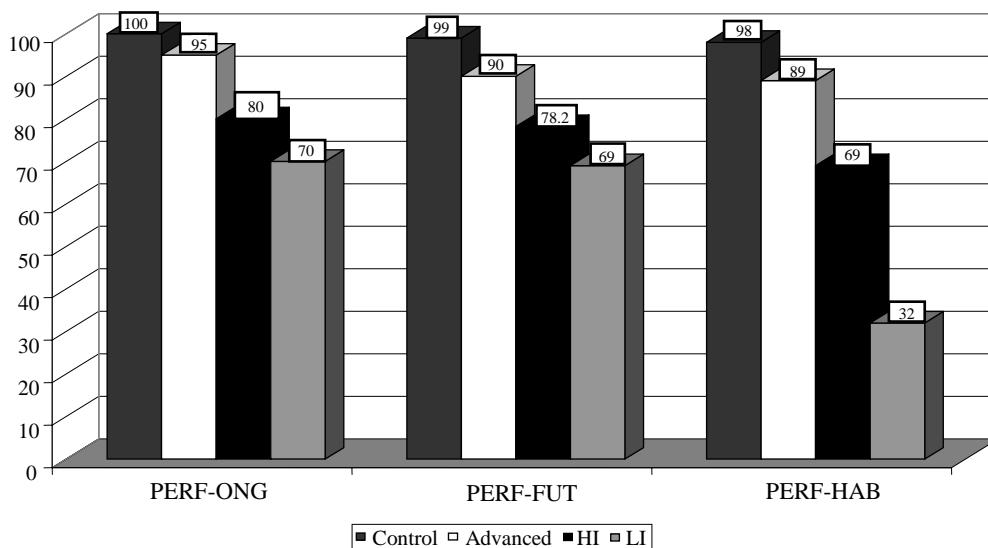


Figure 1. Group results: PERF-ONG, PERF-HAB and PERF-FUT conditions, accuracy, %.

Overall, all subjects performed significantly better on the PERF-ONG and PERF-FUT conditions than on the PERF-HAB condition, although, as revealed by statistical analysis, this distinction was statistically significant only in the case of the high and low intermediate subjects ( $F = 8.61$ ;  $df = 2, 63$ ;  $P < 0.001$ ) and ( $F = 51.73$ ;  $df = 2, 27$ ;  $P < 0.001$ ) respectively. The advanced participants, just as the native controls, behave indistinguishably in all three conditions ( $F = 1.75$ ;  $df = 2, 24$ ;  $P = 0.198$ ).

### 3.6. Discussion

As revealed by the results, contrary to the predictions, L2 participants often misanalysed the PERF-ONG sentences as being grammatical. In particular, the high and low intermediate subjects misjudged 20% and 30% respectively of the PERF-ONG sentences, as opposed to 0% by the Russian controls and 5% by the advanced participants. If incompatibility of syntactically simple non-stative verbs with the present tense is indeed a restriction that applies in both Russian and English – the assumption that we adopted in this paper – then we have to explain why the L2 participants made so many incorrect judgments.

The difficulties that the L2 participants of the lower proficiency groups experienced might be not so unexpected if we take into consideration the fact that the stimulus verbs contained a morpheme that endows them with an idiosyncratic meaning. The morphological non-transparency of these verbs may have mislead L2ers into thinking that they are non-decompositional and, hence, imperfective. As a result of this miscalculation, these verbs would have been deemed as being compatible with the present tense. In short, the reason why the L2 participants of the lower proficiency groups failed to reject some of the perfective verbs appearing in the context of a present tense adverbial is because they failed to compute these verbs as being perfective.<sup>15</sup> Given substantial idiosyncrasies pertaining to the morphological structure of the Russian verbal system, it is not surprising that it takes some time for L2ers to acquire this system. Importantly, the native-like performance of the advanced participants demonstrates that L2ers are able to attain native-like competence with Russian aspectual morphology, eventually overcoming the problem that they experience with verbal decomposition.

<sup>15</sup> As pointed out by an anonymous reviewer, this explanation is speculative in nature. In order to confirm it, one would have to compare the performance of L2 learners on morphologically transparent as opposed to morphologically non-transparent verbs. Unfortunately, not foreseeing this problem, I did not use any morphologically transparent verbs in the present study. Hence, my explanation will have to remain purely intuitive for now.

Let us now turn to the results of the PERF-FUT condition. Recall that this is the condition that tested whether the L2 participants have acquired the Russian version of coercion. The subjects who have achieved native-like competence were expected to judge the sentences appearing in this condition as grammatical. Also recall that L2 learners were predicted to acquire Russian coercion relatively early in the process of acquisition, given the abundance of positive evidence. The obtained results support the latter prediction. Thus, although the performance of the high intermediate and low intermediate groups was found to be statistically different from that of the native controls (78.2% for HI and 69% for LI), these speakers, nonetheless, performed above chance level, revealing their emerging knowledge of Russian coercion. Intriguingly, the L2 participants performed strikingly similarly on the PERF-FUT and PERF-ONG conditions. This suggests that the non-native-like behaviour of the low and high intermediate subjects on the PERF-FUT condition might reflect their occasional failure to recognize that they are dealing with PERF verbs (just as they do in the PERF-ONG condition) rather than their incomplete knowledge of Russian coercion.<sup>16</sup> What is important for the present study, however, is the fact that the advanced group performed similarly to the native controls. These findings imply that L2 learners can successfully acquire Russian coercion.

To see to what extent the L2 participants still used English coercion, let us look at the results of the PERF-HAB condition, which tested the compatibility of Russian PERF verbs with a habitual adverbial. As revealed by the statistical analysis, the high intermediate and the low intermediate participants performed significantly worse on the PERF-HAB condition than on the PERF-ONG and PERF-FUT conditions. These findings suggest that both the low and high intermediate subjects have not preempting yet their L1 coercion.<sup>17</sup>

This is especially true of the low intermediate subjects who erroneously allowed for PERF verbs to receive a habitual interpretation 68% of the time. To obtain a more accurate picture of how often the low intermediate participants made an error because they mistakenly employed English coercion, as opposed to them failing to decompose the stimulus verb into a prefix and a root as they did in PERF-ONG condition, I subtracted the percentage of errors in the PERF-ONG condition (30%) from the total number of errors that they made in the PERF-HAB condition (68%). According to this calculation, the low intermediate subjects mistakenly assumed the English version of coercion 38% of the time. This number is substantially lower for the high intermediate group (i.e., about 11%). If we compare the scores of the low and high intermediate subjects in the PERF-HAB condition with those in the PERF-FUT condition, we obtain a confirmation of Gabriele's (2009) observation that preempting of L1 coercion takes longer than acquisition of L2 coercion.

Importantly, the performance of the advanced participants did not differ significantly from that of native controls (i.e., 6% for the advanced subjects vs. 2% for the controls). These results clearly show that not only are L2ers able to successfully acquire Russian coercion, but also they are able to eventually successfully preempt the English variant of coercion.<sup>18</sup>

To sum up, the native-like performance of the advanced L2 participants suggests that L2 learners can successfully acquire Russian coercion. The higher rate of errors observed in the high and low intermediates may be partially explained by these participants' failure to recognize some of the perfective verbs with non-transparent idiosyncratic meanings as being decompositional and partially by delayed preempting of the English type of coercion.

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<sup>16</sup> Unfortunately, we cannot directly compare whether L2ers failed to decompose the same verbs in the PERF-FUT condition as they did in the PERF-ONG condition, since the verbs tested in these conditions were different.

<sup>17</sup> The fact that the L2 participants often shift the interpretation of Russian perfective verbs into a habitual clearly shows that they do not directly merge Russian perfective verbs under a TP<sub>[+future]</sub>, ignoring the L2 instructions. Instead, they recognize that these verbs carry the same tense marking as present-tense imperfective verbs and, hence, should be just as their imperfective counterparts merged under a TP<sub>[+present]</sub>.

<sup>18</sup> The reason why the L2 participants in this study were more successful in preempting aspectual coercion than in the study by Gabriele (2009) might be that the coercion examined here applies at the syntax-semantics interface while the one examined in her study seems to apply at the syntax-pragmatics interface.

## 4. Conclusion

In this paper we have looked at an experiment that tested whether L2 learners can acquire a type of coercion not applicable in their L1. Specifically, this experiment tested whether English speakers learning Russian as L2 can attain native-like competence with Russian coercion that affects the present tense forms of syntactically simple non-stative verbs or simply PERF verbs. As a result of our investigation, we have established that L2ers experience no particular problems in successfully acquiring Russian coercion. In fact, they acquire this post-syntactic operation quite early in the process of acquisition with even low intermediates displaying their emerging knowledge of this operation. There are, however, two issues that impede the performance of low intermediates and, to a lesser extent, of high intermediates. First, these speakers are not always successful in recognizing that they are dealing with PERF verbs. This is why they occasionally fail to coerce the present tense forms of Russian PERF verbs, allowing them to receive a present tense interpretation as well as preventing them from receiving a future tense interpretation. Second, the performance of high and low intermediates reveals that preempting of L1 coercion takes longer than acquisition of L2 coercion, just as suggested by Gabriele (2009). Because of this, they mistakenly allow for the present tense forms of Russian PERF verbs to optionally assume a habitual interpretation.

Importantly, the native-like performance of advanced speakers unveils that English learners of Russian are able to attain native-like competence with Russian coercion. This finding supports the Interface Hypothesis (Sorace & Filiaci, 2006), which predicts that L2 learners should be able to successfully acquire a type of coercion that occurs at the syntax-semantics interface. This study completes the missing gap in the L2 research on aspect by looking at the aspectual phenomenon that involves the *internal* interface as opposed to the *external* interface or to core syntax.

## References

- Borer, Hagit. (2005). *Structuring sense*. Volume I: *In name only*. Volume II: *The normal course of events*. Oxford University Press.
- Comrie, Bernard. (1976). *Aspect*. Cambridge: Cambridge University Press.
- Copley, Bridget. (2002). *The Semantics of the Future*. Doctoral dissertation, MIT.
- Coppieters, René. (1987). Competence differences between native and near-native speakers. *Language*, 63, 544-573.
- Cowper, Elizabeth. (1998). The simple present in English: a unified treatment. *Studia Linguistica*, 52, 1-18.
- de Swart, Henriëtte. (1998). Aspect shift and coercion. *Natural language and Linguistic theory*, 16, 347-385.
- Depraetere, Ilse. (1995). 'On the necessity of distinguishing between (un)boundedness and (a)telicity.' *Linguistics and Philosophy*, 18, 1-19.
- Dowty, David. (1979). *Word meaning and Montague Grammar. The semantics of verbs and times in Generative Semantics and in Montague's PTQ*. Dordrecht: Reidel.
- Gabriele, Alison. (2005). *The Acquisition of Aspect in a Second Language: a Bidirectional Study Learners of Japanese and English*. Doctoral dissertation, The City University of New York.
- Gabriele, Alison. (2009). Transfer and transition in the SLA of aspect. *Studies in Second Language Acquisition*, 31, 371-402.
- Kaku, Keiko, Licerias, Juana M., & Kazanina, Nina. (2007). Progressing beyond the Neutral Perfective: Acquisition of English aspect by native speakers of Japanese. In Roumyana Slabakova, Jason Rothman, Paula Kempchinsky, & Elena Gavrusheva (Eds.), *Proceedings of the 9th Generative Approaches to Second Language Acquisition Conference (GASLA)* (pp. 90-102). Somerville, MA: Cascadilla Proceedings Project.
- Kozłowska-Macgregor, Martyna. (2002). *The state of near-native grammar: A study of aspect in L2 Polish*. Doctoral dissertation. *McGill Working Papers in Linguistics*.
- Michaelis, Laura. (2004). Type shifting in construction grammar: an integrated approach to aspectual coercion. *Cognitive linguistics*, 15(1), 1-67.
- Montrul, Silvina, & Slabakova, Roumyana. (2003). Competence similarities between native and near-native speakers: An investigation of the preterite/imperfect contrast in Spanish. *Studies in Second Language Acquisition*, 25, 351-398.
- Nossalik, Larissa. (2009). *L2 acquisition of Russian aspect*. Doctoral dissertation, McGill University.
- Pustejovsky, James. (1991). The syntax of event structure. *Cognition*. 41, 47-81.

- Rothstein, Susan. (2004). *Structuring Events: A Study in the Semantics of Lexical Aspect*. Blackwell: Oxford.
- Schwartz, Bonnie, & Sprouse, Rex. (1996). L2 cognitive states and the full transfer/full access model. *Second Language Research*, 12, 40-72.
- Slabakova, Roumyana, & Montrul, Silvina. (2002). On Aspectual Shifts in L2 Spanish. In *Proceedings of the Boston University Conference on Language Development XXVI*, Cascadilla Press.
- Slabakova, Roumyana. (2005). What is so difficult about telicity marking in L2 Russian? *Language and Cognition*, 8(1), 63-77.
- Smith, Carlota. (1991/1997). *The Parameter of Aspect*. Dordrecht. The Netherlands: Kluwer Academic Publishers.
- Sorace, Antonella, & Filiaci, Francesca. (2006). Anaphora resolution in near-native speakers of Italian. *Second Language Research* 22(3), 339-368.
- Trahey, Martha, & White, Lydia. (1993). Positive evidence and preemption in the second language classroom. *Studies in Second Language Acquisition*, 15, 181-204.
- Travis, Lisa. (2010). *Inner Aspect: the articulation of VP*. Dordrecht: Springer.
- Tsimpli, Ianthi, Sorace, Antonella, Heycock, Caroline, & Filiaci, Francesca. (2004). First language attrition and syntactic subjects: a study of Greek and Italian near-native speakers of English. *International Journal of Bilingualism*, 8, 257-277.
- Vendler, Zeno. (1967). Verbs and times. *Linguistics in philosophy*. Cornell University Press.

# Selected Proceedings of the 4th Conference on Generative Approaches to Language Acquisition North America (GALANA 2010)

edited by Mihaela Pirvulescu,  
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Jeffrey Steele, and Nelleke Strik

Cascadilla Proceedings Project Somerville, MA 2011

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Selected Proceedings of the 4th Conference on Generative Approaches  
to Language Acquisition North America (GALANA 2010)  
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Nossalik, Larissa. 2011. L2 Acquisition of Coercion. In *Selected Proceedings of the 4th Conference on  
Generative Approaches to Language Acquisition North America (GALANA 2010)*, ed. Mihaela Pirvulescu et al.,  
172-183. Somerville, MA: Cascadilla Proceedings Project. [www.lingref.com](http://www.lingref.com), document #2594.