# Securing strategic input for L2 learners: Constructions with Russian motion verbs

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Abstract

This article shows how constructional and usage-based approaches to linguistics can be used to identify strategic input for L2 learners, i.e. input that reflects high frequency patterns in the target language. We suggest a methodology combining constructional and grammatical profiles, and argue that this methodology enables us to identify the most relevant morphological and syntactic constructions, and in addition makes it possible to pinpoint the grammatical forms that are most characteristic of each construction. Our argument is based on a case study of Russian verbs of motion, so in addition to implications for L2 instruction in general, our study also has consequences for how we teach Russian motion verbs.

## 1. Strategic input for L2 learners and linguistic profiling

Since L2 learners are sensitive to the frequency of the constructions they encounter (see e.g. Ellis and Wulff 2015 and Ellis et al. 2016: 47), it follows that L2 instructors should pay particular attention to the input they provide learners with. Without a doubt, it is strategic to expose L2 learners to frequently used language patterns, so that they can acquire the most important patterns in the language they are studying. But how can we identify what is the most strategic input? Traditionally, this task has been left to the intuition of L2 instructors and writers of textbooks, and as a result textbooks are often populated with invented sentences that probably “have not occurred in any natural speech situation before (and […] probably never will)” (Römer 2004: 153). The purpose of the present study is to propose a more scientific basis for the identification of strategic input for L2 learners. What counts as “strategic” is a matter of discussion, but it stands to reason that it is important to strike a balance between conceptually basic, easily learnable and high frequent structures in the input to L2 learners. While we acknowledge the relevance of conceptual basicness and learnability, in the present study we focus on the role of frequency. More specifically, on the basis of a case study of Russian motion verbs, we suggest a methodology combining two core concepts of constructional and usage-based approaches, both of which involve frequency: constructional profiles and grammatical profiles. In the remainder of section 1, we will present linguistic profiling, before we give a short overview of Russian verbs of motion in section 2 and their basic constructions in section 3. After a brief discussion of morphological constructions in section 4, we turn to syntactic constructions in sections 5 and 6. In sections 7 and 8 we combine constructional and grammatical profiles, before the contribution of the article is summarized in section 9.

By “linguistic profile” we mean the statistical distribution of features related to a linguistic unit. Linguistic profiling, discussed at length by Kuznetsova (2015), represents a suite of methods for using corpus data to explore form-meaning relationships in language by means of relative frequencies. Linguistic profiles were pioneered by Divjak and Gries (2006), whose “behavioral profiles” summarized the statistical distribution of a large number of properties of linguistic units. In the present study, we will be concerned with two kinds of linguistic profiles: constructional profiles and grammatical profiles.

A constructional profile (Janda and Solovyev 2009) is the relative frequency distribution of the syntactic or morphological constructions a linguistic unit occurs in. In their study of nouns denoting happiness and sadness in Russian they showed that while these words tend to occur in the same set of constructions, the frequency distribution of each word across those constructions is unique, and thus constructional profiles make it possible to tease apart differences between near synonyms.

A grammatical profile is the relative frequency distribution of the inflected forms of a lexeme (Janda and Lyashevskaya 2011: 719).[[1]](#footnote-1) Thus, the grammatical profile of a verb is the proportion of corpus attestations for present tense, past tense, etc. In their large-scale study of imperfective and perfective verbs in Russian, Janda and Lyashevskaya (2011) show that verb pairs based on prefixation and suffixation have similar grammatical profiles, while the profiles of imperfective verbs are clearly distinct from those of perfective verbs. At the same time, Janda and Lyashevskaya (2011) show that the grammatical profiles they investigate make it possible to identify “outlier verbs” that show strong affinities to certain grammatical forms, a fact they argue is of importance for L2 instruction.

In the present study, we will combine the use of constructional and grammatical profiles in order to identify strategic input for L2 learners. However, before we explore linguistic profiling, we will introduce the Russian verbs of motion, since constructions with these verbs are the empirical basis for the claims we make in the present article.

## 2. Russian motion verbs – a major obstacle for L2 learners

Constructions with Russian verbs of motion are challenging for L2 learners of Russian – Gor et al. (2010: 361) aptly describe the motion verbs as a “notoriously thorny topic”. There are at least three main reasons for this: they come in pairs, they are involved in morphological constructions with aspectual prefixes, and there is no generic motion verb in Russian.

The first challenge is illustrated in (1) and (2), which show that Russian has two verbs meaning ‘walk’:[[2]](#footnote-2)

1. *Abbat byl čelovekom blagočestivym i* ***šeluni*** *domoj spat’ srazu že posle večernej messy.* (Brown 2003)

‘The abbu was a deeply pious man who **went** home to bed immediately after mass.’

1. ***Xodilnon*** *v zonu, vernulsja živoj i s den’gami.* (A. and B. Strugatsky 1971)

‘I **went** into the Zone and came back alive and with money.’

In (1), the Russian text has the past tense form *šel* of *idti* ‘walk’, because we are dealing with movement in one direction towards a goal, whereas in (2) the past tense form of *xodit’* ‘walk’ is used, since the example describes a round trip (into the zone and back again). Verbs like *idti* in (1) are referred to as “unidirectional”, whereas the label “non-directional” is used about verbs like *xodit’* in (2).[[3]](#footnote-3) In addition to roundtrips as in (2), non-directional verbs are used in constructions describing multidirectional movement “round about” as in (3), where a woman is walking around in a room, and the ability to carry out the relevant type of motion as in (4), which is about a girl who is able to walk again after a serious illness.

1. *Potom* ***xoditnon*** *po komnate, vidno, čto sderživaet slezy.* (Nabokov 1925-26)

‘Then she **walks** around the room: it is evident that she is holding back tears.’

1. *Slava bogu, ona teper’ uže* ***xoditnon****.* (Dostoevsky 1878)

‘Thank God, she can **walk** now!’

Russian has thirteen pairs of unidirectional and non-directional motion verbs distinguishing various manners of motion, but for the purposes of this article we will limit ourselves to discussing the pairs in Table 1, which are all highly relevant for L2 learners.[[4]](#footnote-4) While the fact that Russian motion verbs come in pairs makes life hard for L2 learners, the situation is further exacerbated by a second challenge – the fact that the motion verbs interact with the notoriously complex Russian aspectual system. Russian has more than fifteen aspectual prefixes that combine with both unidirectional and non-directional verbs and thus create a large system of prefixed verbs of motion that represents a major challenge for L2 learners. The details of this system are debated in the scholarly literature on Russian verbs of motion (see e.g. Nesset 2008), but for present purposes it is sufficient to point out that the relevant prefixes are much more than aspectual markers. Since the prefixes are related to prepositions and have meanings that are similar to the meanings of prepositions, they form complex morphological constructions where the meaning of the preposition interacts with the meaning of the verb stem in non-trivial ways. By way of example, consider the prefix the prefix *v-* ‘into’, which is related to the preposition *v* ‘in(to)’. By adding *v-* to the unidirectional *idti* ‘walk’ we get the perfective verb *vojti* ‘walk into’, while the addition of *v-* to the non-directional verb *xodit’* yields the imperfective verb *vxodit’* ‘walk into’. We present an overview of relevant prefixes in section 4 below.

|  |  |  |
| --- | --- | --- |
| Unidirectional verb | Non-directional verb | English gloss |
| *idti* | *xodit’* | ‘walk’ |
| *exat’* | *ezdit’* | ‘ride in a vehicle’ |
| *letet’* | *letat’* | ‘fly’ |
| *plyt’* | *plavat’* | ‘swim, sail’ |
| *vesti* | *vodit’* | ‘lead’ |
| *vezti* | *vozit’* | ‘transport’ |
| *nesti* | *nosit’* | ‘carry’ |

Table 1: Pairs of unidirectional and non-directional motion verbs

A third challenge, in addition to the pairedness of motion verbs and their use with aspectual prefixes, is the fact that Russian lacks a generic motion verb. While English *go* can be used about motion on foot and by means of a vehicle, in Russian the verbs *idti/xodit’* ‘walk’ describe motion on foot, whereas *exat’/ezdit’* ‘ride in a vehicle’ are used when a vehicle is involved. Thus, in (1) the Russian translator of *The Da Vinci Code* had a choice between *idti* and *exat’*, and went for the former on the basis of the context – presumably the clergyman in question lives close enough to the church to make walking the most likely option for going home from mass. Although Russian lacks a generic motion verb, *idti/xodit’* can be generalized to motion that does not take place on foot (Rakhilina 2004, Nesset 2010). We will return to such uses in section 5 below. At this point, it is sufficient to notice that such generalized uses do not necessarily have any close parallels in English and other languages. A well-known example that L2 learners struggle with is the “weather construction” with *idti* ‘walk’ plus a noun. Thus, English *it rains* corresponds to *idetuni dožd’* ‘(lit.) walks rain’ in Russian.[[5]](#footnote-5)

Since, as we have shown, Russian motion verbs represent a complex system which does not have any direct parallel in English and other non-Slavic European languages, they are a major obstacle for L2 learners. How to provide strategic input to L2 learners is therefore a particularly pertinent question with regard to motion verbs. We address this question in the remainder of the article, exploring a number of morphological and syntactic constructions with Russian motion verbs.

## 3. Distribution of lexical items and the unidirectional/non-directional contrast

Our quest for strategic input starts with a simple question: Which lexical items are most important? As mentioned in section 1, we submit that frequency plays a key role here, i.e. that it is strategic to focus on verbs of high frequency, since such verbs will prove highly useful for L2 learners. In order to investigate the frequency distribution of the Russian motion verbs in Table 1, we turned to the Russian National Corpus (main corpus), a corpus of approximately 283 million words (August 2018). We carried out searches in the manually disambiguated subcorpus, which contains about six million words (August 2018). Since the Russian National Corpus is a balanced corpus that includes a variety of genres, it is likely that the data in Table 2 adequately reflect the overall situation in the language. Further studies of the frequency distribution in specific genres (e.g. oral speech) would be of interest, but for present purposes we limit ourselves to discussion of the data in Table 2.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Unidirectional | Non-directional | Total |
| *idtiuni/xodit’non* ‘walk’ | 6,763 | 2,292 | 9,055 |
| *exat’uni/ezdit’non* ‘ride in a vehicle’ | 1,500 | 712 | 2,212 |
| *letet’uni/letat’non* ‘fly’ | 602 | 226 | 828 |
| *plyt’uni/plavat’non* ‘swim, sail’ | 300 | 260 | 560 |
| *vestiuni/vodit’non* ‘lead’ | 1,608 | 214 | 1,822 |
| *veztiuni/vozit’uni* ‘transport’ | 327 | 173 | 500 |
| *nestiuni/nosit’uni* ‘carry’ | 675 | 812 | 1,487 |
| Total | 11,775 | 4,689 | 16,464 |

Table 2: Frequency distribution of Russian motion verbs (Russian National Corpus, disambiguated part, searches performed in August 2017 and August 2018)

Let us first consider each pair of motion verbs as a unit and explore the distribution of the seven relevant manners of motion: walk, ride in a vehicle, fly, swim/sail, lead, transport and carry. The distribution is visualized in Figure 1, which gives percentages based on Table 2. One observation can be made: the distribution is very skewed, and the verb pair with the meaning ‘walk’ is by far the most frequent. While ‘walk’ accounts for 55% of the examples, the other manners of motion range from 3% to 14%. In view of this, it seems strategic to pay particular attention to ‘walk’ in L2 instruction.

Figure 1: Distribution of manners of motion in percent (based on Table 1)

The data in Table 2 also make it possible to consider the distribution of unidirectional and non-directional verbs. Which type is most frequent and most relevant for strategic input for L2 learners? Figure 2 presents the distribution in percent based on the data in Table 2. As shown, unidirectional verbs cover almost three quarters of all examples with verbs of motion. This strongly suggests that L2 learners should pay particular attention to unidirectional verbs, and that it may be advantageous to start with unidirectional verbs and then proceed to non-directional verbs in L2 instruction. However, it is worth mentioning that there is one exception to the general trend. As shown in Table 2, for ‘carry’ the non-directional verb *nosit’* is more frequent than its unidirectional partner *nesti.* This suggests that in order to construct strategic input for L2 learners, it is important to take the properties of individual verbs into consideration. We will return to ‘carry’ in section 8.

Figure 2: Distribution of unidirectional and non-directional motion verbs in percent (based on Table 1)

## 4. Morphological constructions: prefixes

So far, we have only considered simplex (i.e. unprefixed) motion verbs. However, as mentioned in section 2, Russian verbs of motion combine with a number of aspectual prefixes. Since the meanings of the prefixes interact with the meanings of the stems in complex ways, the prefixed verbs can be considered morphological constructions in the sense of Booij (2010). What would be strategic input for the morphological constructions with prefixes? In order to find out, we considered the frequencies of eight important prefixes:

1. a. *v*- ‘into’

b. *vy*- ‘out of’

c. *pri*- ‘to’

d. *u*- ‘away from’

e. *pod*- ‘up to’

f. *ot*- ‘away from’

g. *pere*- ‘across’

h. *pro*- ‘through’

The glosses give only rough approximations of the meanings, but are precise enough to show that the prefixes encode paths that the motion events in question follow. By adding the prefix *v*- ‘into’ to a motion verb, we create a verb that denotes movement along a path into a three-dimensional space. The prefix *vy-* ‘out of’, on the other hand, creates a prefixed motion verb describing a path out of a three-dimensional space. While examples like these are insufficient to represent the complexity of the system, the meanings given in (5) show that the relevant prefixes are much more than aspectual markers, since they convey information about spatial paths. Janda et al. (2013) have drawn attention to similarities between Russian and Australian languages and argued that Russian prefixes function as verb classifiers, parallel to numeral classifiers of nouns. Regardless of whether one accepts the verb classifier hypothesis advanced by Janda et al. (2013), it is evident that prefixation adds a whole layer of complexity to the Russian verbs of motion, which L2 learners struggle with.

Since the path is marked by a prefix, while the manner of motion is described by the verb stem, Russian is a satellite-framed language in the typology of Talmy (2000: 222). Notice that the prefixes in (5a-f) constitute three pairs of antonyms: ‘into’ – ‘out of’, ‘to’ – ‘away from’, and ‘up to’ and ‘away from’. The prefixes *u-* in (5d) and *ot-* in (5f) are given the same gloss, but are not used interchangeably. While the former describes movement out of a three-dimensional space (e.g. *uexat’ iz Rossii* ‘leave Russia’), the latter is used in situations where someone or something moves further away from a point in space (*ot’’exat’ ot doma* ‘drive (further) away from the house’).

Table 3 gives the frequencies of prefixed verbs with the prefixes in (5) as well as frequencies for the corresponding simplex verbs. The data are gathered from the Russian National Corpus (manually disambiguated subcorpus), as described in section 3. Figure 3, which gives percentages based on Table 3, shows two things clearly. First of all, it is evident that prefixed verbs are much more frequent than simplex verbs, since prefixed verbs account for 70% of the examples.[[6]](#footnote-6) This entails that it is strategic to provide input with prefixed verbs to L2 learners. Traditionally, students are first exposed to simplex verbs, and only when they have mastered the simplex verbs, they go on to study prefixed motion verbs (e.g. Muravyova 1995 and Mahota 1996). Frequency data of the type we present in Table 3 and Figure 3 may be taken as inspiration to rethink this traditional set-up. Would it be advantageous to start with prefixed verbs, and then proceed to simplex verbs instead? We leave this question open for future consideration, but note that constructional profiles of the kind reported in this article have potentially far-reaching implications for L2 instruction.

A second observation that can be made on the basis of Table 3 and Figure 3 is that not all prefixes are equally important. The two pairs of antonyms in (5a-d) account for almost 50% of the examples, while the remaining four prefixes in (5e-h) represent less than 25% of the examples. Clearly, therefore, it is strategic to focus on constructions with the four prefixes in (5a-d) in the input for L2 learners of Russian verbs of motion.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Simplex | *v-*  ‘into’ | *vy-*  ‘out of’ | *pri-*  ‘to’ | *u-*  ‘away from’ | *pod-*  ‘up to’ | *ot-*  *‘*away from’ | *pere-*  ‘across’ | *pro-*  ‘through’ |
| *xodit’non* ‘walk’ | 2,292 | 925 | 1,523 | 1,451 | 1,277 | 767 | 181 | 335 | 1,209 |
| *Idti uni* ‘walk’ | 6,763 | 1,562 | 3,135 | 3,652 | 2,061 | 1,507 | 390 | 516 | 2,346 |
| *ezdit’non (-ezžat’)* ‘ride in a vehicle’ | 712 | 38 | 114 | 635 | 340 | 65 | 35 | 67 | 108 |
| *exat’uni* ‘ride in a vehicle’ | 1,500 | 73 | 203 | 1,739 | 898 | 112 | 38 | 177 | 140 |
| *letat’non* ‘fly’ | 226 | 27 | 68 | 29 | 56 | 9 | 26 | 18 | 52 |
| *letet’uni* ‘fly’ | 602 | 56 | 160 | 144 | 117 | 19 | 41 | 24 | 85 |
| *nosit’non* ‘carry’ | 812 | 124 | 188 | 379 | 92 | 68 | 82 | 128 | 21 |
| *nesti uni* ‘carry’ | 675 | 285 | 275 | 932 | 140 | 121 | 205 | 217 | 51 |
| *vodit’non* ‘lead’ | 214 | 133 | 142 | 497 | 77 | 81 | 85 | 180 | 793 |
| *vesti uni* ‘lead’ | 1,608 | 333 | 308 | 1,173 | 110 | 187 | 281 | 367 | 1,072 |
| *vozit’non* ‘transport’ | 173 | 14 | 42 | 92 | 49 | 17 | 25 | 14 | 1 |
| *vezti uni* ‘transport’ | 327 | 12 | 98 | 556 | 175 | 36 | 115 | 45 | 8 |
| *plavat’non (-plyvat’)* ‘swim, sail’ | 260 | 3 | 28 | 6 | 27 | 10 | 7 | 7 | 30 |
| *plyt’uni* ‘swim, sail’ | 300 | 2 | 43 | 12 | 25 | 20 | 11 | 11 | 32 |
| Total | 16,464 | 3,587 | 6,327 | 11,297 | 5,444 | 3,019 | 1,522 | 2,106 | 5,948 |

Table 3: Distribution of simplex and prefixed motion verbs (Russian National Corpus, disambiguated part, corpus searches carried out in August 2017. The forms given in parentheses for ezdit’ and plavat’ indicate that these verbs have different stems in prefixed verbs.

Figure 3: Distribution of simplex and prefixed motion verbs in percent (based on the bottom line in Table 3)

## 5. Constructional profiles: specific, generalized and metaphorical uses

We now turn from morphological to syntactic constructions. Although in the previous section we argued that prefixed verbs deserve more attention, simplex verbs are nevertheless important. It makes sense to distinguish between three broad classes of constructions where simplex motion verbs involve what we refer to as “specific”, “generalized” and “metaphorical” motion. We show that motion verbs have very different distributions across these three classes of constructions and argue that the differences help us pinpoint strategic input for L2 learners.

“Specific” constructions are found in examples where the verb describes physical motion with the manner of motion specified in the lexical meaning of the verb in question. By way of example, consider the following sentence from *Harry Potter*:

1. *Okazalos’, on ne vral, on dejstvitel’no umel* ***letat’non****.* (J. K. Rowling 1997)

‘He hadn't been lying, he could **fly**.’

Here it is clear that we are dealing with physical movement through space, and that the movement is of the kind specified by the lexical meaning – flying.

“Generalized” motion covers constructions with physical movement in space, but where the movement is not of the type specified by the verb’s lexical meaning:

1. *Nad zamkom rejal flag, po zalivu* ***šliuni*** *korabli ili stojali na jakore.* (R. L. Stevenson 1886)

‘There was a flag upon the castle, and ships **moving** or lying anchored in the firth.’

The ships in this example are clearly moving in space, but although the lexical meaning of *idti* ‘walk’ specifies movement on foot, the ships in the example are not moving on foot, since ships do not have feet. In other words, this is a construction of the generalized motion type.

“Metaphorical” motion is a type of constructions where the motion in question is not literal:

1. *U nas* ***idutuni*** *peregovory s ee mužem o razvode.* (L. Tolstoy 1878)

‘We are **carrying on** negotiations with her husband about a divorce.’

In this example, there is no physical motion, but *idti* ‘walk’ is used metaphorically to indicate the progress of the negotiations.

In order to investigate the distribution of the specific, generalized and metaphorical constructions, we created a database of 100 corpus examples for each motion verb listed in Table 3. We used the Russian National Corpus (main corpus), and restricted the searches to examples from 1950 or later, since we are interested in the situation in modern Russian. Based on the searches we created a random sample of 100 examples for each verb. Each sample contained only one example per author. The samples were conflated to one large dataset, which was then annotated manually. The distribution is given in Table 4 and visualized in Figure 4.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Specific | Generalized | Metaphorical | Total |
| *vezti uni* ‘transport’ | 66 | 0 | 34 | 100 |
| *vozit’non* ‘transport’ | 96 | 4 | 0 | 100 |
| *vesti uni* ‘lead’ | 11 | 0 | 89 | 100 |
| *vodit’non* ‘lead’ | 46 | 37 | 17 | 100 |
| *exat’ uni* ‘ride in a vehicle’ | 99 | 0 | 1 | 100 |
| *ezdit’non* ‘ride in a vehicle’ | 100 | 0 | 0 | 100 |
| *Idti uni* ‘walk’ | 29 | 13 | 58 | 100 |
| *xodit’non* ‘walk’ | 89 | 6 | 5 | 100 |
| *letet’uni* ‘fly’ | 71 | 13 | 16 | 100 |
| *letat’non* ‘fly’ | 97 | 0 | 3 | 100 |
| *nesti uni* ‘carry’ | 34 | 7 | 59 | 100 |
| *nosit’non* ‘carry’ | 9 | 50 | 41 | 100 |
| *plyt’uni* ‘swim, sail’ | 55 | 9 | 36 | 100 |
| *plavat’non* ‘swim, sail’ | 81 | 3 | 16 | 100 |
| Total Unidirectional | 365 | 42 | 293 | 700 |
| Total Non-directional | 518 | 100 | 82 | 700 |
| GrandTotal | 883 | 142 | 375 | 1400 |

Table 4: Constructional profiles for specific, generalized and metaphorical constructions with motion verbs

Figure 4: Constructional profiles for specific, generalized and metaphorical constructions with motion verbs

Three observations can be made on the basis of Table 4 and Figure 4. First, it is clear that motion verbs have quite different constructional profiles – all motion verbs are not born equal. Second, if we compare the pairs of verbs with the same lexical meanings (located next to each other in the figure), we see considerable differences. While some pairs (e.g. *exat’*-*ezdit’* ‘ride in a vehicle’) predominantly involve specific constructions, other pairs such as *nesti-nosit’* ‘carry’ tend to occur in generalized and metaphorical constructions. Third, the members of some pairs display quite different constructional profiles. A case in point is *idti*-*xodit’* ‘walk’, where the former is largely generalized and metaphorical, while the latter is dominated by constructions of the specific type.

What are the implications of the constructional profiles for L2 instruction? If we want to create strategic input for L2 learners, it seems clear that the differences shown in Figure 4 cannot be ignored. In particular, it appears important to introduce generalized and metaphorical constructions at an early stage, especially for those verbs where such constructions are prevalent.

## 6. Constructional profiles: directionality

We now zoom in on the specific constructions. In section 2, we pointed out that non-directional verbs are used in three different types of constructions involving multidirectional motion, round trips, and the capacity to carry out a particular kind of motion.[[7]](#footnote-7) In what follows, we present constructional profiles for these three classes of constructions, and show that they have important implications for strategic input for L2 learners.

The constructional profiles were extracted from the database described in the previous section. The results are summarized in Table 5 and visualized in Figure 5. Notice that we ignore *nosit’* ‘carry’ in this section, since, as shown in the previous section, this verb is largely used in generalized and metaphorical constructions. We return to *nosit’* in section 8 below. With regard to round trip constructions, we have included both single round trips and multiple round trips.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Multidirectional | Round Trip | Capacity | Total |
| *vozit’non* ‘transport’ | 48 | 48 | 0 | 96 |
| *vodit’ non* ‘lead’ | 16 | 30 | 0 | 46 |
| *ezditnon* ‘ride in a vehicle’ | 38 | 62 | 0 | 100 |
| *xodit’non* ‘walk’ | 38 | 48 | 3 | 89 |
| *letat’non* ‘fly’ | 47 | 17 | 33 | 97 |
| *plavat’non* ‘swim/sail’ | 31 | 3 | 19 | 53 |
| Total | 218 | 208 | 55 | 481 |

Table 5: Constructional profiles for non-directional verbs: multidirectional, round trip and capacity constructions

Figure 5: Constructional profiles for non-directional verbs: multidirectional, round trip and capacity constructions

Table 5 and Figure 5 indicate a relatively even distribution for non-directional constructions; multidirectional motion is well attested for all the verbs under scrutiny, and they vary between 35% (*vodit’* ‘lead’) and 58% (*plavat’* ‘swim/sail’). With regard to strategic input, it would not make much difference which verbs were used to introduce this type of construction to L2 learners.

The distribution of round trips and capacity, on the other hand, display differences. Capacity is only attested for three verbs (*xodit’* ‘walk’, *letat’* ‘fly’, and *plavat’* ‘swim/sail’), and only for two of them (*letat’* and *plavat’*) does capacity cover more than 30% of the examples. This is not surprising, since both flying and swimming are skills that humans do not acquire naturally (unlike motion on foot). Flying and swimming are therefore something remarkable from a human perspective, and therefore more relevant to mention than other motion capacities. In L2 instruction, it seems strategic to introduce capacity constructions through *letat’* and *plavat’*, where this class of constructions is frequent. A typical capacity construction has the verb *umet’* ‘be able to’ followed by a motion verb in the infinitive. We have seen an example with *letat’* ‘fly’ in (6) in section 4 above. Here is an example with *plavat’* ‘swim’:

1. Pečorin ne umeet **plavat’** (Nabokov 1958)

‘Pečorin cannot **swim**.’

For L2 instruction, the pervasiveness of examples with *umet’* in the capacity construction has two consequences. First, it is clear that *umet’* cannot be introduced after the capacity construction, and second, examples with *umet’* must figure prominently in the teaching of the capacity construction.

Another subtype of the capacity construction involves an active participle of the motion verb:

1. *Obožaemye čudovišča, velikie* ***letajuščienon*** *mašiny, oni ušli*. (Nabokov 1945)

‘Admirable monsters, great **flying** machines, they have gone […].’

Examples of this type present a simple, but nevertheless important problem for L2 instruction. Participles are generally introduced later than motion verbs, and it is therefore difficult to use examples with participles when teaching the capacity construction.

A third type involves the verb *učit’* ‘teach’ and a variety of prefixations derived from this verb. The motion verb is in the infinitive:

1. *On naučil* ***plavat’non*** *menja, i zaodno i svoego syna Vit’ku*. (Limonov 2002; Russian National Corpus, main subcorpus)

‘He taught me **to swim**, and at the same time his son Victor.’

With regard to the challenges they present to L2 learners, examples like (11) occupy an intermediate position between those in (9) and (10). On the one hand, the fact that (11) involves a motion verb in the infinitive makes it easier than (10), but on the other hand, the teaching verbs (*učit’* and derivatives) involve a number of challenges concerning inflection and case government (Nesset 2014: 73), and (11) is therefore harder than (9)

As shown in Figure 5, capacity and round trips are in nearly complementary distribution; the verbs where capacity is frequent have few or no examples with round trips, and vice versa. Hence, we argue strategic input for round trip constructions should focus on *vozit’* ‘transport’, *vodit’* ‘lead’, *ezdit’* ‘ride in a vehicle’, and *xodit’* ‘walk’, which are verbs that occur frequently in this type of construction. For L2 learners, one of the challenges with the round trip construction is that it frequently involves the combination of a non-directional motion verb and an adverbial describing a goal. Example (2) in section 1 illustrates this type for *xodit’.* Here is a similar example with *ezdit’*:

1. *Knjaz’ Ščerbackij,* ***ezdivšijnon*** *posle Karlsbada v Baden i Kissingen k russkim znakomym […]*. (L. Tolstoy 1878)

‘Prince Shtcherbatsky, who **had gone** on from Carlsbad to Baden and Kissingen to Russian friends […].’

In our experience as L2 instructors, students frequently misunderstand such examples. They see that there are adverbials describing a goal (here: *v Baden i Kissingen k russkim znakomym* ‘to Baden and Kissingen to Russian friends’), and from that jump to the conclusion that we are dealing with motion in one direction towards a goal. However, since the example involves a non-directional verb, a unidirectional reading is impossible. The rule that a non-directional motion verb plus a goal adverbial denote a round trip is something that the particular attention in L2 instruction.

## 7. Constructional and grammatical profiles combined

In this section, we combine the constructional profiles discussed in the two previous sections with grammatical profiles. We suggest that this facilitates creating strategic input for L2 learners, since certain classes of constructions are used frequently in particular grammatical forms.

The situation is summarized in Table 6. The rows distinguish between six groups of inflected forms: present tense, imperative, past tense, infinitive, participle and gerund. The columns represent six classes of constructions. The label “Directional” covers constructions where unidirectional verbs are used about physical movement. “Multidirectional”, “round trip” and “capacity” refer to the constructions discussed for non-directional verbs in section 6, while “generalized” and “metaphorical” describe the constructions explored in section 5.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Direct-ional | Multi-directional | Round trip | Capac-ity | General-ized | Metaphor-ical | Total |
| Present | 114 | 66 | 49 | 7 | 68 | 163 | 467 |
| Imperative | 16 | 1 | 4 | 0 | 3 | 3 | 27 |
| Past | 118 | 74 | 104 | 7 | 48 | 114 | 465 |
| Infinitive | 75 | 68 | 47 | 25 | 34 | 35 | 284 |
| Participle | 29 | 14 | 6 | 16 | 20 | 57 | 142 |
| Gerund | 6 | 1 | 1 | 0 | 4 | 3 | 15 |
| Total | 358 | 224 | 211 | 55 | 177 | 375 | 1400 |

Table 6: Constructional and grammatical profiles combined

Figure 6: Constructional and grammatical profiles combined

Table 6 and Figure 6 show that there are correlations between grammatical and constructional profiles. In particular, two observations can be made. First, we see that capacity constructions are very frequently used with the infinitive. At this point, this comes as no surprise, since capacity constructions typically involve verbs such as *umet’* ‘be able to’ and *učit’* (and derivatives from this verb), as illustrated in (9) and (11) in section 6.

Second, round trip constructions show a strong affinity to the past tense. This is due to examples with a combination of a non-directional motion verb and an adverbial describing a goal, such as (2) in section 1 and (12) in section 6. With regard to the input to L2 learners, we argue that it would be strategic to focus on the infinitive for capacity constructions and the past tense for round trip constructions.

## 8. Case study: *nosit’* ‘carry’

In this section, we report on a small case study concerning the non-directional verb *nosit’* ‘carry’, which as demonstrated in section 5, strongly prefers generalized and metaphorical constructions. We show that three generalized/metaphorical constructions are particularly important. First, we have examples where *nosit’* combines with the noun *xarakter* ‘character’:

1. *Vsja scena* ***nosilanon xarakter*** *privyčnoj intimnosti.* (F. Scott Fitzgerald 1925)

‘There **was an** unmistakable **air of** natural intimacy about the picture.’

Second, we have examples of the following type, where *nosit’* takes a word for ‘name’ as its grammatical object:

1. *Krome togo, každyj iz nix* ***nositnon imja****, kotoroe ja terpet’ ne mogu.* (Fowles 1963)

‘And they both **have** the one man's **name** I really can't stand.

Third, we consider examples where the object of *nosit’* is a noun referring to a garment or another clothing item such as glasses:

1. *On* ***nosilnon očki****, i volosy u nego byli sil’no rastrepany.* (J. K. Rowling 1997)

‘He **wore glasses**, and his hair was very untidy.’

The distribution of the “character”, “name” and “garment” constructions is shown in Table 7, which is organized in the same way as Table 6 in the previous section. However, we have conflated the categories imperative, participle and gerund to “other” in Table 7, since in our database these grammatical forms are not attested frequently for *nosit’*.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Character | Name | Garment |
| Present | 12 | 7 | 17 |
| Past | 9 | 2 | 15 |
| Infinitive | 2 | 1 | 13 |
| Other | 1 | 2 | 3 |
| Total | 24 | 12 | 48 |

Table 7: Constructional and grammatical profiles for nosit’ ‘carry’

Figure 7: Constructional and grammatical profiles for nosit’ ‘carry’

Although we are dealing with a small dataset, it seems clear that the three constructions have somewhat different grammatical profiles. In particular, the infinitive is only frequent for the garment construction. Here is an illustration:

1. *My-to, možet byt’, izlovčimsja večno* ***nosit’non*** *naši maski*. (Nabokov 1968)

‘We'll manage, perhaps, to **wear** our masks always.’

With regard to input for L2 learners, it seems strategic to include the infinitive for the garment construction, but not for the character and name constructions. More generally, the case study with *nosit’* shows that it is necessary to consider each verb individually, since both grammatical and constructional profiles for each verb may involve idiosyncrasies that have consequences for the creation of strategic input for L2 learners.

## 9. Teaching Russian verbs of motion – some questions to consider

While the purpose of the present study is to investigate the role of constructional and grammatical profiles in securing strategic input for L2 learners, all our examples concern Russian verbs of motion, and it therefore seems appropriate to include a discussion of some specific questions pertaining to the teaching of Russian motion verbs. Let us start by summarizing some of our findings:

1. a. Unidirectional verbs are more frequent than non-directional verbs.

b. Prefixed verbs are more frequent than simplex verbs.

c. The most frequent prefixes are *v-* ‘into’*, vy-* ‘out of’*, pri-* ‘to’ *and u-* ‘away from’*.*

d. With regard to the distribution of specific, general and metaphorical uses, there are considerable differences among the Russian motion verbs.

e. For non-directional verbs, the capacity construction is characteristic of verbs meaning ‘walk’, ‘fly’ and ‘swim/sail’, while the round trip construction is typically attested for verbs for ‘transport’, ‘lead’, ‘ride in a vehicle’, and ‘walk’.

f. Among the constructions for non-directional verbs, capacity is frequently attested with motion verbs in the infinitive, while the round trip constructions display an affinity to the past tense.

g. The verb *nosit’* ‘carry’ is mostly not used in examples involving carrying objects, but rather prefer constructions involving names, garments and the noun *xarakter* ‘character’.

What are the implications of these points for teaching Russian verbs of motion? We argue that our findings may encourage L2 instructors to rethink the order in which various parts of the system is presented. In view of (17a), it would seem reasonable to start with one unidirectional verb, among which *idti* ‘walk’ is the most obvious candidate, since it is by far the most frequent unidirectional verb, as shown in Table 2 in section 3. With *idti* in place, it might be tempting to introduce a number of other unidirectional verbs, and then use these verbs as the basis for the presentation of the unidirectional-non-directional contrast. However, our findings would rather suggest to introduce the most frequent prefixes, and demonstrate how they combine with *idti.* Only with this in place, we suggest proceeding to other verbs and to the introduction of the contrast between unidirectional and non-directional verbs. In short, we suggest present the basics in the following order:

1. a. *Idti* ‘walk (unidirectional)’

b. Morphological constructions with *idti* and the prefixes *v-* ‘into’*, vy-* ‘out of’*, pri-* ‘to’ *and u-* ‘away from’

c. Other frequent unidirectional verbs

d. Corresponding non-directional verbs

With regard to non-directional verbs, our data do not point to a particular order of presentation for the multidirectional, round trip and capacity constructions, although it seems useful to restrict the capacity construction to verbs denoting walking, swimming and flying. In addition, the capacity construction should preferably be introduced in the infinitive, while the L2 learners should first encounter the round trip construction in the past tense.

The steps in (18) focus on specific uses, where verbs of walking are used about literal motion on foot, and verbs of carrying are used about transporting physical objects on foot. However, our findings have shown that generalized and metaphorical uses are quite important, despite the considerable variation attested in the system. We would like to point out that it may be useful to make students aware of the fact that motion verbs are frequently used in generalized and metaphorical constructions. As an early illustration, we suggest using the “weather construction” with *idti* ‘walk’ plus a noun in examples such as *idet dožd’* ‘(lit.) walks rain’, which corresponds to *it rains* in English. Somewhat later, the constructions with *nosit’* ‘carry’ explored in section 8 provide good illustrations of generalized uses of motion verbs.

## 10. Concluding remarks

In conclusion, we would like to make two remarks. First, on a general level we have explored the question of how to create strategic input for L2 learners. How to provide learners with input that reflects frequent patterns and therefore facilitates their learning? We have proposed a general methodology involving the combination of constructional and grammatical profiles. This methodology, we have argued, enables us to pinpoint patterns that are of particular relevance for L2 learners.

Our second concluding remark concerns verbs of motion in Russian. Since these verbs represent a major obstacle for L2 learners of Russian, providing L2 learners with strategic input is particularly important. We have shown that creating constructional profiles for the syntactic environments of each verb and combining these profiles with grammatical profiles that show which grammatical forms appear in each construction has the potential to transform the way we teach Russian.

## References

Booij, G. (2010): *Construction morphology*. Oxford: Oxford University Press.

Divjak, D. and S. Th. Gries (2006): Ways of trying in Russian: clustering behavioral profiles. *Corpus Linguistics and Linguistic Theory* 2: 23–60.

Ellis, N. and S. Wulff (2015): Second Language Acquisition. In: E. Dabrowska and D. Divjak (eds.) *Handbook of Cognitive Linguistics*. Berlin: Mouton de Gruyter, 409-432.

Ellis, N., U. Römer and M. O'Donnell (2016): *Usage-based Approaches to Language Acquisition and Processing: Cognitive and Corpus Investigations of Construction Grammar*. Malden, MA: Wiley.

Gor, K., S. V. Cook, V. Malyushenkova and T. Vdovina (2010): Russian verbs of motion: Second language acquisition and cognitive linguistics perspectives. In V. Hasko and R. Perelmutter (eds.): *New Approaches to Slavic Verbs of Motion*. Amsterdam/Philadelphia: John Benjamins, 361–381.

Janda, L. A. and O. N. Lyashevskaya (2011): Grammatical profiles and the interaction of the lexicon with aspect, tense and mood in Russian. *Cognitive Linguistics* 22.4: 719-763.

Janda, L. A. and V. Solovyev (2009): What Constructional Profiles Reveal About Synonymy: A Case Study of Russian Words for SADNESS and HAPPINESS. *Cognitive Linguistics* 20.2: 367-393.

Janda, L. A., A. Endresen, J. Kuznetsova, O. Lyashevskaya, A. Makarova, T. Nesset and S. Sokolova (2013): *Why Russian aspectual prefixes aren’t empty: prefixes as verb classifiers*. Bloomington: Slavica Publishers

Kuznetsova, J. (2015): *Linguistic profiles: going from form to meaning via statistics*. Berlin: De Gruyter Mouton.

Mahota, W. (1996): *Russian motion verbs for intermediate students*. New Haven and London: Yale University Press.

Muravyova, L. (1995): *Verbs of motion in Russian*. Moscow: Russkij jazyk.

Nesset, T. (2000): Iconicity and prototypes: A new perspective on Russian verbs of motion. *Scando-Slavica* 46: 105-119.

Nesset, T. (2008): PATH and MANNER: An Image-Schematic Approach to Russian Verbs of Motion. *Scando-Slavica* 54: 135-197.

Nesset, T. (2010): Metaphorical walking: Russian *idti* as a generalized motion verb In V. Hasko and R. Perelmutter (eds.): *New Approaches to Slavic Verbs of Motion*. Amsterdam/Philadelphia: John Benjamins, 343-360.

Nesset, T. (2014): *Russiskstudentens beste venn.* Oslo: Novus.

Rakhilina, E. V. (2004): There and back: the case of Russian ‘go’. *Glossos* 5: 1-34.

Römer, U. (2004): Comparing real and ideal language learner input: The use of an EFL textbook corpus in corpus linguistics and language teaching. In: G. Aston, S. Bernardini and D. Stewart (eds.): *Corpora and Language Learners*. Amsterdam: John Benjamins, 151-168.

Talmy, L. (2000): *Toward a Cognitive Semantics*. Volume 2. Cambridge, Massachusetts and London, England: The MIT Press.

1. As suggested by an anonymous reviewer, “inflectional profile” would be a more precise term, since the relevant profile concerns the frequency distribution of inflected forms. However, since “grammatical profile” has been used in a number of earlier publications (e.g., Janda and Lyashevskaya 2011), we will continue using this term. [↑](#footnote-ref-1)
2. With the exception of example (11), all numbered examples are from the parallel subcorpus of the Russian National Corpus. We have chosen to cite examples from the parallel corpus in the text since this enables us to address some relevant issues in Russian-English contrastive grammar. Notice, however, that the examples in our database, on which all conclusions are based, are from the monolingual (“main”) part of the Russian National Corpus. The Russian National Corpus is freely available at [www.ruscorpora.ru](http://www.ruscorpora.ru). Notice that we cite the Russian example first, regardless of whether the text in question is a translation from English to Russian or the other way around. The Russian examples are given in transliterated orthography. For the convenience of the reader, the relevant verbs or verb phrases are boldfaced, and unidirectional verbs are provided with the superscript “uni”, while the tag “non” is used for non-directional verbs. [↑](#footnote-ref-2)
3. Notice that the terminology shows some variation. Alternatives to “non-directional” are “multidirectional” or “indeterminate”, while “determinate” is frequently used instead of “unidirectional”. See Nesset 2000: 106-107 for discussion and references. [↑](#footnote-ref-3)
4. For discussion of other motion verbs, see Nesset 2000: 106 and references therein. [↑](#footnote-ref-4)
5. A note on glossing is in order here. Since in addition to the concrete uses, many verbs of motion are used in generalized and metaphorical constructions, it is difficult to come up with glosses that cover all uses of a verb. Throughout the article, we use glosses such ‘ride in a vehicle’, which are based on the concrete uses of the verbs in question, which are arguably prototypical. [↑](#footnote-ref-5)
6. A brief note on comparisons of frequency data is in order here. Instead of comparing frequencies of individual verbs, we compare aggregate numbers for prefixed and simplex verbs. This is legitimate since prefixed and simplex verbs represent different subsystems in the overall system of Russian verbs of motion. [↑](#footnote-ref-6)
7. Notice that the constructions we are discussing here are defined in semantic terms. However, they also have formal characteristics inasmuch as there are syntactic constituents that typically co-occur with the verbs in each construction. For instance, in the multidirectional construction one frequently finds a prepositional phrase with *po* ‘round, about’ as in *xodit’ po komnate* ‘walk around a room’ (see example (3) in section 2). However, since the relevant syntactic constituents are never obligatory, we will not discuss them in the present study. [↑](#footnote-ref-7)