



UiT The Arctic University of Norway

Faculty of Humanities, Social Sciences and Education

## **Together and apart**

Perfective verbs with a prefix and the semelfactive suffix *-nu-* in Contemporary Standard Russian

Maria Nordrum

A dissertation for the degree of Philosophiae Doctor – December 2019



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Yngve, you were an absolutely GREAT flatmate!

Maria Nordrum,  
Tromsø, December 2019

## Data files available in TROLLing

All the corpus and experimental data referred to in this dissertation are available in the Tromsø Repository of Language and Linguistics (TROLLing). The dataset has the following DOI: <https://doi.org/10.18710/PAKDS9> (Nordrum 2019). The data files exist in two formats, .xlsx and .csv, and are numbered to make them appear in TROLLing in the same order that they become relevant in the dissertation. The dataset also includes one .txt file and one R script that were used to make the plot in Chapter 2. The following list gives an overview of the files available in the TROLLing archive:

### Chapter 2

01\_Database Pref-Nu verbs  
02\_Excluded verbs

### Chapter 3

03\_Past passive participles HOMONYMY  
04\_Case study PRYGNUT'  
05\_Case study XLOPNUT'  
06\_Case study KRIKNUT'

### Chapter 4

07\_Selection of Pref-dyads  
08\_Pref-dyads, lexical meanings  
09\_Case study PERELISTNUT'-PERELISTAT'  
10\_Case study PERETRJAXNUT'-PERETRJASTI  
11\_Case study VYTRJAXNUT'-VYTRJASTI  
12\_Case study SLIZNUT'-SLIZAT'  
13\_Case study STRUXNUT'-STRUSIT'  
14\_Case study UTKNUT'-UTYKAT'  
15\_Case study VSKRIKNUT'-VSKRIČAT'  
16\_Case study ZAPIXNUT'-ZAPIXAT'  
17\_Case study ZATOLKNUT'-ZATOLKAT'

### Chapter 6

18\_Experiment results, Pref-dyads

### Chapter 7

19\_Nu-dyads, lexical meanings  
20\_Experiment results, Nu-dyads

### R SCRIPT

21\_Plot data  
21\_Plot script

## Notes on transliteration and example format

In this dissertation, I use the scholarly transliteration system. An exception is made when referring to Russian scholars that consistently transliterate their name in a different way. For example, I write *Lyashevskaya* rather than *Ljaševskaja* and *Say* instead of *Saj* because this is how Olga Lyashevskaya and Sergey Say are known in the research community.

Examples taken from the Russian National Corpus are shown with year of creation and name of author or journal. Other details about the examples may be found by searching them up in the corpus at [www.ruscorpora.ru](http://www.ruscorpora.ru). Some examples are slightly shortened to save space in the text. The following examples serve as illustrations:

### Example from book

In the corpus:

*Kniga porxnula v vozduxe, trepešča stranicami, upala.* [Mixail Elizarov. Bibliotekar' (2007)]

In the dissertation:

*Kniga porxnula v vozduxe, trepešča stranicami, upala.* [M. Elizarov. 2007]  
'The book flapped in the air, fluttered its pages, and fell down.'

### Example from journal

In the corpus:

*Na obratnom puti čerez tuman neožidanno progljanul Èl'brus, on provožal nas počti do Kislovodska.* [Zdes' vam ne ravnina, zdes' klimat inoj... // «Surgutskaja tribuna», 2000.02.26]

In the dissertation:

*Na obratnom puti čerez tuman neožidanno progljanul Èl'brus.* [Surgutskaja tribuna. 2000]  
'On our way back, Elbrus suddenly appeared through the fog.'

The translations of the corpus examples are mine



# 1 Introduction

In descriptions of the Russian aspectual system, it is usually said that perfective verbs are derived from the corresponding base imperfective either by means of a prefix such as *pro-* in *pročitat'* 'read' (cf. the imperfective *čitat'* 'read') or with the semelfactive suffix *-nu-*, as in *kašljanut'* 'cough once' (cf. *kašljat'* 'cough'). In both cases, one affix is used to perfectivize – either a prefix or *-nu-*. What is sometimes overlooked is that Russian perfectives can be derived in a third way, namely by means of these two affixes in combination. This is the situation in such verbs as *vydvinut'* 'put forward, advance' (cf. *dvigat'* 'move'), *vskriknut'* 'give a sudden shout' (cf. *kričat'* 'shout') and *otxlebnut'* 'slurp a portion' (cf. *xlebat'* 'slurp'), which I will refer to as “Pref-Nu verbs”. Although the existence of Pref-Nu verbs in no way is a secret, they are relatively unexplored in the scholarly literature. The goal of this dissertation is to investigate Pref-Nu verbs in Contemporary Standard Russian to find out what happens when a prefix and the semelfactive suffix *-nu-* function **together** in a verb, as in Pref-Nu verbs, compared to when they are **apart**, as in other Russian perfectives.

In this introductory chapter, I aim to situate Pref-Nu verbs in the Russian aspectual system. The information given in Section 1.1 may be superfluous to some readers, but is important to understand what a perfective verb is and how the Russian aspectual system is structured. In Sections 1.2 and 1.3, I go on to consider perfective verbs that are derived either by means of a prefix (here, called “Pref-Only” verbs) or the semelfactive suffix *-nu-* (referred to as “Only-Nu” verbs). Section 1.4 zooms in on Pref-Nu verbs. I summarize what has been said about these verbs by the scholars and discuss what actually should count as a Pref-Nu verb. Section 1.5 states my research aims, and Section 1.6 outlines the structure of the dissertation, including my main findings in each chapter.

## 1.1 Aspect, aspectual pairs and aspectual clusters in Russian

In Russian, aspect is considered a grammatical category in the sense that it is obligatorily marked on all verbs: every verb is either imperfective or perfective, and it is therefore not possible to use a Russian verb and at the same time not express aspect (Zaliznjak and Šmelëv 2000: 10). An often-cited definition of aspect comes from Comrie, who states that “aspects are different ways of viewing the internal temporal constituency of a situation” (Comrie 1976 [2001]: 3). To illustrate one difference between imperfective (IPF) and perfective (PF), Comrie provides the following example:<sup>1</sup>

- (1) *Ivan čital*<sub>IPF</sub>, *kogda ja vošel*<sub>PF</sub>. ‘Ivan was reading when I entered.  
(Comrie 1976 [2001]: 3)

---

<sup>1</sup> In this section, I discuss the Russian aspectual system in general, and, for the convenience of the reader, every mentioned verb is marked with aspect (IPF or PF). In the remaining part of the dissertation, I am mostly concerned with perfective verbs, and marking of the verbs’ aspect therefore appears superfluous.

In this example, the imperfective verb (*čitat'*<sub>IPF</sub> 'read') backgrounds the main event, which in turn is described by a perfective (*vojt*<sub>IPF</sub> 'enter'). A bit simplified, one could say that the perfective aspect describes a situation as complete, or, in Comrie's words, "as a single unanalyzable whole" (ibid), while the imperfective aspect expresses it as ongoing, incomplete or repeated. Some verbs, such as *ženit'sja*<sub>IPF/PF</sub> 'marry', are bi-aspectual, meaning that a given lexeme can express either aspect.<sup>2</sup> The aspect of bi-aspectual verbs is disambiguated from the context. By way of example, *ženit'sja*<sub>PF/PF</sub> 'marry' is imperfective in the habitual context shown in (2) and perfective when it describes a specific, completed one-time event in the past, as in (3). In other words, even bi-aspectual verbs are never aspectually neutral (Zaliznjak and Šmelëv 2000: 10-11, Piperski 2018, Kuznetsova and Nessel Forth.).<sup>3</sup>

(2) *Azerbajdžancy ženjatsja tol'ko na svoix.* [Novyj Mir. 2002]  
'Azerbaijanians marry only their own.'

(3) *V janvare 1943 goda Pinočet ženilsja na Lusii Iriart Rodriges.* [Vokrug sveta. 2003]  
'In January 1943 Pinochet married Lucia Hiriart Rodriguez.'

Russian aspect has been analyzed in a number of ways. For the purposes of this dissertation, I will briefly mention two influential ideas.

First, aspect is in the structuralist tradition described as a privative opposition between a marked and an unmarked member. Perfective verbs are understood as marked and are defined in terms of an invariant meaning, such as completion or totality. Imperfective verbs are analyzed as unmarked, which means that they do not state whether this meaning (completion, totality) is present or not (Jakobson 1932 [1984], Maslov 1959: 309, Forsyth 1970). In Jakobson's words, the Russian imperfective is "noncommittal with respect to completion or noncompletion" (Jakobson 1957 [1984]: 48). To illustrate the idea of Russian aspect as a privative opposition, consider the sentence *Ivan pročital*<sub>PF</sub> *knigu* 'Ivan read the book' that involves the perfective verb *pročitat'*<sub>PF</sub> 'read': it can be understood only as Ivan reading the book to its end. *Ivan čital*<sub>IPF</sub> *knigu* 'Ivan was reading the book', where the verb is imperfective, is, by comparison, neutral to this idea; the verb does not convey the idea of completion, but at the same time does not state that Ivan did *not* finish the book.

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<sup>2</sup> Notice that *ženit'sja*<sub>IPF/PF</sub> occurs in two constructions: about a man getting married (*ženit'sja na kom* 'marry someone') and about two people getting married (*oni ženilis'* 'they got married'). In this latter construction, the prefixed verb *poženit'sja*<sub>PF</sub> is also possible to express perfective meaning, cf. *oni poženilis'* 'they got married', but according to Berkov's Russian-Norwegian dictionary, *poženit'sja*<sub>PF</sub> is more colloquial.

<sup>3</sup> An alternative view is held by Timberlake (2004) and a few other scholars, who prefer to call verbs like *ženit'sja* 'marry' "anaspectual". Timberlake argues that "[r]ather than belonging to both aspects, they have no aspect, and accordingly can, to some extent or another, be used in contexts in which one would otherwise expect either perfective or imperfective" (ibid: 408). For a discussion on the notions of "bi-aspectuality" and "anaspectuality" in Russian, see Bermel (1997: 105-106).

A different approach to Russian aspect comes from Cognitive Linguistics where Janda (2004) has proposed that Russian aspect can be described through metaphor, prototype theory and radial networks. Using the TIME IS SPACE metaphor (Lakoff and Johnson 1980, Haspelmath 1997), she suggests that PERFECTIVE IS A DISCRETE SOLID OBJECT, while IMPERFECTIVE IS A FLUID SUBSTANCE. In other words, perfectives typically describe actions as bounded, impenetrable events, while imperfectives describe them as unbounded and penetrable. At the same time, just like there are “marginal and transitional zones of matter” (Janda 2007: 485), between the oppositional end-points of prototypical perfectives and prototypical imperfectives, we find verb uses that are more or less close to those prototypes. As the reader will soon discover, my dissertation draws on many of the ideas and findings published by Janda and other cognitive linguists. However, I also turn to ideas from other traditions, such as the notion of privative oppositions.<sup>4</sup>

The distinction between Russian perfective and imperfective is the object of a vast literature that I cannot do justice to here. Suffice it to say that the use of Russian aspect is complex and regulated by certain rules, but still not fully understood (see e.g. Janda and Reynolds 2019). Also, although aspect in Russian and other Slavic languages tends to be treated as prototypical examples of the category, it is in fact quite different from aspect in most other languages (Dahl 1985). By way of example, unlike in many other languages, manner adverbials like *medlenno* ‘slowly’ are in the Slavic languages mostly combined with imperfective verbs (ibid: 77), and the perfective aspect is not restricted to past tense reference (ibid: 80). In pedagogical literature, aspect is often described as one of the most difficult parts of Russian to master for second-language learners (e.g. Offord 1996: 405, Andrews et al. 1997: 16, Martelle 2011).

Grammatical aspect must be distinguished from Aktionsart, which is known in the scholarly literature by a number of terms, including lexical aspect (Timberlake 2004), actionality (Tatevosov 2002), procedurals (Forsyth 1970), situation type (Smith 1997), and, in Russian, *sposoby glagol'nogo dejstvija* (Zaliznjak and Šmel'ev 2000), *soveršaemost'* (Isačenko 1960 [2003]), *podvidy* (Šaxmatov 1941), and others. Verbs with Aktionsart semantics tend to describe the beginning or end of an activity (e.g. *zapet'*<sub>PF</sub> ‘begin to sing’ from *pet'*<sub>IPF</sub> ‘sing’ and *otsidet'*<sub>PF</sub> (*srok*) ‘sit out (one’s term)’ from *sidet'*<sub>IPF</sub> ‘sit’), or its intensity as compared to the norm (cf. *podtajat'*<sub>PF</sub> ‘melt a little’ from *tajat'*<sub>IPF</sub> ‘melt’). Aktionsart, unlike aspect, is not a grammatical category in Russian in the sense that expression of Aktionsart is non-compulsory. As we will see, Aktionsart is very relevant for Pref-Nu verbs.

An imperfective verb and a perfective verb that have the same lexical meaning are called an aspectual “pair”: the imperfective verb *čitat'*<sub>IPF</sub> ‘read’ forms an aspectual pair with the perfective verb *pročitat'*<sub>PF</sub> ‘read’; the perfective verb *vojt'i*<sub>PF</sub> ‘enter’ has

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<sup>4</sup> Another noteworthy analysis of aspect from the perspective of Cognitive Linguistics comes from Dickey (2000) who provides a thorough comparison of aspect in all the Slavic languages.

the imperfective partner *vxodit'*<sub>IPF</sub> 'enter'; etc. Traditionally, aspectual pairs are established by determining whether the imperfective verb can replace the perfective verb in a context of obligatory imperfectivization, i.e. in a context where the use of perfective verbs is prohibited. The most famous context of this kind is the *praesens historicum* where an event in the past is described as if it is happening at the time of speech ("Maslov's criterion", Maslov 1948 [1984]). If the imperfective verb can replace the perfective verb in the *praesens historicum* or in another context that requires the imperfective aspect, the two verbs are considered to be an aspectual pair. This is illustrated with the verbs *otkryt'*<sub>PF</sub> 'open' and *otkryvat'*<sub>IPF</sub> 'open' below. In the first context, the perfective verb *otkryt'*<sub>PF</sub> 'open' describes a completed one-time event in the past. In the second context, the imperfective verb *otkryvat'*<sub>IPF</sub> 'open' expresses the exact same lexical meaning in the *praesens historicum*:

- (4) *Pridja včera domoj, ja otkryl'*<sub>PF</sub> *okno* 'When I came home yesterday, I opened the window'
- (5) *Prixožu ja včera domoj, otkryvaju*<sub>IPF</sub> *okno* 'When I came home yesterday, I opened the window (*praesens historicum*)'

(Kuznetsova 2015: 110)

Aspectual pairs are primarily formed in two ways. Either a prefix is added to the base imperfective to create a perfective partner, e.g. *čitat'*<sub>IPF</sub>/*pročitat'*<sub>PF</sub> 'read', or a suffix (-*aj-*, -*vaj-* or -*ivaj-*) is added to a derived prefixed perfective to create a so-called secondary imperfective, e.g. *perečitat'*<sub>PF</sub>/*perečityvat'*<sub>IPF</sub> 'reread'.<sup>5</sup> More rarely, pairs consist of a simplex perfective and a derived imperfective, as in *brosit'*<sub>PF</sub>/*brosat'*<sub>IPF</sub> 'throw' and *dat'*<sub>PF</sub>/*davat'*<sub>IPF</sub> 'give'. A few pairs consist of verbs with different stems ("suppletives"), e.g. *govorit'*<sub>IPF</sub>/*skazat'*<sub>PF</sub> 'speak, say'. Verbs of motion, such as *vojt'*<sub>IPF</sub>/*vxodit'*<sub>IPF</sub> 'enter', follow a slightly different pattern that will not be discussed here. Imperfective and perfective verbs that do not have an aspectual partner are known as *imperfectiva tantum* (e.g. *soderžat'*<sub>IPF</sub> 'contain') and *perfectiva tantum* (e.g. *ucelet'*<sub>PF</sub> 'survive').

For many decades, Russian aspectology was, and largely remains, dominated by the notion of aspectual pairs. A main occupation among aspectologists has been to provide evidence that the Russian aspectual system is organized around pairs (Šaxmatov 1941: 186-187, Vinogradov 1947: 499-501, Zaliznjak et al. 2015) and describe what these pairs may look like and how aspectual partners interact (Maslov 1948 [1984]: 54-64). At the same time, it is clear that a base imperfective like *čitat'*<sub>IPF</sub> 'read' is aspectually related not only to its perfective partner *pročitat'*<sub>PF</sub> 'read', but also to verbs like *perečitat'*<sub>PF</sub> 'reread' and *perečityvat'*<sub>IPF</sub> 'reread' with

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<sup>5</sup> In the scholarly literature, the suffixes of secondary imperfectives are represented in different ways. In this dissertation, I will follow Townsend (1975) who speaks of the suffixes -*aj-*, -*vaj-* and -*ivaj-*. Another common way of rendering these suffixes is -*a-*, -*va-* and -*yva-*/*-iva-*, which shows how they are represented in writing and addresses the variation between *y* and *i* in the last suffix.

which it does not have a pair relation. To capture the complexity of this system, Janda (2007) introduced the so-called cluster model that shows how “aspectual partnerships... are usually embedded in larger clusters” (ibid: 609). Although Janda’s model has been criticized (Zaliznjak et al. 2015), combined with corpus data, empirical studies based on the cluster model have yielded new insight into the various relationships existing between Russian verbs, and aspectual pairs have been shown to be gradual in nature and rarely, if ever, “perfect” (e.g. Janda et al. 2013, Kuznetsova 2015: 108-167).

In the initial version of the cluster model from 2007, Janda distinguished between two types of imperfectives (base imperfectives like *čítat’*<sub>IPF</sub> ‘read’ and secondary imperfectives like *perečítivat’*<sub>IPF</sub> ‘reread’) and four types of perfectives. The first three types of perfectives are derived by adding a prefix to a base imperfective; the fourth type is derived primarily with the suffix *-nu-*:

- A. Natural Perfectives: In these verbs, the meaning of the prefix “overlaps” with the lexical meaning of the base imperfective. For instance, *pro-* in *pročítat’*<sub>PF</sub> ‘read’ involves the idea ‘through’, which is part of the activity of reading in the sense that the activity is completed when you have read something all the way through. Natural Perfectives form aspectual pairs with the base imperfective.<sup>6</sup>
- B. Specialized Perfectives: Here, the semantic contribution of the prefix alters the lexical meaning of the base imperfective. For instance, *pere-* in *perečítat’*<sub>PF</sub> ‘reread’ contributes the notion of performing the action one more time. Specialized Perfectives form aspectual pairs with a secondary imperfective derived with the suffix *-aj-*, *-vaj-* or *-ivaj-*, e.g. *perečítivat’*<sub>IPF</sub> ‘reread’, as described by Townsend (1975: 134-141).<sup>7</sup>
- C. Complex Act Perfectives: The prefixes in these verbs modify the verb meaning in terms of duration or intensity. In the scholarly literature, Complex Act Perfectives are associated with Aktionsart meanings, e.g. delimitative (*popísat’*<sub>PF</sub> ‘write for some time’ from *pisat’*<sub>IPF</sub> ‘write’), ingressive (*zakričat’*<sub>PF</sub> ‘begin to shout’ from *kričat’*<sub>IPF</sub> ‘shout’), attenuative

<sup>6</sup> Natural Perfectives can also derive secondary imperfectives, such as *pročítivat’* ‘read’. Here, the secondary imperfective tends to be used when the speaker specifically draws attention to the completion or result of the relevant process (Veyrenc 1980: 176), cf. *My s mužem pročítываем газету от начала до конца, нам всё в ней нравится* [*Marijskaja Pravda*. 2003] ‘My husband and I read the newspaper from beginning to end, we enjoy everything in it’. Together the base imperfective, prefixed perfective and secondary imperfective form an aspectual “triplet” (*čítat’*<sub>IPF</sub>/*pročítat’*<sub>PF</sub>/*pročítывat’*<sub>IPF</sub> ‘read’), a phenomenon I will come back to in Section 5.1.

<sup>7</sup> The following examples are taken from Townsend (1975: 135) and illustrate how the given suffixes are added to verb stems:

Stem	Suffix	Third person plural	English gloss
<i>sberëg-</i>	<i>-aj-</i>	<i>sberegajut</i>	‘save’
<i>zapisä-</i>	<i>-vaj-</i>	<i>odevajut</i>	‘dress’
<i>odeñ-</i>	<i>-ivaj-</i>	<i>zapisyvajut</i>	‘write down’

(*priotkryt'*<sub>PF</sub> 'open a little' from *otkryt'*<sub>PF</sub> 'open'), accumulative (*nagotovit'*<sub>PF</sub> *čego* 'make a lot of something' from *gotovit'*<sub>IPF</sub> 'prepare'), etc. It is generally claimed that verbs with Aktionsart meaning do not have aspectual partners (Isačenko 1960 [2003]: 217), but there are many counterexamples of this, including *priotkryvat'*<sub>IPF</sub> 'open a little' and *nagotavlivat'*<sub>IPF</sub> *čego* 'make a lot of something' that are both used widely in contemporary Russian.

- D. Single Act Perfectives: In these verbs, the suffix *-nu-* singles out one phase of a multiphasal activity. By way of example, *bodnut'*<sub>PF</sub> 'butt once' expresses one repetition of the multiphasal activity *bodat'*<sub>IPF</sub> 'butt'. In the scholarly literature, Single Act Perfectives are referred to as "semelfactives" or "*-nu-*semelfactives", and they are generally regarded as *perfectiva tantum*, i.e. perfective verbs that do not have an imperfective partner. A smaller number of Single Act Perfectives are derived with the suffix *-anu-* or the prefixes *s-* and *u-* (see Section 1.3).

In 2009, Makarova and Janda added a fifth type of perfective to the cluster model, namely Specialized Single Act Perfectives with the following main characteristics:

- E. Specialized Single Act Perfectives: These verbs have a prefix *and* the suffix *-nu-*, e.g. *zaxlopnut'*<sub>PF</sub> 'slam shut'. They are derived from the corresponding Single Act Perfective, e.g. *xlopnut'*<sub>PF</sub> 'slam, bang, pop once'. According to Makarova and Janda, Specialized Single Act Perfectives retain the semelfactive meaning associated with the suffix *-nu-* and furthermore have a specialized (i.e. more specific) lexical meaning due to the semantic contribution of the prefix. Specialized Single Act Perfectives derive secondary imperfectives by means of *-ivaj-* (e.g. *zaxlopyvat'*<sub>IPF</sub> 'slam shut').

According to Makarova and Janda, Specialized Single Act Perfectives, or prefixed *-nu-*semelfactives as they also call them, have received limited attention in the scholarly literature. However, since the main goal of Makarova and Janda is to point out that such verbs exist and explain how they fit into the cluster model, they do not provide an in-depth analysis of their semantic properties and behavior, and the claims they make are based on a limited sample of verbs. My dissertation aims to fill the knowledge gap concerning the verbs in E above and scrutinize this group of verbs based on as much data as possible.

Distinct as the first four types of perfectives seem at first sight, several studies suggest that their boundaries are fuzzy. For instance, a polysemous perfective can function as a Natural Perfective in some constructions and as a Specialized Perfective or Complex Act Perfective in others. By way of example, consider, *probit'*<sub>PF</sub> 'hit through' that is a Natural Perfective of *bit'*<sub>IPF</sub> 'hit' in the context of *časy* 'clock', e.g. *časy b'jut/probili odinnadcat'* 'the clock strikes/struck eleven', and a Specialized Perfective in all other contexts, e.g. *master často bil/\*probil učenikov* 'the master often hit/\*hit through the students' (Kuznetsova 2015: 156-157).

Another example is *prospat'*<sub>PF</sub> that is a Specialized Perfective of *spat'* 'sleep' in the meaning 'oversleep', e.g. *on prospal na rabotu* 'he overslept for work', and a Complex Act Perfective with perdurative Aktionsart meaning in contexts of duration, e.g. *on prospal tri časa* 'he slept for three hours'. With regard to Complex Act Perfectives, scholars furthermore do not always use parallel lists of Aktionsart meanings, thus showing that some verbs and verb meanings might be analyzed in terms of Aktionsart by one scholar, but not by another (cf. Isačenko 1960 [2003]: 224-300 and Zaliznjak and Šmelëv 2000: 104-127). As for the status of Single Act Perfectives, it has been pointed out that some of them in certain contexts function as aspectual partners of the corresponding base imperfectives (Isačenko 1960 [2003]: 255-257), in this way coming close to Natural Perfectives. Each of these types of perfectives furthermore contains more typical and less typical representatives (ibid: 159-163, Nessel 2013).

In view of this complex situation with several not easily distinguishable types of perfective verbs, for the purposes of this dissertation, I will use the following terminology:

- A. Pref-Only: Prefixed perfectives (Natural Perfectives, Specialized Perfectives and Complex Act Perfectives)
- B. Only-Nu: Unprefixed perfectives with the suffix *-nu-* (Single Act Perfectives)
- C. Pref-Nu: Perfectives with a prefix and the suffix *-nu-* (Specialized Single Act Perfectives)

These terms are "neutral" in the sense that they do not say anything about the verbs' semantics or how they are derived. With regard to Pref-Nu verbs in particular, which are the focus in my dissertation, the selected term does not make any claims as to whether *-nu-* is added to a prefixed verb or whether a prefix is added to a verb with *-nu-*. This neutral position, I argue, represents a good starting point for an empirical investigation of the kind I pursue. For imperfective verbs, I use the standard terms "base imperfective" and "secondary imperfective".

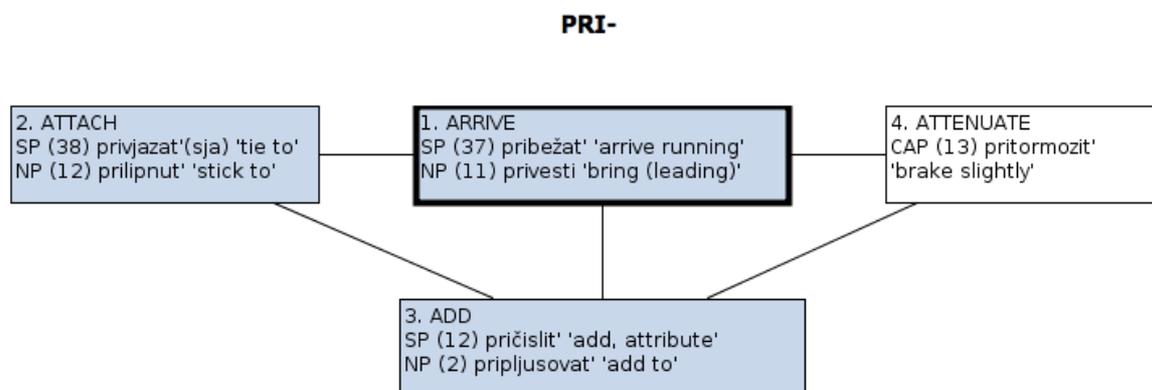
Having situated Pref-Nu verbs in the Russian aspectual system, I will now go on to discuss the two verb types that Pref-Nu verbs will be compared to, namely Pref-Only verbs (Section 1.2) and Only-Nu verbs (Section 1.3). The statements made in the scholarly literature about Pref-Nu verbs are recapitulated in Section 1.4.

## **1.2 Prefixed perfectives (Pref-Only)**

Prefixation is the most common way of deriving perfectives in Russian. As just mentioned, prefixed perfectives fall into three main groups: the prefix "overlaps" with the lexical meaning of the verb (Natural Perfectives), the prefix alters the lexical meaning of the verb (Specialized Perfectives), and the prefix contributes some kind of Aktionsart meaning (Complex Act Perfectives).

The number of Russian verb prefixes encountered in scholarly works fluctuates between 18 and 20 depending on whether the given scholar analyzes *o-* and *ob(o)-*, as well as *vz-* and *voz-*, as different prefixes or as variants of the same morpheme (Krongauz 1998, Endresen 2014). Each prefix is associated with a particular semantic content. Their semantic content has been described in different ways – as lists of unrelated meanings (e.g. Švedova et al. 1980), in terms of invariant meanings that are meant to cover all their uses (e.g. Flier 1975, Gallant 1979), and as radial networks with a central, prototypical meaning and a number of submeanings that are related to the prototype through cognitive mechanisms, such as metaphor and metonymy (e.g. Janda 1986, Janda et al. 2013). In this dissertation, I will primarily rely on the radial networks of prefix meanings proposed by Janda et al. (2013). However, when these prove inadequate to describe the prefix use in question, I will draw on other analyses, as pointed out in the text. Prefix meanings will be shown in capital letters, e.g. THROUGH and REDO (*pro-*). Most of the prefix meanings proposed by Janda et al. (2013) can be explored on the Exploring Emptiness website: [http://emptyprefixes.uit.no/methodology\\_eng.htm](http://emptyprefixes.uit.no/methodology_eng.htm).

To illustrate what a radial network of prefix meanings may look like, consider the radial network for *pri-* in Figure 1. For this prefix, Janda et al. (2013) distinguish between four meanings – the prototypical meaning ARRIVE and three others. The prototypical meaning is circled with a thick line. The abbreviations NP, SP and CAP show the number of Natural Perfectives, Specialized Perfectives and Complex Act Perfectives in *pri-* that were found with the various prefix meanings in their study. For each type of perfective, the scholars provide one example from their database.



**Figure 1** Radial network of the prefix *pri-* proposed by Janda et al. (2013). The figure is taken from the Exploring Emptiness website: [emptyprefixes.uit.no/pri\\_eng.htm](http://emptyprefixes.uit.no/pri_eng.htm).

The prototypical meaning of *pri-* is the directional meaning ARRIVE that is found most clearly in verbs of motion, e.g. *pribežat'* 'arrive running' from *bežat'* 'run'. The meanings ATTACH and ADD are extensions of the prototype insofar as they express "a type of arrival that results in something becoming fixed in a place" and "an arrival that increases a larger whole" (Janda et al. 2013: 53). The meaning ATTENUATE is analyzed as connected with ADD in the sense that it expresses a smaller amount of an activity that "is added to the whole situation" (ibid, see also

Makarova 2014: 129-135). In Janda et al.'s analysis, a given prefix has between one and eleven submeanings (cf. *v-* and *pere-*). With the exception of *po-*, all the prefixes can express a spatial path (Dickey 2007), for example ARRIVE for *pri-*, INTO for *v-*, etc.

As pointed out by Nessel (2019), it would be naïve to think that a network such as the one in Figure 1 can account for and explain all the semantic nuances that a prefix can contribute to a verb. At the same time, networks of this kind are helpful to, on the hand, see the semantic unity of the prefixes (i.e. how their submeanings are connected), and, on the other hand, represent their complexity (i.e. they have more than one meaning).

### 1.3 *Nu*-semelfactives (Only-*Nu*)

While prefixation is the most common way of deriving perfective verbs in Russian, one group of perfectives is derived from the base imperfective with the suffix *-nu-*, namely semelfactives. Typically, semelfactives occur in aspectual clusters where the base imperfective describes a multiphasal or “multiactional” activity (Zaliznjak and Šmelëv 2000: 119). Xrakovskij (1998: 487) defines multiphasal verbs in this way: “These are atelic imperfective verbs that denote a series of “quanta” of an activity that are (more or less) regularly repeated within (relatively) short intervals, that are identical to each other throughout the time of their performance, and that together constitute a discontinuous process”.<sup>8</sup> Typical examples are *prygat'* ‘jump’, *krjakat'* ‘quack’, *axat'* ‘gasp, sigh’, *migat'* ‘blink’ and *skripet'* ‘creak’ that describe simple bodily movements or sounds created by humans or animals (Zaliznjak and Šmelëv 2000: 118). The term “semelfactive” comes from the Latin words *semel* ‘once’ and *factum* ‘event’, and semelfactives describe one “phase” or one “quantum” of the corresponding multiphasal activity, e.g. *prygnut'* ‘jump once’, *krjaknut'* ‘quack once’, *axnut'* ‘gasp, sigh once’, *mignut'* ‘blink once’ and *skripnut'* ‘creak once’. Semelfactives are regarded as a form of Aktionsart that is also, though less frequently, expressed by the suffix *-anu-* (e.g. *rubanut'* ‘chop once’ from *rubit'* ‘chop’) and the prefixes *s-* (e.g. *sxodit'* ‘go somewhere and back’ from *xodit'* ‘walk’ and *sglupit'* ‘do one stupid thing’ from *glupit'* ‘be foolish’) and *u-* (e.g. *ukolot'* ‘prick once’ from *kolot'* ‘prick, chop’) (Zaliznjak and Šmelëv 2000: 120). The suffix *-anu-* is considered more expressive and yields an extra nuance of abruptness and force (ibid: 119).

The two diagrams in Figure 2 illustrate the meaning of multiphasal imperfectives and semelfactives. Each bar illustrates one “quantum” of the activity. The two circles on the end of each bar represent the beginning and the end of the action. The fact that they are located directly above each other shows that they take place at the same point in time. Imperfective multiphasal verbs typically refer to a series of identical phases. Semelfactives focus on one single phase.

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<sup>8</sup> “*Reč' idet o nepredel'nyx glagolax NSV, oboznačajuščix serii kvantov dejatel'nosti, kotorye (bolee ili menee) reguljarno povtorjajutsja čerez (otnositel'no) nebol'sie intervaly, ostajutsja toždestvennymi sebe v tečenie vsego perioda ix soveršenija i sostavljajut v sovokupnosti preryvistyj process.*” – Translation to English by MN.

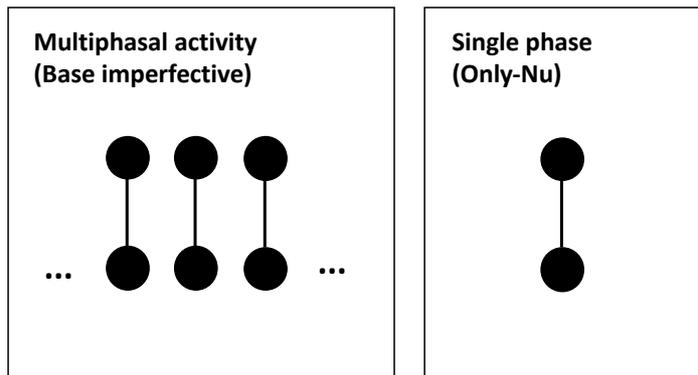


Figure 2 Illustration of multiphasal and semelfactive verb meanings.

Semelfactive actions are usually instantaneous in time (Smith 1997: 29) and, unlike the actions expressed by most Pref-Only verbs, they are not concerned with a result.<sup>9</sup> In Smith’s words “[t]ypical semelfactives are events that occur very quickly, with no outcome or result other than the occurrence of the event” (Smith 1997: 29). By way of example, jumping, quacking and gasping do not in themselves culminate in a change of state. At the same time, “whatever a person does, he does with a goal” (Šatunovskij 2009: 62) and therefore any action may have a consequence (ibid).<sup>10</sup> What is important and what motivates scholars to say that semelfactives are not resultative is that the verb itself does not contain information about any result (ibid). Nessel (2013: 126) reflects: “a sentence such as *on prygnul* ‘he jumped’ will most likely be interpreted as describing one jump up in the air and a landing on the same spot. This is non-resultative in the sense [that] the subject resumes his/her initial position and is ready to perform a new jump of the same type”. If, however, *prygnut’* ‘jump once’ is followed by a prepositional phrase and the subject moves to a new location, such as in *On prinužden byl prygnut’ čerez zabor* ‘he was forced to jump over the fence’, the verb meaning becomes resultative (ibid, see also Samedova 2013). Jumping a bit ahead, I will suggest that Only-Nu verbs are “non-specific” with regard to the result, rather than “non-resultative” as such. Thus, they neither state that a result takes place, nor that a result is absent. By comparison, Pref-Nu verbs, as we will see, tends to be resultative. Following up on that, I will suggest that the relationship between Pref-Nu and Only-Nu may, at least for some verbs, be analyzed as a privative opposition or as a device to foreground or background the action’s result. I will return to these ideas in Chapter 3.

Semelfactivity is arguably a gradual notion (Nessel 2013). Prototypical semelfactives, such as *axnut’* ‘gasp once’, have all the properties characteristic of the category – a single, instantaneous “quantum” of a multiphasal activity that does not culminate in a result. Other semelfactives share one or a few properties. As just shown, *prygnut’* ‘jump once’ can, for instance, express a result or not express a

<sup>9</sup> Isačenko (1960 [2003]: 253) argues that instantaneousness is not a property of semelfactivity, but rather a part of the lexical meaning of the verbs in question.

<sup>10</sup> “*Vsě, čto čelovek ni delaet, on delaet s kakoj-to cel’ju*” – Translation to English by MN.

result depending on the context in question. Some semelfactives, such as *gljanut* 'glance once' and *pugnut* 'scare once', are not related to multiphasal activities, and the "quantum" meaning is less clear (Zaliznjak and Šmelëv 2000: 119). In these verbs, the suffix *-nu-* often contributes an additional nuance of "quickly", "abruptly" and "with force" (ibid). Townsend (1975: 104-105) speaks of an old and a new type of semelfactives and asserts that the newer verbs "are more obviously semelfactive than the older verbs" (ibid: 105). Švedova et al. (1980: 597, §1421) mention verbs that come close to semelfactives, although they generally are not regarded as such.<sup>11</sup>

Because of the graduality of semelfactive meaning, scholars may classify a given verb in different ways – some as semelfactive, others as just a perfective verb and/ or the aspectual partner of the corresponding base imperfective. For the purposes of the present study, I regard *-nu-* to convey semelfactive meaning in a wide sense as long as the unprefixated *-nu-*verb is perfective. To emphasize that Only-Nu verbs are understood as involving the semelfactive suffix *-nu-*, their English glosses will include 'once', although this in some cases can sound slightly unnatural, e.g. *vernut* 'return once'. Moreover, some verbs, such as *trjaxnut* 'shake once', describe situations that almost always entail more than one "quantum" of the action, e.g. *trjaxnut ruku* 'shake [someone's] hand' and *trjaxnut golovoj* 'shake [one's] head'.

Only-Nu verbs are always perfective and must be distinguished from imperfective verbs with the inchoative suffix *-nu-* that expresses acquirement of a property, e.g. *slepnut* 'become blind' and *soxnut* 'become dry'.<sup>12</sup> Unlike *-nu-*semelfactives, inchoatives tend to drop *-nu-* in past tense forms, cf. *odežda soxla na solnce* 'the clothes were drying in the sun' and the semelfactive *Liza axnula* 'Liza gasped once' (for a discussion of *-nu-*drop in past tense forms, see Nessel and Makarova 2012). In both semelfactives and inchoatives, *-nu-* is reduced to *-n-* in non-past forms (cf. *odežda soxnet* 'the clothes are drying' and *Liza axnet* 'Liza gasp once (future tense)'). Inchoative verbs and their prefixations are not relevant to this dissertation.

#### **1.4 Perfectives with a prefix and the semelfactive suffix *-nu-* in previous scholarship (Pref-Nu)**

As already mentioned, what I have called "Pref-Nu verbs" have received limited attention in the scholarly literature. In the publications I have encountered, their existence and properties are usually mentioned in passing. Existing discussions of them are brief and based on small sets of verbs, and a large-scale empirical study has yet to be carried out. In the following, I briefly summarize what has been said about Pref-Nu verbs in the past. Section 1.4.1 discusses the derivation of Pref-Nu

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<sup>11</sup> "K odnoaktnym glagolam po značeniju primykajut glagoly, ne imejuščie motivirujuščix glagolov nesov. vida, takie kak xlynut', drognut', rinut'sja, rexnut'sja" 'Single-act verbs are close in meaning to verbs that do not have a corresponding imperfective verb, such as *xlynut* 'gush out', *drognut* 'shiver', *rinut'sja* 'dash, hurl oneself', *rexnut'sja* 'go mad' (Švedova et al. 1980: 597, §1421).

<sup>12</sup> Inchoatives have also been called "gradatives" (*gradativ*) (Padučeva 1996).

verbs and their corresponding imperfectives. I then recapitulate the statements that have been made about the semantics of Pref-Nu verbs, as compared to Only-Nu verbs (Section 1.4.2) and Pref-Only verbs (Section 1.4.3). In Section 1.4.4, I discuss what should count as a Pref-Nu verb and introduce the criteria that I will use in this regard.

#### 1.4.1 Derivation of Pref-Nu and their corresponding imperfectives

In most scholarly accounts, Pref-Nu verbs are described as derived from Only-Nu, i.e. *-nu*-semelfactives. Isačenko writes that “semelfactives in *-nut'*, such as *kriknut'* [‘shout once’] or *sunut'* [‘shove once’], can serve as the derivational base for new prefixed verbs, for example *vskriknut'* [‘give a sudden shout’] and *vsunut'* [‘shove into’] (Isačenko 1960 [2003]: 263).<sup>13</sup> Makarova and Janda (2009: 93) describe them as “formed from *-nu*-semelfactives” and Townsend (1975: 104) speaks of “the addition of a prefix” to *-nu*-semelfactives. Kuznetsova and Makarova (2012: 166) examine the distribution of *-nu-* and the competing, more stylistically marked suffix *-anu-* in Russian semelfactives and find that prefixed verbs (i.e. Pref-Nu verbs) are derived almost entirely from verbs with *-nu-* (and not *-anu-*).<sup>14</sup>

A different view is presented by Plungjan (2000) who claims that Pref-Nu verbs are derived from the corresponding secondary imperfectives. In other words, he analyzes *pridvinut'* ‘move up to’ as derived from the imperfective *pridvigát'* ‘move up to’, *zasnut'* ‘fall asleep’ as derived from *zasypat'* ‘fall asleep’, and *otrjaxnut'* ‘shake off, down’ as derived from *otrjaxivat'* ‘shake off, down’.<sup>15</sup> Feldstein proposes a third possibility, arguing that Pref-Nu verbs are “prefixed perfectives which... are derived with the *-nu-* [suffix]” (Feldstein 2007: 18), that is, that they are derived by adding *-nu-* to Pref-Only. In this dissertation, I will not be occupied with the question of derivation, since, as we will see in Section 1.4.4, how we analyze their derivation in part depends on the criteria we use to define Pref-Nu verbs. The question of derivation furthermore has little relevance for the main topic of this dissertation, which is to explore the semantics and behavior of Pref-Nu verbs.

As for the derivation of imperfectives, the scholars unanimously agree that Pref-Nu verbs form aspectual pairs with a derived secondary imperfective, usually involving the suffix *-ivaj-*, e.g. *zasunut'* ‘shove somewhere’ has the imperfective *zasovyvat'* ‘show somewhere’ (Vinogradov 1947: 501-502, Isačenko 1960 [2003]: 263, Townsend 1975: 106, Avilova 1976: 161-162, Plungjan 2000: 7, Makarova and Janda 2009: 93). In Old Russian, the imperfectivizing suffix was *-aj-*, and this suffix has been kept in the imperfectives of some Pref-Nu verbs, such as *vydvigát'*

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<sup>13</sup> “*Odnokratnye glagoly na -nut' tipa kriknut' ili sunut' mogu služít' bazoj dlja obrazovanija novyx pristavočnyx glagolov, naprimer vskriknut', vsunut'.*” – Translation to English by MN.

<sup>14</sup> Kuznetsova and Makarova’s database includes 1225 perfective verbs with a prefix and the suffix *-nu-* (in their study called “prefixed *-nu*-semelfactives”) and only three of these involve the suffix *-anu-*: *sšibanut'* ‘knock down’, *sblevanut'* ‘throw up once’ and *sygranut'* ‘play once’.

<sup>15</sup> “[*O*]ni morfoložičeski proizvodny ot oboznačeniij predel'nyx processov NSV i opisývajúť takie sobytija, kotorye služát estestvennym finalom ètix processov. Primery: *pridvinut'* (< *pridvigát'*), *zasnut'* (< *zasypat'*), *otrjaxnut'* (< *otrjaxivat'*) i dr.” (Plungjan 2000: 7) – Translation to English by MN.

'move forward, advance' from *vydvínut'* 'move forward, advance' (Silina 1982: 258-259). As just mentioned, Plungjan analyzes Pref-Nu verbs as derived from secondary imperfectives, but most other scholars understand it the other way around, i.e. that the imperfectives are derived from the Pref-Nu verbs. Isačenko argues that the secondary imperfectives of Pref-Nu verbs are derived from the base imperfectives, meaning that *zasovyvat'* 'shove somewhere' is derived from *sovat'* 'shove'.<sup>16</sup>

#### 1.4.2 Semantics of Pref-Nu as compared with Only-Nu

To describe the semantic properties of Pref-Nu verbs, scholars tend to compare them with Only-Nu verbs (-*nu*-semelfactives). Scholars present different views on their semantic differences.

##### 1.4.2.1 Isačenko (1960)

Isačenko devotes three pages to Pref-Nu verbs in his discussion of semelfactive Aktionsart (*odnokratnaja soveršaemost'*, Isačenko 1960 [2003]: 263-265). His main point is that Pref-Nu verbs represent a unique situation insofar as they are derived from a verb with Aktionsart meaning: "Among the Aktionsarten of the Russian verb, the semelfactive Aktionsart expressed with the suffix *-nut'*, holds a special place. Verbs that express one or the other Aktionsart are always related to the base verbs they are modifying. Aktionsarten derived by means of a prefix (*zagovorit'* ['begin to talk'], *pogovorit'* ['talk for a bit'], *nagovorit'sja* ['have a good talk']) do not usually form new verbs by means of qualifying prefixes. The exception is semelfactive Aktionsart expressed with the suffix *-nut'*. Semelfactive verbs in *nut'*, such as *kriknut'* ['shout once'] or *sunut'* ['shove once'] can serve as the derivational base for new prefixed verbs, for example *vskriknut'* ['give a sudden shout'], *vsunut'* ['shove into']" (ibid: 263).<sup>17</sup> However, Isačenko finds that many Pref-Nu verbs have lost their corresponding Only-Nu verb in the contemporary standard language. *Razinut'* 'open jaws' was, for instance, historically derived from the perfective verb *\*zinut'* before this verb was replaced by *zevnut'* 'yawn once'; *poddaknut'* 'nod along (lit. slightly say yes)' has largely replaced *?daknut'*; *vsxlipnut'* 'sob' has replaced *?xlipnut'*; etc.

With regard to the semantics of Pref-Nu verbs, Isačenko argues that "they retain the semelfactive meaning of the simplex verb [Only-Nu] to a certain extent, but this

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<sup>16</sup> "Privedënnye formy ns/v obrazovany ne neposredstvenno ot kornja semel'faktivnyx glagolov (tip za-su-nut'), a ot kornja sootvetstvujuščego nesemel'faktivnogo glagola (tip sovat') "The given imperfective forms are not directly derived from the root of the semelfactive verbs (such as *za-su-nut'*), but from the root of the corresponding non-semelfactive verb (such as *sovat'*) (Isačenko 1960 [2003]: 263) – Translation to English by MN.

<sup>17</sup> "V krugu soveršaemostej russkogo glagola *odnokratnaja soveršaemost'*, vyražennaja suffiksom *-nut'*, zanimaet osoboe mesto. Glagoly, vyražajuščie tu ili inuju soveršaemost', semantičeski vseгда sootneseny so svoimi isxodnymi glagolami, modifikacijami kotoryx oni i javljajutsja. Ot soveršaemostej, obrazovannyx pri pomoščii pristavok (napr. *zagovorit'*, *pogovorit'*, *nagovorit'sja*, i t.p.), obyčno uže ne obrazujutsja novye glagoly pri pomoščii pristavok-kvalifikatorov. Isključeniem javljaetsja *odnokratnaja soveršaemost'*, vyražennaja suffiksom *-nut'*. Odnokratnye glagoly na *-nut'* tipa *kriknut'* ili *sunut'* moguť služít' bazoj dlja novyx pristavočnyx glagolov, naprimer *vskriknut'*, *vsunut'*." – Translation to English by MN.

meaning gets very close to a general perfective one whereby a process is perceived as a whole event” (ibid: 264).<sup>18</sup> In other words, Pref-Nu verbs are considered less semelfactive than Only-Nu, although Isačenko does not specify precisely how.

#### 1.4.2.2 Townsend (1975)

Townsend, whose book concerns Russian word-formation, mentions Pref-Nu verbs in his discussion of the semelfactive suffix *-nu-* (Townsend 1975: 104-107). As mentioned in Section 1.3, he distinguishes between two types of *-nu-*semelfactives in Russian – an older type and a newer type. The two types can to some extent be distinguished based on stress and morphology.<sup>19</sup> A more important observation for us, however, is that verbs of the newer type are “much more obviously semelfactive than the older verbs” (ibid: 105) and that prefixed verbs (Pref-Nu), according to Townsend, are derived only from the older type, that is, verbs with a vague semelfactive meaning. In Townsend’s view, the addition of a prefix makes the semelfactive meaning of the verb even weaker (it “voids semelfactive meaning”, ibid: 104). A few verbs in this group have no corresponding Only-Nu verb, e.g. *obmanut’* ‘deceive’ and *ulybnut’sja* ‘smile’ (ibid: 106). Townsend does not suggest how these latter verbs have appeared in the language.

#### 1.4.2.3 Silina (1982)

Silina’s work concerns the historical development of aspect in Russian, and Pref-Nu verbs appear in her discussion of the suffix *-nu-* (Silina 1982: 178-180, 248-259). According to Silina, the semelfactive *-nu-* was present already in Proto-Slavic and appeared before aspect to express one act of a multiphasal activity, e.g. *dōnōti* ‘blow once’ from *dōti* ‘blow’. Silina observes that *-nu-*derivation has been very productive throughout the history of Russian, but proposes that it became even more widespread when prefixes became engaged as a form of derivation.<sup>20</sup> At this time, many verbs were derived by means of a prefix and the suffix *-nu-* together, and in old manuscripts some of them do not occur without a prefix, e.g. *dostignuti* ‘reach’ (*\*stignuti*). When aspect developed as a category in the language, the unprefixed *-nu-*verbs, such as *dōnōti* ‘blow once’, became perfective. They retained their meaning of a single act. These verbs are what we call “*-nu-*semelfactives” in modern Russian, or, in this dissertation, “Only-Nu” verbs. The prefixed *-nu-*verbs (Pref-Nu), on the other hand, developed new lexical meanings and could lose their single act semantics and become “general-resultative” (*obščerezul’tativnye*).

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<sup>18</sup> “*Pristavočnye glagoly tipa vskriknut’, vzdrognut’ [...], zakinut’ i t.d. do izvestnoj stepeni soxranjajut značenie odnokratnosti dejstvija; no èto značenie v značitel’noj mere približaetsja k obščemu grammatičeskomu značeniju soveršennogo vida, poskol’ku vsjakij perfektivnyj glagol imeet v vidu process, vosprinjatyj kak celostnoe sobytje*” (Isačenko 1960: 264) – Translation to English by MN.

<sup>19</sup> The older type of semelfactives may have stress either in the beginning of the word (like *dvínut’* ‘move once’) or in the end (like *tolknút’* ‘push once’) and may have a consonant disappearing before *-nu-* (cf. *dvínut’* ‘move once’ and the imperfective *dvígat’* ‘move’). Semelfactives of the newer type always have stress on the last syllable and do not lose a consonant before *-nu-* (cf. *bodnút’* ‘butt once’ and the imperfective *bodat’* ‘butt’).

<sup>20</sup> Silina does not specify in which time interval this may have happened.

As we can see, then, Silina agrees with Isačenko and Townsend that Pref-Nu verbs are less semelfactive than Only-Nu verbs, and she furthermore connects this with their ability to express a result. In addition, Silina gives insight into the historical process that led to their existence. However, a problematic side of Silina's account is that she treats prefixations of verbs with the semelfactive suffix *-nu-* together with prefixations of imperfectives with the inchoative *-nu-* (that, as mentioned in Section 1.3, are not considered in this dissertation) and also verbs like *dostignuti* 'reach' that have probably never existed in an unprefixated form. In Silina's view, all these verbs are resultative in meaning and have had the same development and fate in Russian. For my purposes, however, it is important to distinguish between the different verb types involved, a point I address in further detail in Section 1.4.4.

#### 1.4.2.4 Plungjan (2000)

In the relevant work, Plungjan explores the semantics of the suffix *-nu-* in Russian and argues that it functions as a grammatical marker of the meaning 'quickly' (*bystro*).<sup>21</sup> Plungjan makes a distinction between four types of perfectives with *-nu-*. Pref-Nu verbs fall into the third of these groups ("completives").

1. Quanta (*kvanty*): These verbs express one short or instantaneous act of a situation consisting of a series of such acts, e.g. *kašljanut'* 'cough once' (from *kašljat'* 'cough') and *šagnut'* 'take one step' (from *šagat'* 'step'). These are the verbs usually referred to as "semelfactives" in the scholarly literature.
2. Events (*sobytiya*): Here, the suffix *-nu-* is a morphological marker of their main aspectual property, which is 'instantaneousness' (*mgnovennost'*), e.g. *zvezdanut'* 'hit strongly' and *koknut'* 'break (by accident)'. Verbs of this type are not derived from other verbs.
3. Completives (*kompletivy*): These verbs express the natural end-point of a telic process. With the exception of *vernut'* 'return once', all of them are prefixed and derived from a secondary imperfective, e.g. *pridvinut'* 'move towards' (from *pridvigát'* 'move towards') and *zasnut'* 'fall asleep' (from *zasypat'* 'fall asleep'). In completives, the suffix *-nu-* does not contribute semantic content and functions simply as a marker of perfectivity.
4. Bundles (*svěrtki*): These verbs describe a process that, due to the semantic contribution of *-nu-*, is shorter than usual, e.g. *gul'nut'* 'have some fun' (from *guljat'* in the meaning 'have fun') and *kurnut'* 'have a quick smoke' (from *kurit'* 'smoke').

Let us look more closely at the third group, which Plungjan calls "completives". Plungjan argues that the presence of *-nu-* in these verbs is the least motivated and even semantically superfluous. He furthermore points out that only completives combine with adverbials like *postепенно* 'gradually', *медленно* 'slowly' and *за пять минут* 'in five minutes' that are not compatible with the notion of 'quickly'

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<sup>21</sup> Apart from verbs in *-nu-*, Plungjan includes into his study verbs with the suffix *-anu-*, like *rubanut'* 'chop once', and verbs with a circumfix like *vz-...-nu-* in *vsplaknut'* 'shed a tear'. In Plungjan's view, these suffixes yield identical meaning ('quickly') and can therefore be explored together (Plungjan 2000: 5-6).

expressed by *-nu-* (Plungjan 2000: 7). The reason for this is, in Plungjan's opinion, the prefix. To illustrate, he draws attention to the aspectual-semantic difference between the unprefixed verb *tolknut'* 'push once', which he relates to the first group above ("quanta"), and the completives *podtolknut'* 'urge to' or *vytolknut'* 'push out' that, in his words, "literally before one's eyes loose the effect of a "compressed spring" so strongly felt in most contexts where *-nu-* is used" (ibid).<sup>22</sup>

Plungjan's analysis agrees with Isačenko's, Townsend's and Silina's in that the semantic contribution of the suffix in prefixed verbs is understood as strongly reduced. Notice, however, that Plungjan is not concerned with prefixed semelfactives as such. His criterion for completives is their semantics, namely that they describe the completion of a telic process. Not all the verbs in this group are prefixed (*vernut'* 'return once'), while some prefixed verbs may potentially not be included into it.

#### **1.4.2.5 Makarova and Janda (2009)**

Makarova and Janda present the only empirical study of Pref-Nu verbs that I am aware of. The main focus of their study is *-nu-*semelfactives (referred to as "Single Act Perfectives"), and the fact that they can have related Pref-Nu verbs (which they call "Specialized Single Act Perfectives") comes in as a secondary point that is discussed in one section of their article (Makarova and Janda 2009: 92-97). Their database contains 164 Pref-Nu verbs. Makarova and Janda make the following observations:

First, they argue that Pref-Nu verbs are "a type of Specialized Perfective that retains the semelfactive meaning of a Single Act Perfective" (ibid: 93). In other words, unlike the other researchers mentioned above, they understand Pref-Nu verbs as being semelfactive. The resemblance of Pref-Nu verbs to Specialized Perfectives comes from the observation that the prefix changes the lexical meaning of the verb, and that they express a result. Makarova and Janda write: "the meaning of a Specialized Single Act Perfective is more complicated, combining both a specialized resultative meaning and semelfactivity, than the meaning of either a Specialized Perfective or a Single Act Perfective" (ibid: 97).

Second, Makarova and Janda find that the semantics contributed by the prefixes in Pref-Nu verbs is identical to what we find in Specialized Perfectives. In both verb types, *vz-* can, for instance, yield the idea of suddenness (cf. *vzdumat'sja* 'suddenly take into one's head' from *dumat'* 'think' and *vskriknut'* 'give a sudden shout' from *kriknut'* 'shout once') and *pod-* can attenuate (cf. *podlečit'* 'cure a little' from *lečit'* 'cure' and *podprygnut'* 'make a little jump' from *prygnut'* 'jump once'). Based on their data, the researchers conclude that the prefix in Pref-Nu verbs "either is semantically related to semelfactivity or is used to define the path of a movement"

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<sup>22</sup> "Očevidnoe aspektual'no-semantičeskoe različie meždu "kvantovym" tolknut' [...] i "kompletivami" podtolknut' ili vytolknut', bukval'no na glazax terjajuščimi tot oreol "sžatoj pružiny", kotoryj tak xorošo oščuščajetsja v osnovnyx kontekstax upotreblenija -nu.-" - Translation to English by MN.

(ibid: 95) and that “[o]ther meanings associated with these prefixes, such as the meaning of excessive action expressed by *za-* and *pere-* (cf. *zakormit* ‘overfeed’, *pereigrat* ‘overdo’) are not present” (ibid).

The main goal of Makarova and Janda’s analysis is to describe the role of Pref-Nu verbs in the cluster model, since, in the original cluster model (Janda 2007), they were not considered. Emphasis is therefore placed on the fact that Pref-Nu verbs exist and how they are connected with the other verb types in the cluster model. A few Pref-Nu verbs are illustrated with corpus examples, but none of them are studied in depth.

#### **1.4.2.6 Summary**

To summarize, most of the scholars reviewed above are concerned with prefixed verbs derived from, or related to, *-nu-*semelfactives, but most of them furthermore mention verbs that have no related Only-Nu verb, at least not in contemporary Russian. With the exception of Makarova and Janda, the given scholars agree that the addition of a prefix normally cancels out semelfactive meaning or, in Plungjan’s analysis – the notion of ‘quickly’ (*bystro*). From Townsend’s account it appears that Pref-Nu verbs are derived exclusively from the older type of semelfactives, which in themselves are less semelfactive than the newer type. Only Makarova and Janda’s study involves more than a few verbs, and only this study is corpus-based. None of the studies explore the actual use of Pref-Nu verbs in much detail. In short, the opinions about Pref-Nu verbs vary, and they are not based on large-scale analyses of corpus data.

#### **1.4.3 Semantics of Pref-Nu as compared with Pref-Only**

Let us now turn to the claims that have been made about the semantics of Pref-Nu verbs in comparison to Pref-Only verbs. Both of these verb types have a prefix, but the former type furthermore has *-nu-*, while the latter type lacks this suffix. In this way, comparison of Pref-Nu and Pref-Only shows us the potential semantic contribution of the suffix *-nu-*.

##### **1.4.3.1 Plungjan (2000)**

Recall from Section 1.4.2.4 that Plungjan analyzes the suffix *-nu-* in what he calls “completives” as semantically superfluous and just a marker of perfective meaning. Since it is morphologically possible to derive Pref-Only verbs in the same clusters, Plungjan goes on to argue that completives may have a synonymous perfective verb without *-nu-*, i.e. Pref-Only. The two synonymous perfectives have the same secondary imperfective. Only three illustrations of this situation are provided: *povernut* ‘turn’ – *povorotit* ‘turn’ (imperfective: *povoračivat* ‘turn’), *nastignut* ‘get, overtake’ – *nastič* ‘get, overtake’ (imperfective: *nastigat* ‘get, overtake’), and *vytrjaxnut* ‘shake out’ – *vytrjasti* ‘shake out’ (imperfective: *vytrjaxivat* ‘shake out’). Whether the given situation occurs frequently is not commented on, and the claim that the verbs are synonymous is not backed up with corpus examples.

#### 1.4.3.2 Dickey (2001)

Dickey's work investigates the existence and semantics of prefixed perfective *a*-stem/*n*-stem doublets across the Slavic languages. Prefixed *a*-stem perfectives are derived from a base imperfective and correspond in Russian to what I call "Pref-Only". Prefixed *n*-stem perfectives are derived from *-nu*-semelfactives and are in Russian what I call "Pref-Nu". The term "doublet" refers to situations where a Pref-Only verb and a Pref-Nu verb have the same root and prefix, e.g. *odtrhat* 'tear off' (*a*-stem) and *odtrhnout* 'tear off' (*n*-stem) in Czech. Dickey's observations are as follows:

First, doublets of this type are by far most common in the western Slavic languages, especially Czech, Upper Sorbian and Slovak: "Eastward of these languages dictionaries attest fewer such doublets" (Dickey 2001: 30). With regard to Russian, Dickey notices that dictionaries may include some doublets, but his consultants do not recognize them as "characteristic of the contemporary language" (ibid: 35). Thus, in order to study doublets in Russian, Dickey argues that one cannot only rely on dictionaries, but also need to consider their actual frequency of use (ibid: 28). Referring to Silina (1982: 259), Dickey admits that certain dialects may retain more perfective doublets than the standard language, but, in general, the situation should not be very widespread in Russian.<sup>23</sup>

Second, in most cases the two perfectives display a systematic relationship, which Dickey refers to as the "distributive/semelfactive distinction": the prefixed *a*-stem (Pref-Only) expresses an action that affects multiple objects, while the prefixed *n*-stem expresses a single action directed towards a single object. To illustrate the difference, consider the following examples provided by Dickey from Czech, Upper Sorbian and Slovenian where the first verb has the *a*-stem and the second verb has the *n*-stem:

(6) Czech:

*Odtrhat listy* 'tear off the pages'

*Odtrhnout list z kalendáře* 'tear a page off a calendar'

(Dickey 2001: 27)

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<sup>23</sup> At an earlier stage in her argument, Silina mentions that Pref-Nu and Pref-Only verbs frequently existed side by side in the initial verb system, but that they were lost very early so that they hardly occur even in the oldest manuscripts dating from the 11-12<sup>th</sup> centuries (Silina 1982: 248-249). She also points out that specialists on Old Church Slavonic tend to treat Pref-Nu and Pref-Only verbs as parts of the same "mixed" paradigm (*kontaminirovannaja paradigma*) where Pref-Nu primarily is used in infinitive and non-past forms, while Pref-Only is used in past tense (ibid: 250). However, as mentioned in Section 1.4.2.3, a problem with Silina's account is that she treats verbs derived from semelfactives and verbs derived from inchoatives together. She also includes verbs derived with a prefix and the suffix *-nu-* in one operation. From her illustrations, it seems that most of her argument concerns other types of verbs than those relevant for myself and Dickey. Silina does not discuss the possibility of a semantic difference between Pref-Nu and Pref-Only.

- (7) Upper Sorbian:  
*Dočerpać* ‘scoop out [in several motions/several objects]’  
*Dočerpnyc* ‘scoop out [in one motion]’  
 (Dickey 2001: 30)
- (8) Slovenian:  
*Odvihati rokave* ‘roll up sleeves’  
*Odvihni hlačnico* ‘roll up a pant leg’  
 (Dickey 2001: 33)

Third, Dickey notices that the given semelfactive/distributive distinction between the two verb types is most consistent in the western languages where such doublets are most common. In Polish, which has fewer doublets, this distinction is found to be “less stable” (ibid: 31), and in Ukrainian and Belorussian the few doublets that exist “are only sometimes” found to follow this pattern (ibid). With regard to Russian, Dickey’s main observation is that doublets are uncommon. Russian prefixed *a*-stems (Pref-Only) may take on a separate lexical meaning, e.g. *vytjagat* ‘extract through a lawsuit’ (cf. *vytjanut* ‘pull out’), and in this way differ from the prefixed *n*-stem not in terms of distributivity, but in lexical meaning.

#### 1.4.3.3 Feldstein (2007)

Feldstein mentions the opposition between Pref-Nu and Pref-Only in his analysis of so-called dual simplexes and their prefixation in Russian. Feldstein discusses five groups of such verbs. In three of them, illustrated below, the prefixed perfectives display an opposition between single vs. multiple instances. The first group involves motion verbs (Table 1), the second group involves stems in *-i-* and *-aj-* (Table 2), and the third group involves stems in *-nu-* and *-aj-*, which create Pref-Nu and Pref-Only verbs (Table 3). In the third group, the *-nu-* stem is arguably derived from the base imperfective, and Feldstein therefore refers to these duals as “unprefixed” rather than “simplex”.

Verb level	Example	Opposition
Simplex stems	<i>lete</i> <sub>-IPF</sub> ‘fly (unidirectional)’ <i>letaj</i> <sub>-IPF</sub> ‘fly (non-directional)’	Directional
Prefixed perfectives	<i>oblete</i> <sub>-PF</sub> ‘fly around some entity’ <i>obletaj</i> <sub>-PF</sub> ‘fly/travel all over’	Single vs. multiple instances

Table 1 Prefixation of dual simplexes in motion verbs.

Verb level	Example	Opposition
Simplex stems	<i>brosi</i> <sub>-PF</sub> ‘throw’ <i>brosaj</i> <sub>-IPF</sub> ‘throw’	Aspectual
Prefixed perfectives	<i>vbrosi</i> <sub>-PF</sub> ‘throw into in one turn’ <i>vbrosaj</i> <sub>-PF</sub> ‘throw into in some turns’	Single vs. multiple instances

Table 2 Prefixation of dual simplexes with *-i-* and *-aj-* stems.

Verb level	Example	Opposition
Unprefixed stems	<i>kinu</i> -PF ‘throw’ <i>kidaj</i> -IPF ‘throw’	Aspectual
Prefixed perfectives	<i>zakinu</i> -PF ‘throw sth. (far away)’ <i>zakidaj</i> -PF ‘cover by throwing onto’	Single vs. multiple instances

**Table 3** Prefixation of dual unprefixed *-nu-* and *-aj-* stems.

The opposition between prefixed perfectives that describe a single instance and prefixed perfectives that describe multiple instances appears similar to what Dickey refers to as the “distributive/semelfactive distinction”. Thus, with regard to the semantic difference between Pref-Nu and Pref-Only, Dickey and Feldstein agree.

However, unlike Dickey who evaluates the extent of what he calls “doublets” as very marginal in Russian, Feldstein presents the situation as widespread and important for the structure of the language (Feldstein 2007: 17, 20). Second-language learners of Russian should, in his view, not only be taught the complexity of motion verbs, shown in Table 1 (which is always part of the curriculum), but also the corresponding complexity of verbs that do not describe motion (ibid: 15).

As for the semantic properties of non-motion dual simplexes, Feldstein observes that they usually represent multiphasal verbs “such as throwing, grabbing, dumping, breaking, etc... where the *i-* or *nu-* suffixed verbs represent a single phase, and the *aj-* stems are multiphase” (ibid: 20). He furthermore finds that the prefix often yields an identical spatial meaning in both verbs, for example, ‘into’ in *vbrosit* ‘throw into (in one turn)’ and *vbrosat* ‘throw into (in multiple turns)’, or that a given spatial or Aktionsart meaning of a prefix combines only with one of the two stems. However, only five of the illustrations he provides involve Pref-Nu and Pref-Only verbs, and, at least in the Russian National Corpus, the relevant Pref-Only verbs do not occur.<sup>24</sup> Contrary to what Feldstein himself asserts then, there is no clear evidence that dual verbs of this type (Pref-Nu and Pref-Only) actually are a large and productive group in the contemporary language. This, in turn, goes hand in hand with Dickey’s claim that prefixed doublets occupy a very marginal place in Russian.<sup>25</sup>

<sup>24</sup> Feldstein’s five examples are: *protisnut* ‘squeeze through’ (69 ex.) – *protiskat* (2 ex.), *pristuknut* ‘whack’ (288 ex.) – *pristukat* (2 ex.), *otčerpnut* (1 ex.) – *otčerpāt* (3 ex.), *vsunut* ‘shove into’ (692 ex.) – *vsovat* (0 ex.), *ottolknut* ‘push away’ (2782 ex.) – *ottolkat* (6 ex.). These corpus frequencies were collected in September 2019 and are based on the whole main corpus of the RNC. English glosses are given only for verbs attested in at least ten corpus examples.

<sup>25</sup> Going further back in history, in his *Praktičeskaja russkaja grammatika* (“Practical Russian Grammar”) from 1827, Greč made an observation that resembles Feldstein’s position. Greč suggested that Pref-Nu and Pref-Only verbs represent different aspects – the semelfactive perfective aspect (*odnokratnyj soveršennyj vid*) and the undetermined perfective aspect (*neopredelennyj soveršennyj vid*). The semelfactive aspect, he said, expresses “that the action is completely finished, will completely finish or should completely finish, with one performance, one strike, one movement” (Greč 1827 [1834]: 174). By analogy, the undetermined aspect can be understood as expressing that the action is completely finished, will completely finish or should completely finish, with an *undetermined* number of performances, strikes or movements. To

#### 1.4.3.4 Summary

Plungjan, Dickey and Feldstein explore the relationship between Pref-Nu and Pref-Only verbs from different angles and arrive at different conclusions. Plungjan claims that the suffix *-nu-* simply is a perfective marker and that Pref-Nu and Pref-Only, if they have the same stem and prefix, are synonymous. Dickey analyzes the phenomenon in light of the aspectual system in Slavic languages overall. He argues that prefixed *n*-stems (Pref-Nu) and prefixed *a*-stems (Pref-Only) typically involve a semelfactive/distributive distinction of meaning, but assumes that the number of such instances in Russian is extremely low and that the cases that do exist not necessarily follow this pattern. Feldstein offers a similar analysis of the semantic distinction between the verbs (single vs. multiple instances). Contrary to Dickey, he claims that Russian has many examples of this phenomenon, but the illustrations he uses are hardly attested in the corpus. In summary, we see that the researchers considered in this section have expressed a variety of opinions - largely without involving any large-scale corpus data.

#### 1.4.4 What should count as a Pref-Nu verb?

With the exception of Silina and Plungjan, all the scholars mentioned above are specifically concerned with prefixations of *-nu*-semelfactives. Thus, as a criterion for Pref-Nu verbs, one could say that they need to be derived from a *-nu*-semelfactive. At first glance, this appears to yield a good category “criterion” to work with, especially from the perspective of a study like the one at hand. In practice, however, this criterion is far from straightforward.

First, semelfactivity is arguably a gradual notion with prototypical and much less typical representatives (Neset 2013). In part, this may be due to the distinction between so-called older and newer semelfactives (Townsend 1975: 104-105), but even within these classes, we find different degrees of semelfactive meaning. *Bodnut* ‘butt once’, for instance, clearly expresses one “quantum” of a multiphasal activity and is in this way a more typical semelfactive than *spekul’nut* ‘speculate once’, although both belong to the newer, “more obviously semelfactive” type, according to Townsend (ibid). In other cases, a verb is considered semelfactive in

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illustrate, Greč provides a list of ten perfective doublets/prefixed dual stems. However, in only two of them I find examples of both verbs in the RNC (no restriction on time period), namely *sdunut* ‘blow off’ – *sdut* ‘blow off’ and *zaxlopnut* ‘slam shut’ – *zaxlopat* ‘begin to slam’. This does not “prove” that the remaining eight doublets do not exist/have not existed, but indicate that they at least have been very marginal in use over the last few centuries. With reference to Greč’s observation, Vinogradov (1947: 527) states that perfective verbs involving this opposition are becoming increasingly rarer in the modern language and that they rather develop different lexical meanings. Vinogradov does not provide illustrations of his claim. Ferrell (1951) report that his native speaker informants “on the general theoretical point” agree that verbs like *vyboltat* ‘reveal, blab’ (Pref-Only) represent a series action (e.g. *on vyboltal vse naši sekrety* ‘he blabbed all our secrets’), while *vyboltnut* ‘blab’ (Pref-Nu) expresses one unit (e.g. *on sljučajno vyboltnul sekret* ‘he accidentally blabbed the secret’) (ibid: 122). In practical usage, however, his informants claim to use the verbs interchangeably, and Ferrell argues that “[o]nly a large number of examples from contemporary literary sources could do much toward answering the question, To what degree the difference is real and widely observed and to what degree it has ceased to exist as a living force?’. All of this agrees with Dickey’s claim that although Russian *a*-stem/*n*-stem doublets may occur in dictionaries, they are not widespread in use and the ones that exist may not fully conform to the semelfactive/distribute distinction.

one context, but not in another (Isačenko 1960 [2003]: 255-256). Moreover, dictionaries and other resources do not always regard the same verbs as semelfactive, and many verbs with a low token frequency in corpora are not included in dictionaries at all. These issues alone make it difficult to determine which verbs can be analyzed as prefixations of *-nu*-semelfactives.

Second, many *-nu*-semelfactives have been lost while their prefixations remain. *Razanut'* 'open jaws' was, for instance, derived from the semelfactive *\*zinut'* before this verb was replaced by *zevnut'* 'yawn once' (Isačenko 1960 [2003]: 264-265). Isačenko finds no difficulty in analyzing these verbs together with Pref-Nu verbs that have a corresponding *-nu*-semelfactive in modern Russian. However, although Isačenko claims that this situation is widespread, he himself provides only a few illustrations of it, and the few comments that I have found in other works are sometimes contradictory. To illustrate, Kuznetsova and Makarova (2012: 168) include *svergnut'* 'overthrow' among their prefixed *-nu*-semelfactives and Plungjan (2000: 7) mentions the prefixations of *\_stignut'* as examples of "completives", but Townsend (1975: 108) lists both *svergnut'* 'overthrow' and the prefixations of *\_stignut'* among verbs that do not occur without a prefix and that probably involve the inchoative suffix *-nu-* and/or are of Church Slavonic origin. As has been mentioned, Silina (1982: 248) does not see a reason to distinguish between prefixations of *-nu*-semelfactives, *-nu*-inchoatives and *-nu*-stems that have never existed without a prefix. Her work includes examples of many verbs with a prefix and *-nu-*, but she does not specify which verbs historically are related to a semelfactive. All of these observations further complicate the picture of what should count, and not count, as a Pref-Nu verb.

Third, a number of Russian verbs represent what the Academy Grammar (Švedova et al. 1980) calls "diminutive-attenuative Aktionsart" (*umen'sitel'no-smjagčitel'nyj sposob dejstvija*), henceforth "diminutives". According to this grammar, these verbs express "to perform the action slightly, with little intensity, over a short period of time" (*proizvesti dejstvie slegka, s nebol'soj intensivnost'ju, v tečenie nedolgogo vremeni*, *ibid*: 597, §1422). Diminutives look like Pref-Nu verbs insofar as they involve a prefix and the suffix *-nu-*, e.g. *vsplaknut'* 'shed a tear'. However, unlike Pref-Nu verbs, they are understood as derived from the base imperfective (e.g. *plakat'* 'cry') by means of a circumfix consisting of a prefix and *-nu-* (e.g. *vz-...-nu-*), and, in many cases, they do not have a corresponding *-nu*- semelfactive. In contemporary Russian, there is, for instance, no *\*plaknut'* (*ibid*).

The problem with diminutives is that they are difficult to tease apart from Pref-Nu verbs. At least five challenges can be mentioned:

Semantics: Not all verbs mentioned as diminutives in the scholarly literature are clearly diminutive in meaning, and, as a result, a given verb may be classified in different ways. By way of example, *spolosnut'* 'rinse' is regularly mentioned as a diminutive derived from the imperfective *poloskat'* 'rinse' with the circumfix

*s-...-nu-* (e.g. Zalznjak and Šmelëv 2000: 120). The fact that the meaning of *spolosnut'* 'rinse' does not appear diminutive might be the reason why Isačenko (1960 [2003]: 264) understands this verb to be a prefixed *-nu-*semelfactive that has lost the corresponding unprefixed verb with time (*polosnut'*).

Morphology: Just like it is possible to imagine that *spolosnut'* 'rinse' was derived from a historical verb *polosnut'*, one could imagine that *vsplaknut'* 'shed a tear' and other diminutives at some point in history were derived from a *-nu-*semelfactive, e.g. *plaknut'*. Without more data at hand, how these verbs appeared in the language and through which process, becomes speculation.

Derivation: If we accept that Pref-Nu verbs are derived with a prefix from Only-Nu and that verbs with diminutive or close-to-diminutive meaning are derived with a circumfix from the corresponding base imperfective, this means that closely related verbs, such as *otpugnut'* 'scare away' and *pripugnut'* 'scare slightly', are derived in different ways: *otpugnut'* 'scare away' is derived from *pugnut'* 'scare once' with the prefix *ot-* and *pripugnut'* 'scare slightly' is derived from *pugat'* 'scare' with the circumfix *pri-...-nu-*.

Illustrations of the category: In descriptions of diminutives, scholars tend to present the same list of about 15-20 verbs (cf. Švedova et al. 1980: 597, §1422 and Zalznjak and Šmelëv 2000: 120). It is unclear whether other prefixed *-nu-*perfectives with a diminutive or attenuative meaning should be connected with this category, and if so, where the boundary is to be drawn (cf. *spolosnut'* 'rinse').

Fuzzy boundaries with other Aktionsart categories: The illustrations given of diminutives sometimes appear in the descriptions of other Aktionsart meanings too. By way of example, *vskriknut'* 'shout suddenly', which is often mentioned among diminutives, is also described as an ingressive (Avilova 1976: 272), in this dissertation called "**v(o)z-semelfactive**".<sup>26</sup> *Vskriknut'* has also been analyzed as a Pref-Nu verb (Isačenko 1960 [2003]: 263, Makarova and Janda 2009: 95-96). All of this testifies to the heterogeneous nature of verbs associated with the diminutive group.

Now, one could ask whether it really matters if a perfective verb with a prefix and *-nu-* is a prefixation of a *-nu-*semelfactive or derived with a circumfix from an imperfective. How can we be sure that a verb is derived in one way or the other? And do these formalities actually reflect speakers' mental grammars? These questions clearly go beyond the scope of this dissertation, and I will therefore not

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<sup>26</sup> The term "**v(o)z-semelfactive**" builds on Endresen (2014)'s distinction between the ingressive and semelfactive meanings of the prefixes *vz-* and *voz-*. The ingressive meaning expresses a "gradual entry into a new state of affairs" (ibid: 230) and is relevant in such verbs as *vozljubit'* 'begin to love' from *ljubit'* 'love'. The semelfactive meaning describes an abrupt, instantaneous and unpredicted action, such as *vzlajat'* 'bark once' from *lajat'* 'bark' (ibid). Since both these meanings can be seen as concerned with the beginning of an action, a distinction between them has not always been made, and, in earlier works, the two prefix meanings have often been treated together under the label "ingressive" (cf. Zalznjak and Šmelëv: 110).

attempt to answer them here. However, what all the points in this section show is that determining which verbs should count as a Pref-Nu verb and which verbs should not is a more complex issue than may be evident at first glance, and to work around it we need a more specific criterion than “prefixed verbs derived from *-nu*-semelfactives”. Three approaches can be envisioned:

The “liberal approach” includes all perfective verbs with a prefix and the suffix *-nu-* (excluding derivations of imperfective *-nu*-verbs with inchoative meaning). This approach is adopted by Kuznetsova and Makarova (2012) and Plungjan (2000). Here, verbs are included even if the corresponding unprefixated *-nu*-semelfactive is not attested in modern Russian. An “intermediate approach” is exemplified by Isačenko (2003/1960: 264-265) who includes a prefixed verb if he believes that the unprefixated *-nu*-semelfactive has existed at an earlier point. In a “conservative approach”, verbs are regarded as Pref-Nu verbs only if they have a corresponding *-nu*-semelfactive in the contemporary language (Makarova and Janda 2009).

In this dissertation, I will follow the “conservative” approach because it gives the “cleanest” data. The “liberal” and “intermediate” approaches open up for more subjectivity in the sense that prefixed *-nu*-verbs without an unprefixated counterpart in modern Russian, as just shown above, sometimes can be analyzed in different ways. My working criteria for Pref-Nu verbs will therefore be as follows:

Pref-nu verbs:

- Are perfective
- Have a prefix
- Have the suffix *-nu-*
- Have a related Only-Nu verb in Contemporary Standard Russian

The last of these criteria is impossible to apply with 100% certainty, since many words that do not exist in dictionaries or corpora nevertheless may occur in usage. For the purposes of the present study, I will assume that an Only-Nu verb related to a Pref-Nu verb exists in Contemporary Standard Russian if it is attested in the modern subcorpus of the RNC (i.e. texts created in  $\geq 1950$ ).

Notice that the “conservative” approach does not completely filter out diminutives: although it does not accept *vsplaknut'* ‘shed a tear’, since *\*plaknut'* does not exist, it includes *pripugnut'* ‘scare slightly’ because of *pugnut'* ‘scare once’. Verbs like *razinut'* ‘open jaws’, which likely have been derived from a semelfactive before this verb disappeared, are also not included.

To further reduce subjectivity I will, due to the gradual nature of semelfactive meaning, consider unprefixated verbs with the suffix *-nu-* (Only-Nu) semelfactive as long as they are perfective. This goes regardless of whether they are prototypical of the semelfactive category (e.g. *mignut'* ‘blink once’), less typical (e.g. *dvinut'* ‘move once’), or usually not classified as semelfactive in dictionaries (e.g. *vernut'*

‘return once’). What is important is that they do not involve the inchoative suffix *-nu-* that describes the acquirement of a property and appear in imperfectives. This is also why I prefer to call them “Pref-Nu verbs” and not “prefixed *-nu-*semelfactives”, a term that emphasizes the (prototypical?) semelfactive meaning of the related Only-Nu verbs.

In this dissertation, I do not consider Pref-Nu verbs with the reflexive ending *-sja*, e.g. *pošatnut’sja* ‘stagger, be shaken’ from *šatnut’sja* ‘stagger once’ and *utknut’sja* ‘bury oneself (in)’ from *tknut’sja* ‘hit against’, simply because Pref-Nu verbs without *-sja* already represent so much corpus data.

### 1.5 Research focus

As we can see, although Pref-Nu verbs have been mentioned in a number of works, there have been no studies that analyze them in detail, and there is clearly much more to learn. Three areas stand out as particularly relevant and form the basis for the questions that will be investigated in the remainder of the dissertation:

First, none of the studies mentioned in Section 1.4 seek to shed light on the actual distribution of Pref-Nu verbs in contemporary Russian. Moreover, since the scholars mention only a few Pref-Nu verbs each, we know very little about which verbs this group contains, which semantic classes they belong to, etc. A relevant question is furthermore whether all Only-Nu verbs can derive Pref-Nu verbs or whether this is characteristic only of some of them. Makarova and Janda use empirical data to investigate the prefixes and prefix meanings relevant in Pref-Nu verbs. However, the verb set they base their conclusions on is limited. My dissertation sheds light on these questions by means of extensive corpus data.

Second, while scholars have commented on the semantic differences between Pref-Nu verbs and Only-Nu verbs, I have not been able to find any in-depth case studies that explore the relation between the two types of verbs. The differences that are proposed, are to some extent contradictory (Pref-Nu verbs are semelfactive/less semelfactive than Only-Nu/not semelfactive) and few scholars provide sufficient examples to illustrate their claims. A central goal of this dissertation is therefore to investigate the relationship between Pref-Nu and Only-Nu in detail.

Third, the scholarly literature contains little and, in part, contradictory claims about the semantic relationship between Pref-Nu and Pref-Only. With regard to this latter situation, the scholars are furthermore divided as to its status in Russian (cf. Dickey 2001 and Feldstein 2007). None of the relevant scholars provide large-scale empirical studies to test their claims. In-depth case studies of individual “pairs” are also nowhere to be found. In view of this knowledge gap, my dissertation looks into the relationship between Pref-Nu and Pref-Only.

In addition to this, being limited in scale, none of the above-mentioned studies have involved experimental research to shed light on native speakers’ intuitions about

Pref-Nu verbs compared to other types of perfectives in the Russian language. In my dissertation, the corpus-based studies are backed up with an experiment involving 203 native speakers to see how these two types of data, corpus and experiment, can complement each other and together shed light on the role and meaning of Pref-Nu verbs in modern Russian. In particular, it is interesting to see how native speakers react to verbs that, judging from corpus data, appears to be more or less synonymous.

My dissertation places itself in the tradition of Cognitive Linguistics, which claims that language, rather than being a separate faculty of the mind, is governed by the general cognitive abilities of human beings, such as the way we categorize things based on their similarity with a most typical representative, i.e. a prototype (Rosch 1973), and which insists on a usage-based approach to language study (Langacker 1987: 46, Glynn 2010: 5-6). Cognitive Linguistics was taken into the field of Russian aspectology by Janda (1986), and my dissertation builds on many of the ideas found in her subsequent publications. Like cognitive linguistic works, my studies furthermore explore real language usage (corpus data). At the same time, although my dissertation is strongly influenced by the works of cognitive linguists, I do not set out to test the mental representation of Pref-Nu verbs in the minds of speakers. Rather, I hope to provide a descriptive and practical analysis of Pref-Nu verbs' behavior in contemporary Russian in a way that can be useful both for linguists and second-language learners, in general.

### **1.6 Structure and contribution of this dissertation**

This dissertation has eight chapters. After this introduction to my topic in **Chapter 1**, in **Chapter 2**, I collect all Pref-Nu verbs available in the Russian National Corpus. A set of 254 verbs is selected for the database and forms the basis for all my following studies. This chapter sheds light on the way Pref-Nu verbs are distributed among aspectual clusters, their semantic classes, prefixes and prefix meanings. I argue that Pref-Nu verbs are structured in much the same way as Pref-Only verbs, except that the prefix in Pref-Nu verbs is unnecessary to make the verb perfective. After these first explorations of the basic properties of Pref-Nu verbs, I carry out a series of case studies.

In **Chapter 3**, I zoom in on three aspectual clusters and use corpus data to investigate the use of Pref-Nu verbs vs. Only-Nu verbs in what I call "Nu-dyads". I introduce the Nu-dyad Hypothesis according to which Pref-Nu verbs have a more specific ("narrow") lexical meaning than Only-Nu verbs and describe either an action that culminates in a result or Aktionsart. Only-Nu verbs are, by comparison not concerned with a result. Although I find much support for this hypothesis in my data, I also find instances that are more difficult to explain, and much depends on how one defines "resultativity". As an idea for the future I suggest that Nu-dyads, at least in some cases, possibly function as a privative opposition or as a way of foregrounding or backgrounding the result of the action.

In **Chapter 4**, I turn to “Pref-dyads”, that is, Pref-Nu verbs and Pref-Only verbs that have the same stem and prefix. I focus on the 20 Pref-dyads that are most widely attested in the RNC and test the Pref-dyad Hypothesis, which, following Dickey (2001) and Feldstein (2007), predicts a single instance/multiple instance distinction between the two verb types. My findings for non-synonymous Pref-dyads yield support to this hypothesis; my findings for synonymous Pref-dyads are more varied.

Based on the insights from Chapters 3 and 4, in **Chapter 5**, I discuss three situations of linguistic rivalry involving Pref-Nu verbs and compare these with more well-known cases of rivalry in Russian verbs. I also discuss how rival forms have been, and can be, studied, and propose that corpus-based studies can be useful to combine with psycholinguistic experiments.

**Chapter 6** continues the study of Pref-dyads in Chapter 4 insofar as I investigate Pref-dyads by means of a psycholinguistic experiment involving native speakers’ acceptability scores of Pref-Nu and Pref-Only verbs in authentic contexts from the Russian National Corpus. My primary focus is on instances of near-synonymy. An experiment of this kind is unable to “prove” that two verbs are synonymous, but it can potentially shed light on whether native speakers, on the contrary, perceive them as clearly different. The results of the experiment indicate that the two verbs in synonymous Pref-dyads represent different nuances of meaning, at least in most of the relevant contexts.

**Chapter 7** presents and discusses the acceptability scores concerning Nu-dyads from the same experiment. Although most of the relevant verbs are relatively easy to distinguish semantically, based on the results of the experiment, I suggest that the interaction between Only-Nu and Pref-Nu verbs play out in many different ways, and five of these “situations” are discussed and illustrated with examples from the experiment.

In **Chapter 8**, I recapitulate my findings and reflect upon how they contribute to the field of Russian aspectology. In addition, I propose avenues for future research.



## 2 Pref-Nu verbs in the RNC: First explorations of the category

Are there many Pref-Nu verbs in Russian? Which kinds of aspectual clusters do they appear in? Which types of lexical meanings do they tend to express? Can we speak of a category with internal structure? In this second chapter of the dissertation, I explore these and other basic questions about Pref-Nu verbs by means of data from the Russian National Corpus (RNC) to gain a bird's eye perspective on this verb category.<sup>27</sup>

My findings are manifold. First, my corpus data confirm the heterogeneous nature of perfectives with a prefix and *-nu-* discussed in Section 1.4.4 and, with that, the need to use a more specific criterion for Pref-Nu verbs than “prefixations of *-nu-*semelfactives”. I identify a number of subgroups in my corpus data. Only one of these subgroups matches all the criteria for Pref-Nu verbs and is considered in this dissertation. Second, my investigation reveals that what I classify as Pref-Nu verbs form a far from trivial verb group with several hundred different verbs attested in the corpus. Of these, 254 verbs are selected to be part of the present study. Third, Pref-Nu verbs represent a number of semantic classes, but primarily express movement and physical impact. Fourth, I discover that the prefixes in Pref-Nu verbs contribute semantic content in much the same way as they do in other perfectives, that is, Pref-Only verbs. However, the big difference is that the prefixes in Pref-Only verbs furthermore make the verbs perfective, while the prefixes in Pref-Nu verbs do not change the verbs' aspect. Fifth, my data confirm that Pref-Nu verbs tend to have an imperfective correlate.

This chapter is structured as follows. In Section 2.1, I give a detailed account of how I collected Pref-Nu verbs from the RNC and the various considerations that were made in this process. In Section 2.2, I examine the verbs' token frequencies in the corpus, show how they are distributed among aspectual clusters, and present an overview of the clusters in question. In Section 2.3, I explore the semantic classes of Pref-Nu verbs in the RNC, and, in Section 2.4, I consider the relationship between “cluster size” (the number of Pref-Nu verbs in a cluster) and semantic class. Section 2.5 looks into the prefixes and prefix meanings relevant in Pref-Nu verbs. Derivation of secondary imperfectives is discussed in Section 2.6. In Section 2.7, I summarize my findings and conclusions.

### 2.1 Collection and selection of data

In order to get a complete overview of all Pref-Nu verbs in the RNC, a manual search was carried out for every prefix in combination with the verb ending *-nut'*, e.g. *вы\** & *\*нуть*.<sup>28</sup> This dissertation focuses on Pref-Nu verbs in Contemporary

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<sup>27</sup> The Russian National Corpus is available at [www.ruscorpora.ru](http://www.ruscorpora.ru)

<sup>28</sup> For the prefixes *iz-*, *raz-*, *voz-* and *vz-* separate searches were carried out for the voiced and voiceless variants of the prefixes, e.g. *из\** & *\*нуть* and *ис\** & *\*нуть*. Some prefixed verbs have a fleeting vowel

Standard Russian, and the searches were therefore limited to texts created after 1950, often referred to as the “modern subcorpus” or, in this dissertation, “the RNC (years 1950-2017)”. Taken together, these searches yielded 1,269 unique lemmas and 533,406 attestations.<sup>29</sup> In this section, I describe what this group of verbs contained and which of these verbs were included in the database for further study.

In line with the criteria of the “conservative” approach outlined in Section 1.4.4, it was crucial that every verb in the study is perfective, involves a prefix, the suffix *-nu-*, and have a related Only-Nu verb in the corpus. To filter out verbs that do not meet all of these criteria, all 1,269 verbs were considered individually. Based on this examination, I identified the subgroups in Figure 3. The subgroup relevant for my purposes is highlighted in grey.

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between the prefix and the verb stem, such as *-o-* in *votknut'* ‘stick into’. This was not a problem for the given searches, since the prefix is still there.

<sup>29</sup> The corpus searches were carried out in November 2017.

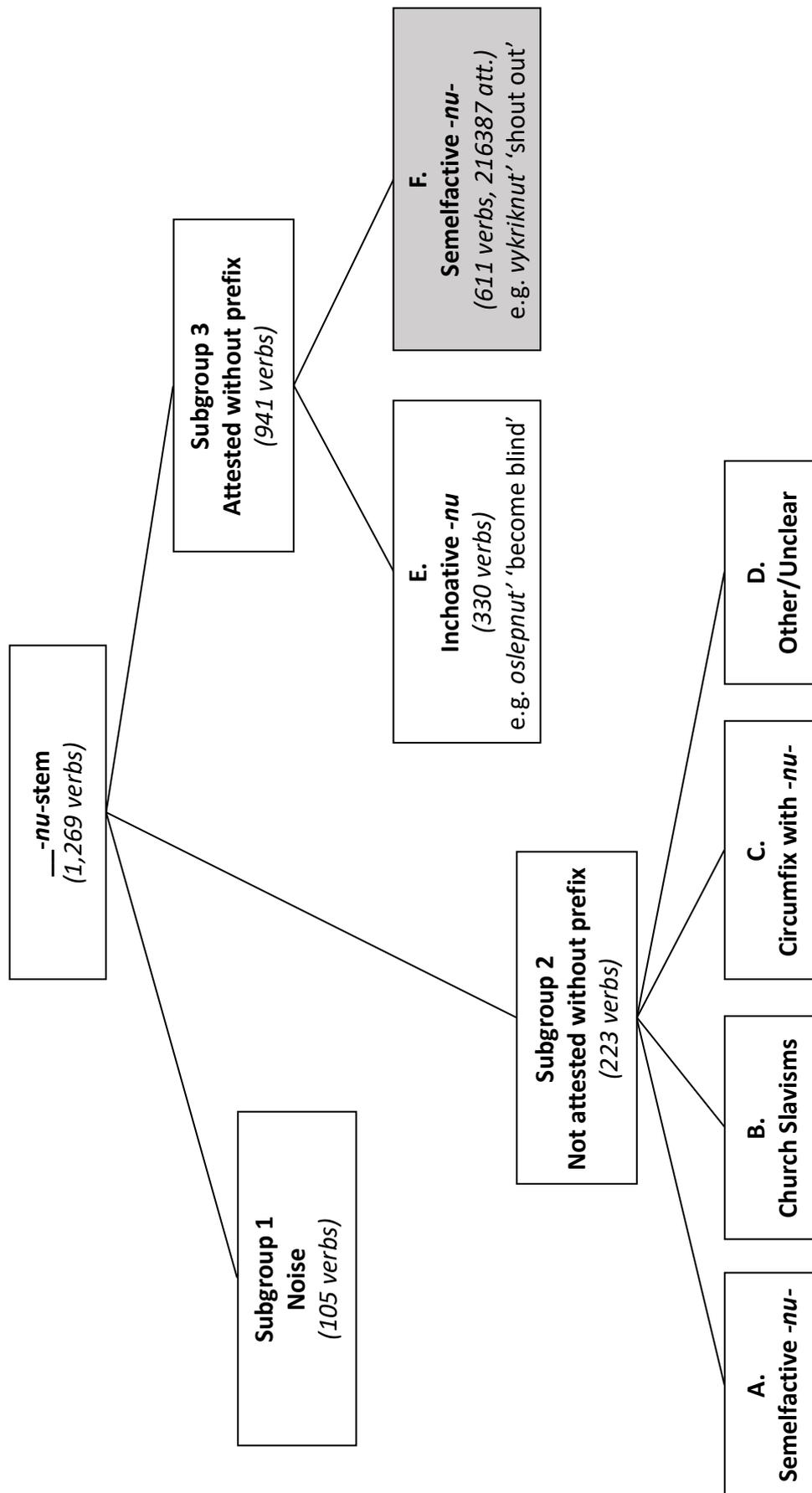


Figure 3 Subgroups among the 1,269 verbs in the RNC search output.

Subgroup 1 represents “noise” and was excluded. Noise was mostly caused by verbs like *slepnut* ‘become blind’ and *užasnut* ‘horrify’ where the first letters, here *s* and *u*, are part of the stem and not a prefix, as opposed to the first letters in verbs like *sdelat* ‘do’ (from *delat* ‘do’) and *uexat* ‘drive away’ (from *exat* ‘drive’). In addition, a few verbs with very low token frequencies were annotated incorrectly in the corpus: the four examples of *pobašljanut* actually involve forms of the verb *pobašljat* ‘pay’, the one example of *vybuxnut* is actually an attestation of the noun *vybux* ‘explosion’, etc.

Subgroup 2 contains verbs that do not have an unprefixated counterpart in the RNC. Thus, they do not meet the criteria for Pref-Nu verbs and were not included in my database. This subgroup is strongly heterogeneous, and it is useful to describe it in terms of four even smaller groups, in Figure 3 marked as A through D. In the following, I provide some illustrations of each group, but notice that it is not always clear whether a given verb represents group A, B, C or D. For this reason, in Figure 3, I do not specify the number of verbs the four groups contain individually. This is also an additional reason why I do not include the verbs in group A that arguably involve the semelfactive suffix *-nu-* (as discussed in Section 1.4.4).

Group A includes verbs that historically are related to an unprefixated verb with the semelfactive suffix *-nu-*. These are verbs like *razinut* ‘open jaws’ that are derived from a *-nu-*semelfactive that is no longer in use (cf. *\*zinut* ‘yawn once’, see Isačenko 1960 [2003]: 264). Like other verbs with the semelfactive *-nu-* they retain the suffix in past tense forms, e.g. *on razinul rot* ‘he opened his mouth’.<sup>30</sup>

Group B contains verbs like *voskresnut* ‘resurrect’, *isčeznut* ‘disappear’ and *issjaknut* ‘expire’ that are of Church Slavonic origin (Townsend 1975: 108). Many of them are derived from the same stems, e.g. *otverznut* ‘open’ and *razverznut* ‘open wide’; *svergnut* ‘overthrow’, *nizvergnut* ‘defeat’ and *podvergnut* ‘subject’; *istorgnut* ‘throw out’ and *ottorgnut* ‘snatch’; etc. The semantics of *-nu-* in these verbs is less clear, but both Townsend (ibid) and Vinogradov (1947: 438) suggest that the inchoative suffix *-nu-* may be relevant, and several of these verbs drop *-nu-* in past tense forms just like inchoatives do, cf. *on isčez* ‘he disappeared’ and the inchoative *on oslep* ‘he became blind’.

In Group C, we find verbs that usually are analyzed as diminutives derived from the base imperfective with a circumfix (Švedova et al. 1980: 597, §1422), for example *prixvornut* ‘be a little sick’ (*pri-...-nu-*), *spolosnut* ‘rinse’ (*s-...-nu-*), *vzdremnut* ‘take a little nap’ (*vz-...-nu-*), *prostirnut* ‘wash a little’ (*pro-...-nu-*), etc. For *spolosnut* ‘rinse’, a corresponding unprefixated *-nu-*perfective *polosnut* (*nožom*) ‘slash once (with a knife)’ exists, but the prefixed and unprefixated verbs seem

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<sup>30</sup> Notice that this group includes prefixations of *\_dvignut* (*spodvignut* ‘incite’, *vozdvignut* ‘erect’, etc.). In previous times, *\_dvignut* was used in its unprefixated form, but with time it was replaced by *dvignut* ‘move’ due to the law of open syllables (*zakon otkrytogo sloga*) that reduced the number of closed syllables, often by deleting syllable-final consonants, such as *-g-* in *dvignut* (Garibjan 2005: 25-30, Nessel 2015: 200ff).

etymologically unrelated and are therefore connected with different aspectual clusters: *spolosnut'* 'rinse' belongs to the cluster of *poloskat'* 'rinse', while *polosnut'* 'slash once' is part of the cluster of *polosovat'* 'flog'.

The remaining verbs that do not have a corresponding unprefixated *-nu*-verb in the RNC fall into Group D that I have called "Other/Unclear". Many of these are found in less than a handful of examples and are difficult to interpret in terms of morphological composition and semantics. The unintelligible verb *otbuknut'* is, for instance, attested in one corpus example.

Let us now move to Subgroup 3, which is in the right part of Figure 3. These are the prefixated verbs that have a corresponding unprefixated *-nu*-verb in the RNC. There are two subgroups.

In the leftmost group we find derivations of imperfective verbs with the inchoative suffix *-nu-*, e.g. *oslepnut'* 'get blind (result)' from *slepnut'* 'become blind (process)' and *vysoxnut'* 'dry up (result)' from *soxnut'* 'become dry (process)'. As pointed out in Section 1.3, these verbs constitute a clearly different group than Pref-Nu verbs, and they were therefore removed from the dataset.

Finally, we have come to the verbs that are relevant in this dissertation, namely the 611 verbs in Group F that have a corresponding Only-Nu verb in the RNC. These are the verbs that pass the criteria for Pref-Nu verbs dictated by the "conservative approach" in Section 1.4.4. By way of example, *vykriknut'* 'shout out' is perfective, has the prefix *vy-* and the suffix *-nu-*, and is related to the Only-Nu verb *kriknut'* 'shout once'.<sup>31</sup>

## 2.2 Aspectual clusters of Pref-Nu verbs

In the present section, I take a closer look at the Pref-Nu verbs in the database and explore how they are distributed among aspectual clusters. I find strong variation: some clusters contain a very high number of Pref-Nu verbs, others involve only one or two. Many Pref-Nu verbs are occasionalisms, defined here as appearing in less than ten corpus examples. For the purposes of the present study, I use the term "size" to refer to the number of Pref-Nu verbs belonging to a given aspectual cluster.

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<sup>31</sup> Two verb roots in the database are "tolerant" in the sense that they occur in imperfective inchoatives as well as in perfective semelfactives: *doxnut'* 'die<sub>IPF</sub>, breathe once<sub>PF</sub>' and *drognut'* 'be chilled<sub>IPF</sub>, shake once<sub>PF</sub>'. The imperfective verbs have stress on the first syllable (*dóxnut'*, *drógnut'*), while the perfectives have stress on the last syllable (*doxnút'*, *drognút'*). For these verbs, prefixations were included in the database if they are semantically related to the perfective verb (e.g. *vdoxnút'* 'inhale') and excluded if they are related to the imperfective (e.g. *sdóxnut'* 'die'). A third verb root, *paxnut'*, is arguably also "tolerant": dictionaries often include an imperfective *páxnut'* 'smell' as well as a perfective *paxnút'* 'blow once' (see also Kuznetsova and Nessel Forth.). For the purposes of the present study, I follow Isačenko (1960 [2003]: 264) who argues that the perfective *paxnút'* is so rare in modern Russian that it can be said to not exist. I therefore considered all prefixations of *paxnut'* to represent Subgroup 2 in Figure 3, i.e. prefixated verbs that do not have a corresponding Only-Nu verb in the RNC.

The 611 Pref-Nu verbs in the database are distributed between 166 aspectual clusters. A given cluster contains between 1 and 21 Pref-Nu verbs. As shown in Figure 4, most of the clusters are small: 67 (40%) have only one Pref-Nu verb and 31 (19%) have two, but the remaining 68 (41%) are larger. Notice that the largest cluster sizes exceed the number of verb prefixes available in the language.<sup>32</sup> The fact that up to 21 Pref-Nu verbs were discovered in a single cluster (the cluster of *kinut* ‘throw once’) is due to prefix stacking, which means that two prefixes are combined, e.g. *o-* and *pro-* in *oprokinut* ‘overturn’ (for a discussion, see Tatevosov 2009).

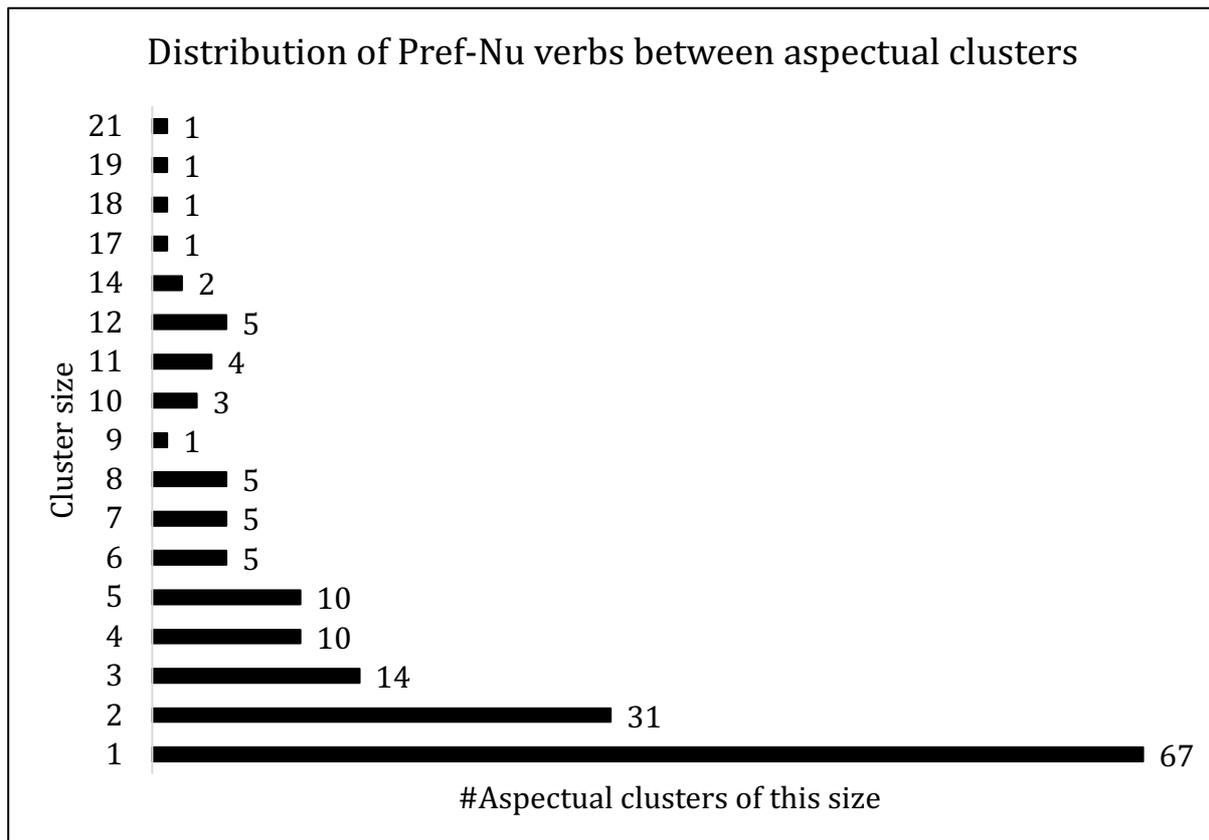


Figure 4 Distribution of 611 Pref-Nu verbs among 166 aspectual clusters.

The distribution in Figure 4 shows how many Pref-Nu verbs were attested in the various aspectual clusters, but takes not into account the verbs’ token frequencies in the corpus. A manual examination of each cluster showed that almost all of them involve some Pref-Nu verbs that are used on a regular basis, such as *zaxlopnut* ‘slam shut’ and *prixlopnut* ‘smack (dead)’ in the cluster of *xlopnut* ‘slam, pop, bang once’, and some occasionalisms, in this case *sxlopnut*, *naxlopnut* and *vyxlopnut*, as shown in Table 4. In Figure 4, *xlopnut* is one of the ten clusters representing size

<sup>32</sup> As mentioned in Section 1.2, the number of verb prefixes in Russian is commonly estimated to 18-20. The fluctuating number comes from the fact that *o-/ob(o)-* and *vz-/voz-* in some accounts are treated as separate prefixes, while in others – as allomorphs of the same prefixes (Krongauz 1998, Endresen 2014).

“5”, but if we ignore the three occasionalisms and consider only those verbs that appear in at least ten corpus examples, we are left with a cluster of size “2”.<sup>33</sup>

Pref-Nu	#Corpus examples
<i>zaxlopnut'</i> ‘slam shut’	1,686
<i>prixlopnut'</i> ‘smack (dead)’	380
<i>sxlopnut'</i> ‘collapse, shut together’	9
<i>naxlopnut'</i> ‘slap on’	1
<i>vyxlopnut'</i> ‘pop out’	1

**Table 4** Token frequencies in the RNC of Pref-Nu verbs in the cluster of *xlopnut'* ‘slam, clap once’.

The cluster of *pljunut'* ‘spit once’ serves as a second illustration of this situation. For this cluster, I find seven Pref-Nu verbs (size” 7”). However, due to their low token frequencies in the corpus, three verbs arguably may be removed, yielding a “real” cluster size of “4”.

Pref-Nu	#Corpus examples
<i>spljunut'</i> ‘spit’	881
<i>vypljunut'</i> ‘spit out’	396
<i>perepljunut'</i> ‘outdo’	143
<i>dopljunut'</i> ‘spit to somewhere’	19
<i>napljunut'</i> ‘give a damn’	5
<i>otpljunut'</i> ‘spit towards something’	5
<i>zapljunut'</i> ‘not care’ <sup>34</sup>	1

**Table 5** Token frequencies in the RNC of Pref-Nu verbs in the cluster of *pljunut'* ‘spit once’.

A number of clusters contain only occasionalisms. The two Pref-Nu verbs in the cluster of *zevnut'* ‘yawn once’ – *dozevnut'* ‘finish a yawn’ and *pozevnut'* ‘yawn’ – are, for instance, both hapaxes (i.e. occur once in the corpus). In other clusters, the Only-Nu verb has a low token frequency too. By way of example, *svoroxnut'* ‘move someone away from’ is found in one corpus example, and the unprefixated *voroxnut'* ‘move once’ – in eight.

These observations are important. First, they show that speakers coin “new” Pref-Nu verbs as needed for a particular situation, much the same way as they do with

<sup>33</sup> Recall from Section 1.4 that I do not consider verbs with the reflexive suffix *-sja*. If I did, the “sizes” of the relevant clusters would be larger. The cluster of *xlopnut'*, for example, includes the reflexive verbs *sxlopnut'sja* ‘collapse’ (44 ex.) and *zaxlopnut'sja* ‘be slammed shut’ (1,370 ex.).

<sup>34</sup> In the relevant context, *zapljunut'* appears to express a similar meaning to that of *pljunut'* in the metaphorical meaning ‘not care’: – *Ta staraja kvartira u vas ne otdel'naja byla? – Otdel'naja, čto vy, kak možno! – Tak začem že vy togda pereezžali, ja vas vse-taki nikak ponjat' ne mogu, ili vy šutite? Davajte-ka lučše vyp'em. – Esli by ne potolki nizkie... – Da pljujte vy na potolki... – Zapljunut' para pustjakov, èto vy verno zametili.* [V. Goljavkin. 1973] “‘Didn’t you have that old apartment to yourself?’” “To myself, of course not!” “Then why did you then move, I don’t understand you at all, or are you joking? Let’s have a drink instead.” “If it wasn’t for the low ceilings...” “Oh, don’t care about the ceilings...” “It’s much easier to stop caring about it, you are right.”

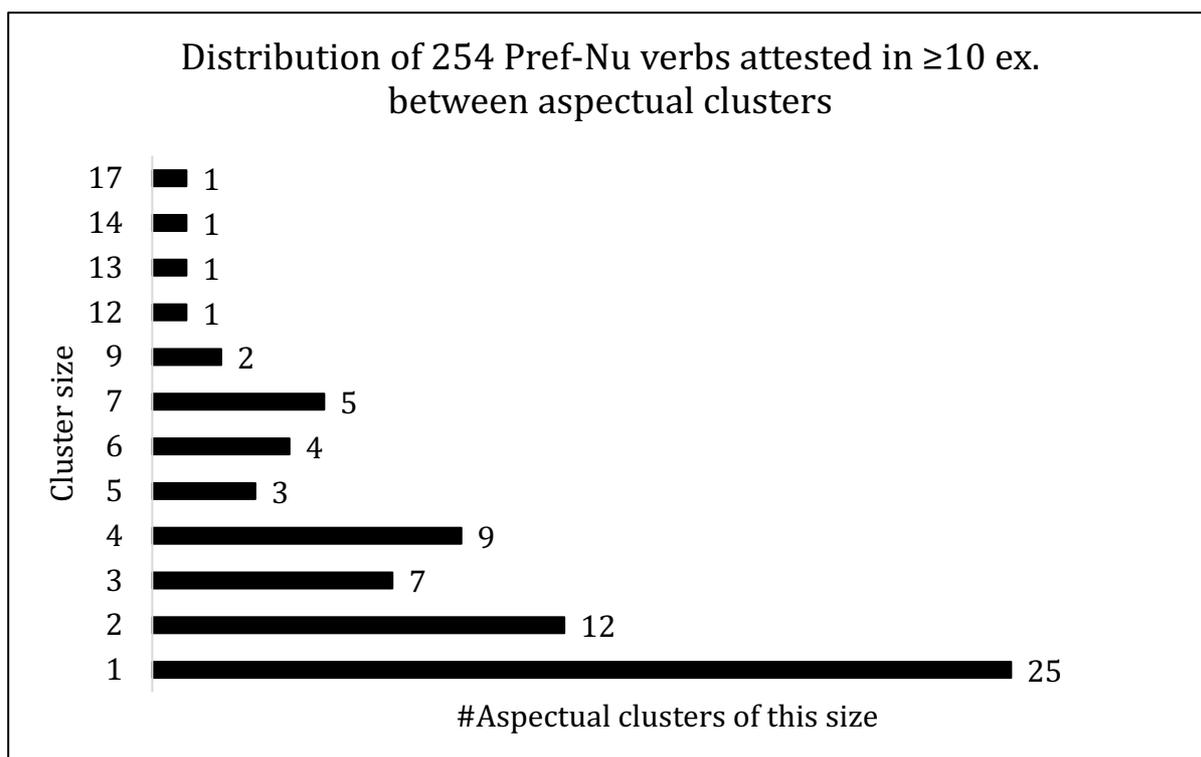
Pref-Only verbs that can be formed ad hoc (Endresen et al. 2012: 244). By way of illustration, in (9), the unusual combination of *vy-*, which yields the meaning OUT OF A CONTAINER, and *xlopnut'* 'slam, pop, bang once' gives the precise meaning the author was looking for, namely the idea of something making a popping sound at the same time as it goes out:

- (9) *Kran gromko **vyxlopnul** tri ryžie kapli i zamer.* [G. Ščerbakova. 1997]  
'The water faucet loudly popped out three reddish-brown drops and died out.'

Second, since one goal of this dissertation is to shed light on how Pref-Nu verbs are *typically* used compared to the corresponding unprefixated verbs, it makes sense to focus on verbs that are attested in more than a handful of corpus examples. From the total set of 611 Pref-Nu verbs, I will therefore focus on Pref-Nu verbs that are (a) attested in at least ten corpus examples and (b) furthermore are related to an Only-Nu verb attested in at least ten corpus examples. The first of these criteria ensures a minimum amount of corpus data for every Pref-Nu verb in the database. The second criterion sets the Pref-Nu verbs in the database more clearly apart from the verbs in Subgroup 2 in Figure 3 that do not have a corresponding unprefixated verb in the corpus.

The frequency criterion of  $\geq 10$  examples for Pref-Nu and Only-Nu verbs arbitrarily excludes 357 prefixed verbs from the dataset: 254 are left for further study. The 357 excluded verbs account for only 7,582 (3,5%) of the 216,728 corpus examples involving verbs from Group F in Figure 3. In terms of corpus data, then, we do not lose very much. The 254 verbs that remain mostly have relatively high token frequencies in the corpus: 162 (64%) are attested in at least 100 examples and 53 (21%) are found in at least 1,000 examples. Most of them should therefore be familiar to native speakers of Russian and, since they are well-attested, they are suitable for a corpus-based study. The remaining part of this dissertation will focus on the verbs in this smaller dataset.

Let us now consider how these 254 Pref-Nu verbs are distributed between aspectual clusters. Figure 5 is organized in the same way as Figure 4, but goes up to 25 clusters on the x-axis and size "17" on the y-axis (rather than up to 67 clusters and size "21"). There are 71 aspectual clusters in total.



**Figure 5** The 254 Pref-Nu verbs that are attested in  $\geq 10$  examples in the RNC are distributed among 71 aspectual clusters.

As we can see, the majority of the clusters are still small in the sense that they contain only one Pref-Nu verb (25 clusters) or two Pref-Nu verbs (12 clusters), but nearly half – 34 clusters (49%) – have more. The number of Pref-Nu verbs in the biggest cluster is reduced from 21 to 17, but is still the cluster of *kinut* ‘throw once’. *Kinut* is furthermore the only cluster with cases of prefix stacking: *oprokinut* ‘overturn’, *zaprokinut* (*golovu*) ‘put back (one’s head)’ and *poraskinut* (*mozgami*) ‘think it over (lit. slightly throw one’s brains around)’.

It is important to remember that the term cluster “size” refers to the number of Pref-Nu verbs (with a corpus frequency of  $\geq 10$  ex.) in a given aspectual cluster. Cluster size does not refer to all the imperfective and perfective verbs that are connected with the given cluster in total, a number that for most clusters would be considerably higher, since they tend to include a base imperfective (e.g. *kidat* ‘throw’), many Pref-Only verbs derived from this imperfective (e.g. *nakidat* *čego* ‘throw a lot of something’, *zakidat* ‘heap up’, etc.) and secondary imperfectives (*vykidyvat* ‘throw out’, *skidyvat* ‘throw off, cut down (price)’, etc.).

Notice also that it is customary to think of the base imperfective as the core unit in an aspectual cluster, and it would therefore make sense to refer to the clusters by means of this verb, e.g. “the cluster of *kidat* ‘throw’”. Since, however, two clusters in my study lack a base imperfective (*minut* ‘pass by once’, *xlynut* ‘gush out once’),

but all the clusters include an Only-Nu verb, I will refer to the clusters by means of their Only-Nu verb, e.g. “the cluster of *kinut* ‘throw once’”.<sup>35</sup>

Table 6 provides a list of the 71 aspectual clusters in question and their relevant Pref-Nu verbs (shown by means of their prefixes). A glossed overview of the Pref-Nu verbs is given in Appendix 1.

Size	Aspectual cluster	Prefixes (Pref-Nu verbs) <sup>36</sup>
1	<i>boltnut</i> ‘blurt out once’	<i>s-</i>
	<i>bryknut</i> ‘kick once’	<i>vz-</i>
	<i>bryznut</i> ‘spray once’	<i>s-</i>
	<i>čmoknut</i> ‘give one smacking kiss’	<i>pri-</i>
	<i>cyknut</i> ‘hush once’	<i>pri-</i>
	<i>drognut</i> ‘shake once’	<i>vz-</i>
	<i>kačnut</i> ‘rock once’	<i>po-</i>
	<i>kljunut</i> ‘peck once’	<i>s-</i>
	<i>mel'knut</i> ‘flash once’	<i>pro-</i>
	<i>metnut</i> ‘throw once’	<i>vz-</i>
	<i>mignut</i> ‘blink once’	<i>pod-</i>
	<i>pyxnut</i> ‘blaze once’	<i>vz-</i>
	<i>šatnut</i> ‘sway once’	<i>po-</i>
	<i>ševel'nut</i> ‘move once’	<i>po-</i>
	<i>šlěpnut</i> ‘slap once’	<i>pri-</i>
	<i>šmygnut</i> ‘slip, dart once’	<i>pro-</i>
	<i>stuknut</i> ‘knock once’	<i>pri-</i>
	<i>sverknut</i> ‘sparkle once’	<i>pro-</i>
	<i>svistnut</i> ‘whistle once’	<i>pri-</i>
	<i>topnut</i> ‘stamp one’s foot once’	<i>pri-</i>
	<i>tronut</i> ‘touch once’	<i>za-</i>
<i>truxnut</i> ‘act like a coward once’	<i>s-</i>	
<i>vil'nut</i> ‘wiggle once’	<i>u-</i>	
<i>vizgnut</i> ‘squeal once’	<i>vz-</i>	
<i>xixiknut</i> ‘giggle once’	<i>pod-</i>	

<sup>35</sup> The verb *minut* ‘pass by once’ has the corresponding imperfective *minovat* ‘pass by’. However, unlike base imperfectives, this verb is derived from Only-Nu (*minut*) with the imperfectivizing suffix *-ova-* (Silina 1982: 173). *Minovat* ‘pass by’ is furthermore bi-aspectual

<sup>36</sup> In Table 6 as elsewhere in this dissertation, the prefixes are referred to by means of their basic allomorph. This means that I only show the voiced variants of *iz-*, *raz-*, *voz-* and *vz-* (spelled *is-*, *ras-*, *vos-* and *vs-* before voiceless consonants, cf. *vspugnut* ‘scare away’), and I do not show fleeting vowels, such as *-o-* that is inserted after *s-* in *soskol'znut* ‘slide’. The prefixes *o-/ob(o)-* and *vz-/voz-* have been found to function as non-standard allomorphs (Endresen 2014). In this dissertation, they are shown as distinct prefixes, since their distribution depends not only on phonological factors, but also on, for example, semantics, prosody and register (ibid: 324). Moreover, in the cluster of *děrnut* ‘pull once’, *o-* and *ob-* create different verbs: *oděrnut* ‘pull down, straighten (clothes), call to order’ and *obděrnut* ‘pull around’. The prefix *pre-*, which appears in only one verb in this study, (*ne*) *preminut* ‘not miss’, is often analyzed as a variant of *pere-* that mostly appears in adjectives (ibid). I show *pre-* separately from *pere-*, since the use of *pre-* in (*ne*) *preminut* ‘not miss’ cannot be deduced on the basis of phonology.

2	<i>blesnut'</i> 'sparkle once'	<i>pro-, vz-</i>
	<i>čerpnut'</i> 'scoop once'	<i>po-, za-</i>
	<i>dunut'</i> 'blow once'	<i>s-, v-</i>
	<i>glotnut'</i> 'swallow once'	<i>s-, za-</i>
	<i>kolupnut'</i> 'pick once'	<i>ot-, s-</i>
	<i>listnut'</i> 'flip once'	<i>pere-, pro-</i>
	<i>maknut'</i> 'dip once'	<i>ob-, pro-</i>
	<i>minut'</i> 'pass by once'	<i>ob-, pre-</i>
	<i>morgnut'</i> 'blink once'	<i>pod-, s-</i>
	<i>prjanut'</i> 'jump once (obs.)'	<i>ot-, voz-</i>
	<i>xlebnut'</i> 'nip once'	<i>ot-, pri-</i>
<i>xlopnut'</i> 'pop, bang once'	<i>pri-, za-</i>	
3	<i>kliknut'</i> 'cry, call once'	<i>o-, voz-, vy-</i>
	<i>liznut'</i> 'lick once'	<i>ob-, s-, u-</i>
	<i>plesnut'</i> 'splash once'	<i>raz-, vy-, vz-</i>
	<i>rygnut'</i> 'belch once'	<i>iz-, ot-, s-</i>
	<i>šagnut'</i> 'step once'	<i>ot-, pere-, vy-</i>
	<i>švyrnut'</i> 'hurl once'	<i>ot-, vy-, za-</i>
	<i>xlestnut'</i> 'lash once'	<i>pere-, pod-, za-</i>
4	<i>kovyrganut'</i> 'pick once'	<i>ot-, pod-, s-, vy-</i>
	<i>kriknut'</i> 'shout once'	<i>o-, pri-, vy-, vz-</i>
	<i>pljunut'</i> 'spit once'	<i>do-, pere-, s-, vy-</i>
	<i>prysnut'</i> 'sprinkle once'	<i>o-, s-, v-, vz-</i>
	<i>pugnut'</i> 'scare once'	<i>ot-, pri-, s-, vz-</i>
	<i>ščelknut'</i> 'click once'	<i>ot-, pri-, vy-, za-</i>
	<i>ščipnut'</i> 'pluck once'	<i>ot-, pri-, u-, za-</i>
	<i>skol'znut'</i> 'slip once'	<i>pro-, s-, u-, vy-</i>
	<i>xlynut'</i> 'gush out once'	<i>na-, ot-, pri-, s-</i>
5	<i>gljanut'</i> 'glance once'	<i>o-, pro-, vy-, vz-, za-</i>
	<i>nyrnut'</i> 'dive once, get out of sight'	<i>do-, pod-, pro-, vy-, za-</i>
	<i>trjaxnut'</i> 'shake once'	<i>o-, pere-, s-, vy-, vz-</i>
6	<i>čerknut'</i> 'scribble once'	<i>ot-, pere-, pod-, pro-, vy-, vz-</i>
	<i>doxnút'</i> 'breathe once'	<i>ot-, pere-, pro-, v-, vy-, vz-</i>
	<i>porxnut'</i> 'flit once'	<i>pere-, s-, u-, v-, vy-, vz-</i>
	<i>tknut'</i> 'poke once'	<i>pod-, pri-, pro-, u-, v-, za-</i>
7	<i>pixnut'</i> 'stuff once'	<i>ot-, pod-, pro-, s-, v-, vy-, za-</i>
	<i>stegnut'</i> 'stitch once'	<i>ot-, pod-, pri-, raz-, v-, vy-, za-</i>
	<i>sunut'</i> 'shove once'	<i>na-, pere-, pod-, pro-, v-, vy-, za-</i>
	<i>tisnut'</i> 'squeeze once'	<i>ot-, pri-, pro-, s-, v-, vy-, za-</i>
	<i>tolknut'</i> 'push once'	<i>na-, ot-, pod-, pro-, s-, v-, za-</i>
9	<i>maxnut'</i> 'wave once'	<i>ob-, ot-, pere-, pod-, pro-, raz-, s-, vy-, vz-</i>
	<i>prygnut'</i> 'jump once'	<i>na-, ot-, pere-, pod-, s-, v-, vy-, vz-, za-</i>

12	<i>dvinut'</i> 'move once'	<i>na-, ot-, pere-, po-, pod-, pri-, pro-, raz-, s-, v-, vy-, za-</i>
13	<i>děrnut'</i> 'pull once'	<i>na-, o-, ob-, ot-, pere-, po-, pod-, pro-, raz-, s-, vy-, vz-, za-</i>
14	<i>vernut'</i> 'return once'	<i>do-, na-, ob-, ot-, pere-, po-, pod-, pri-, pro-, raz-, s-, v-, vy-, za-</i>
17	<i>kinut'</i> 'throw once'	<i>do-, na-, o-, opro-, ot-, pere-, po-, pod-, poraz-, pri-, pro-, raz-, s-, vy-, vz-, za-, zapro-</i>

**Table 6 Overview of the aspectual clusters and Pref-Nu verbs in the database.**

### 2.3 Semantic classes

In the RNC, most verbs are annotated with a semantic class. By way of example, the verb *vynyrnut'* 'emerge, come to the surface' expresses a type of movement and has the semantic tag Move; *problesnut'* 'shine through' describes a light phenomenon and represents the semantic class Light; the lexical meaning of *izrygnut'* 'vomit' pertains to the physiological sphere and is annotated with the semantic class Physiol; etc. In the present section, I examine the distribution of semantic classes among the clusters involving Pref-Nu verbs and compare it with the distribution of semantic classes among Only-Nu verbs reported by Makarova and Janda (2009). My goal is to find out whether there is a relationship between the semantic class of an aspectual cluster and the likelihood that it contains Pref-Nu verbs. I show that Pref-Nu verbs primarily appear in aspectual clusters that represent the semantic classes Move, Impact and Physiol. By comparison, Only-Nu verbs are furthermore typical in the semantic classes Sound and Speech. In these two semantic classes, Pref-Nu verbs are less widespread.

Before we look at the actual distribution of semantic classes in the data, a few words are in order about the RNC classification system and how it was applied in Makarova and Janda's study and my own:

The RNC makes use of 27 semantic classes for verbs. Some of these are subclasses of a main class. By way of example, the classes Impact: Creat (*creation of a physical object*) and Impact: Destr (*destruction of a physical object*) are variations of the basic semantic class Impact (*physical impact*). In the present study, nuances of this kind were not seen as important and semantic subclasses were conflated with the corresponding basic class, e.g. Impact. Makarova and Janda appear to have done the same, although this is not mentioned explicitly in their study.

All the 254 Pref-Nu verbs were marked with the semantic class of the corresponding Only-Nu verb. In other words, all the Pref-Nu verbs in the cluster of *kriknut'* 'shout once' were marked with the semantic class of the unprefix verb, which is Sound, rather than the ones attributed the prefixed verbs individually in the RNC. In most clusters, the Only-Nu and Pref-Nu verbs in a cluster have the same semantic class, but in a few cases, they are different. In the RNC, *vskriknut'* 'give a

sudden shout' is, for instance, marked as Sound, while *okriknut'* 'call up', *prikriknut'* 'shout at' and *vykriknut'* 'shout out' are marked as Speech. By tagging the Pref-Nu verbs with the semantic class of the corresponding Only-Nu verb, we can compare the distribution of semantic classes among Only-Nu verbs (Makarova and Janda 2009) to the distribution of semantic classes among Only-Nu verbs that are related to one or several Pref-Nu verbs (my data).

Five Only-Nu verbs in my database have more than one semantic tag in the RNC. For four of these I created a category called "Double"; *pixnut'* 'shove once' and *sunut'* 'put once' are annotated in the RNC as Move and Put, since the goal of the subject is to Move something so that it is Put into a container; the subject of *stuknut'* 'knock once' makes a Sound by Impacting a surface, and this verb therefore represents the semantic classes Sound and Impact; *tronut'* 'touch once' expresses both physical and emotional touching (e.g. *ja tronut/a'* 'I am touched') and is ascribed the semantic classes Contact and Impact. The last Only-Nu verb, *boltnut'*, is arguably a homonym representing two clusters with one semantic tag for each – *boltnut'* 'dangle once' (e.g. *boltnut' nogami* 'dangle with feet') with the semantic tag Move and *boltnut'* 'blurt out once' (e.g. *boltnut' lišnee* 'say too much') with the semantic tag Speech.<sup>37</sup> Since the Pref-Nu verb in question, *sboltnut'* 'blurt out', only represents the latter cluster, *sboltnut'* 'blurt out' was annotated with the semantic class Speech in the database.

In 19 clusters (49 Pref-Nu verbs), the Only-Nu verb was not assigned a semantic class in the RNC, and here I used the semantic class of the base imperfective. If this verb was not annotated either, I selected the semantic class best suited according to my own understanding of the RNC annotation system, as shown in Table 7. In this way, all the aspectual clusters in the database received a semantic class.

Semantic class	Aspectual cluster
Be	<i>pyxnut'</i> 'ooze, emit once' <sup>38</sup>
Impact	<i>čerknut'</i> 'make one scribble', <i>maknut'</i> 'dip once', <i>plesnut'</i> 'splash once', <i>prysnut'</i> 'sprinkle once', <i>šlěpnut'</i> 'slap once'
Move	<i>čerpnut'</i> 'scoop once'
Physiol	<i>kljunut'</i> 'peck once', <i>rygnut'</i> 'belch once'
Psych, Behav	<i>truxnut'</i> 'act like a coward once'

**Table 7 My designation of semantic classes for verbs lacking a semantic class in the RNC. "Psych" and "Behav" are RNC's abbreviations for verbs concerned with the psychological sphere and behavior.**

<sup>37</sup> I say "arguably", since the borderline between homonymy and polysemy is gradable (Taylor 2002 [2010]: 469-470) and on a more abstract level one could, perhaps, connect the two lexical meanings of *boltnut'* in one schema.

<sup>38</sup> *Pyxnut'* 'ooze once, emit once' does not have a semantic tag in the RNC. The base imperfective *pyxat'* *čem* 'emanate' has the semantic tag Temper (*temperature*). Since this tag is not part of the usual RNC semantic tags inventory for verbs and furthermore appears misleading (*pyxat'* does not express temperature as such, but that something metaphorically exudes some quality, e.g., strength or good health), the related Pref-Nu verb *vspyxnut'* 'blaze up' was given the semantic tag 'Be' in the database (the subclass would be Be: Appear).

The distribution of semantic classes reported for Only-Nu verbs by Makarova and Janda (2009: 86) is shown in the middle column of Table 8. The rightmost column shows the distribution of semantic classes for the 71 aspectual clusters involving Pref-Nu verbs. Every cluster corresponds to one Only-Nu verb (the cluster of *kinut* ‘throw once’, the cluster of *dvinut* ‘move once’, etc.). Semantic classes represented by very few Only-Nu verbs in the dataset are shown in one row (“Other”). This row also contains the four clusters in my dataset with a double semantic tag.<sup>39</sup>

Semantic class	#Only-Nu (%) (Makarova and Janda)	#Clusters with Pref-Nu (%) (Nordrum)
Move, e.g. <i>maxnut</i> ‘wave once’	84 (30%)	26 (37%)
Impact, e.g. <i>ljagnut</i> ‘kick once’	62 (22%)	17 (24%)
Sound, e.g. <i>kriknut</i> ‘shout once’	57 (20%)	6 (7%)
Physiol, e.g. <i>zevnut</i> ‘yawn once’	21 (8%)	9 (13%)
Speech, e.g. <i>šepnut</i> ‘whisper once’	21 (8%)	1 (2%)
Other	34 (12%)	12 (17%)
Total	279 (100%)	71 (100%)

**Table 8 Distribution of semantic classes among Only-Nu verbs (Makarova and Janda 2009: 86) and aspectual clusters with Pref-Nu verbs in my database.**

Table 8, visualized in Figure 6, confirms that Pref-Nu verbs are connected with all the semantic classes found to be most widespread among Only-Nu verbs. However, although Move and Impact have the highest type frequency for both verb types, the semantic classes are distributed differently in the two columns. Move and Physiol represent bigger proportions of clusters involving Pref-Nu verbs than for clusters with Only-Nu verbs, while the opposite is found for Sound and Speech. The semantic class Impact accounts for approximately the same proportion of clusters in both groups. A chi-squared test of the raw numbers in Table 8 shows that the difference between the verb types is significant (p-value: 0.02) and the effect size is small, but reportable (Cramer’s V: 0.18).<sup>40</sup> We can conclude that Pref-Nu verbs

<sup>39</sup> The two columns in Table 8 are not fully parallel, and two comments are in order. First, in cases of double semantic tags, Makarova and Janda count each tag separately. In other words, they count verbs like *pixnut* ‘shove once’ twice – once in the semantic class Move and once in the semantic class Put (see footnote 8 in Makarova and Janda 2009: 85). There are 16 such verbs in their study (=32 tags). In my study, there are only four clusters with a double semantic tag, and the two semantic classes of the verbs do not seem to refer to different lexical meanings, but to different parts of the same one, as explained above. Since this difference in the presentation of results concerns a low number of verbs compared to the total number of verbs considered in each study, it should have a limited impact on the distribution in Table 8. Second, Makarova and Janda’s dataset includes all Only-Nu verbs listed as a semelfactive in Švedova et al. (1980) and Zaliznjak (1980), while my dataset includes all aspectual clusters where both Only-Nu and at least one Pref-Nu verb are attested in  $\geq 10$  corpus examples. As a result, my dataset, on the one hand, contains clusters that are not included the study of Makarova and Janda because they are not regarded as semelfactive in their two selected sources. On the other hand, Makarova and Janda’s study may include some of the 95 clusters that were excluded from my study due to the verbs’ low token frequencies in the RNC.

<sup>40</sup> Because the expected value of Speech in the rightmost column of Table 8 is below 5, I collapsed the type frequencies of Sound and Speech in each column to get a correct chi-squared approximation. Thus, the p-value of 0.02 was obtained with Pearson’s chi-squared test of the following values: 84, 26, 62, 17, 78, 7, 21,

typically are derived in clusters from three semantic clusters: Move, Impact and Physiol. In other semantic classes, they are possible, but much less widespread.

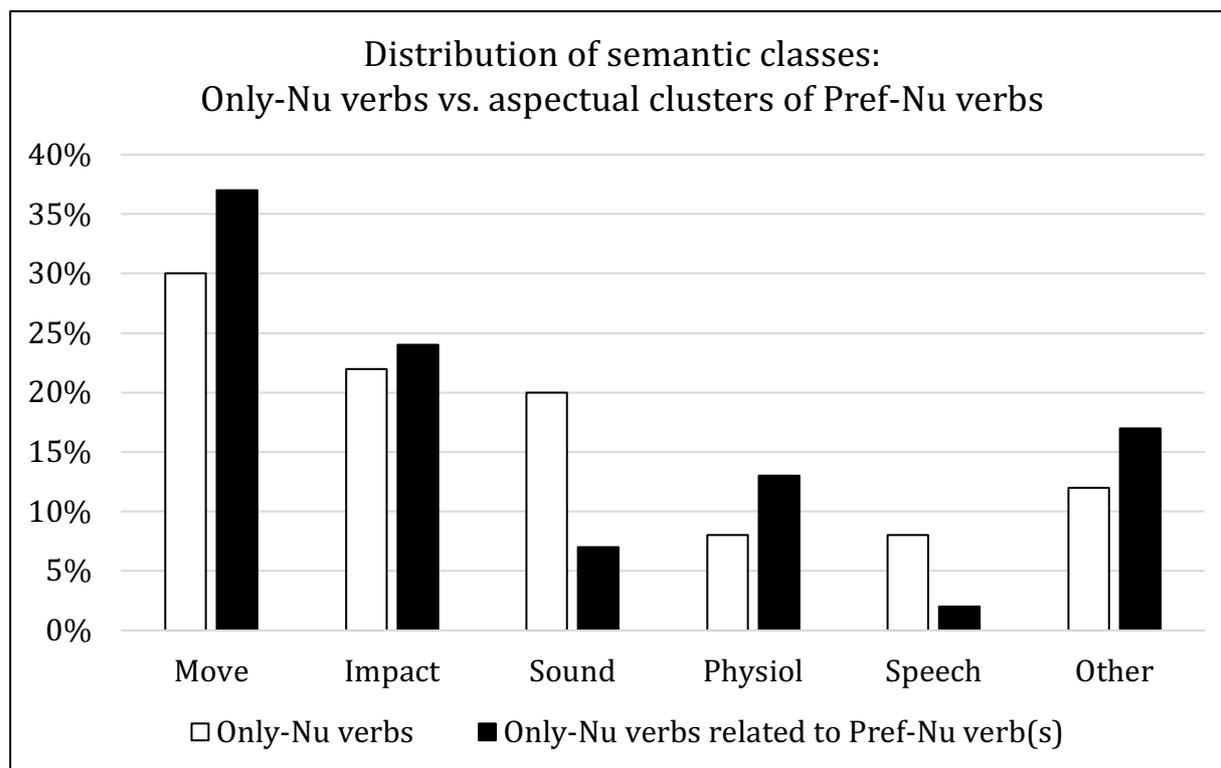


Figure 6 Distribution of semantic classes: Only-Nu vs. aspectual clusters containing Pref-Nu verbs.

#### 2.4 Semantic classes and cluster size – a relationship?

Section 2.2 showed that aspectual clusters vary strongly in terms of “cluster size”, i.e. how many Pref-Nu verbs they contain in my database. Using the verbs’ semantic tags, we can now ask whether there is a relationship between the size of the clusters and the semantic class they represent. The answer is yes. The only Speech cluster in the database has one Pref-Nu verb (*boltnut* ‘blurt out once’), Sound clusters also usually have one Pref-Nu verb, but go up to size “4” (*kriknut* ‘shout once’), Physiol clusters go up to size “6” (*doxnút* ‘breathe once’) and Impact clusters to size “7” (*stegnut* ‘stitch once’ and *tisnut* ‘squeeze once’). One of the clusters that is bigger than this, *vernut* ‘return once’, represents the semantic class Poss (*possession*) that in Table 8 was included in the category “Other”. Otherwise all the big clusters represent the semantic class Move.

The relationship between cluster size and semantic class is illustrated in the plot in Figure 8. In the plot, every point represents one Pref-Nu verb in the database. Their location in the plot is determined by the number of Pref-Nu verbs in their

9, 34, 12. Sound and Speech were conflated because they display the same tendency in my data in the sense that they are typical for Only-Nu verbs and much less typical for clusters involving Pref-Nu verbs.

cluster (cluster size, x-axis) and their token frequency in the corpus (y-axis).<sup>41</sup> The verbs' token frequencies are log-transformed to make the plot easier to interpret. Their semantic classes are shown by means of color.<sup>42</sup>

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<sup>41</sup> In the plot, the cluster of *prygnut* 'jump once' is located at size "8" instead of size "9", the reason being that *otprygnut* 'jump away from' was wrongly marked in the corpus as *otprygat* and was discovered at a later stage in the project when this plot had already been made.

<sup>42</sup> I would like to express my deep gratitude to Natalia Levshina for graciously helping me make this plot.



Figure 7 illustrates that there is a relationship between cluster size and semantic class. However, there does not seem to be any relationship between these factors and the verbs' token frequencies in the corpus. Neither the verbs' location on the x-axis (cluster size), nor their color (semantic class) appears to influence where they fall on the y-axis. On the contrary, the 14 verbs in the top area of the diagram (above "8" on the y-axis) come from clusters of different sizes and semantic classes.

## 2.5 Prefixes and prefix meanings

Going one step further, we can now ask what motivates the large number of Pref-Nu verbs in clusters describing movement and a lower number of Pref-Nu verbs in clusters from other semantic classes. The most obvious answer to this question is that each prefix (arguably, except *po-*, see Dickey 2007) can express a spatial path, which is a very relevant concept for verbs expressing motion in space. Hence, as long as the path expressed by the prefix is imaginable for the given type of movement, a Pref-Nu verb should, in principle, be possible. At the same time, there is no one-to-one relationship between prefix meaning and semantic class. To get a better understanding of which prefix meanings are relevant and how they are distributed, let us consider more carefully the prefixes and prefix meanings in the various Pref-Nu verbs.

Table 9 shows how the prefixes are distributed among verbs in the database (type frequency) and examples involving Pref-Nu verbs in the corpus (token frequency):

Prefixes	Type frequency	Token frequency
<i>s-</i>	27	19,558
<i>vy-</i>	25	21,185
<i>ot-</i>	23	14,710
<i>za-</i>	22	24,049
<i>pro-</i>	21	5,520
<i>pri-</i>	19	5,328
<i>pod-</i>	18	15,220
<i>vz-</i>	18	42,136 (20%)
<i>pere-</i>	15	8,894
<i>v-</i>	13	4,040
<i>na-</i>	8	3,169
<i>po-</i>	8	17,330
<i>o-</i>	7	3,240
<i>raz-</i>	7	10,655
<i>ob-</i>	6	1,102
<i>u-</i>	6	1,650
<i>do-</i>	4	68
<i>voz-</i>	2	8,041
<i>iz-</i>	1	32
<i>pre-</i>	1	477
Prefix stacking	3	2,742
Total:	254	209,146

**Table 9** Distribution of prefixes in the database (type frequency) and the number of examples involving verbs with the various prefixes in the corpus (token frequency).

Table 9 shows that Pref-Nu verbs attract the full spectrum of verb prefixes available in Russian. In addition, we can make the following observations:

The type frequencies of the prefixes show that some prefixes occur to a particularly large extent. Arguably, the first ten prefixes (*s-* through *v-*) are more frequent than the last ten (*na-* through *pre-*). At the same time, the transition between *s-* on the top and *iz-* and *pre-* on the bottom is relatively gradual. All the prefixes are clearly possible.

Makarova and Janda (2009) reported a quite similar distribution of prefixes in their study of 164 Pref-Nu verbs. In their article, however, they only show the type frequency of the eight most widespread prefixes in their data. In their study, *v(o)z-* (*vz-* and *voz-*) have the highest type frequency, followed by *s-* and *vy-*. They do not mention *pro-* and *pod-* that come high up on my list. *Po-* is, on the other hand, included among the top eight, while in my study it falls further down on the list.

In terms of token frequency, *vz-* stands out, since this prefix alone accounts for 20% of the corpus examples. The impressive token frequency of *vz-* is due to a handful

of verbs that occur in a very large number of corpus examples, including *vzdoxnút'* 'sigh' (13,189 ex.) and *vzgljanut'* 'take a look at' (12,310 ex.). On the other end of the scale, we find *iz-* that is least significant both in terms of type and token frequencies. The high token frequency of *voz-*, which is relevant in only two verbs, is caused by *voskliknut'* 'call, hail' (7,766 ex.).<sup>43</sup>

In *vzdoxnút'* and *vzgljanut'*, the prefix *vz-* supports the semelfactive meaning of the unprefix verb. In both cases, the prefixed verb describes an action that is slightly more intense, abrupt or sudden than the unprefix verbs *doxnút'* 'breathe once' and *gljanut'* 'glance once'. However, *vz-* has other meanings too, including MOVE UPWARD and RESIST. Which prefix meanings are then relevant in Pref-Nu verbs?

Most of the scholars that were mentioned in Section 1.4.4 do not address this question, but Makarova and Janda (2009) claim that the prefix in Pref-Nu verbs "either is semantically related to semelfactivity or is used to define the path of a movement" (ibid: 95). Although this observation is interesting at first sight, a problem with it is that most prefix meanings in fact can be related to a path literally or metaphorically. Also, Makarova and Janda do not explain how they define semelfactivity. Their statement is therefore not very informative.

Consider, for instance, the four submeanings of *vz-* proposed by Janda et al. (2013). The central meaning of the prefix, MOVE UPWARD, appears in verbs of motion and other types of movement and clearly expresses a spatial path, e.g. *vzletet'* 'fly up' (from *letet'* 'fly'). The three other meanings associated with *vz-* are metaphorically related to an upward path: AGITATE, found in such verbs as *vzbit'* 'whip up' (from *bit'* 'hit'), is "connected to UPWARD in that it raises the energy level and is apparent on the upper level" (ibid: 57); RESIST, which occurs in verbs like *vzbuntovat'* 'incite to revolt' (from *buntovat'* 'revolt'), means that "something is raised UPWARD" (ibid); REBUILD, illustrated with *vosstanovit'sja* 'be restored' (from *stanovit'sja* 'become'), means that something is "brought back to an UPWARD position" (ibid). Looking at Janda et al.'s semantic networks, it is unclear where to place the boundary between prefix meanings that are related to a path and those that are not. With the exception of *vz-*, which in Endresen (2014) furthermore is attributed the submeaning SEMELFACTIVE, and *s-*, which, as mentioned in Section 1.3, often is connected with semelfactive Aktionsart, it is also not clear which prefix meanings may be regarded as "related to semelfactivity".

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<sup>43</sup> Following up on this, one could ask what the type and token frequencies of prefixes are in other types of Russian perfectives. A comparison of this kind would enable us to determine whether the distribution in Table 9 is special for Pref-Nu verbs in particular or whether it follows the pattern for Pref-Only verbs. Unfortunately, there is no straightforward answer. First, Pref-Only verbs are a very heterogeneous group, and what are called "Natural Perfectives", "Specialized Perfectives" and "Complex Act Perfectives" in Janda's cluster model (described in Section 1.1) clearly involve different type distributions of prefixes. Second, Specialized Perfectives and Complex Act Perfectives are open classes, making it virtually impossible to establish the type frequencies of their prefixes. In Natural Perfectives, the by far most common prefix is *po-*, closely followed by *s-* and *za-* (Janda et al. 2013: 15, Gjervold 2014).

To illustrate prefix meanings that are not connected with a path or semelfactivity, Makarova and Janda provide only one illustration, namely the idea of an excessive action expressed by *za-* and *pere-* in verbs like *zakormit* ‘overfeed’ (from *kormit* ‘feed’) and *pereigrat* ‘overdo’ (from *igrat* ‘play’): these prefix meanings “are not present among the Specialized Single Act Perfectives” (Makarova and Janda 2009: 95). However, even the idea of excessiveness can be understood as a metaphorical path. This is clear from Janda et al. (2013) who define the idea of excessiveness in *pere-*, labelled OVERDO, as connected with the path meaning of *pere-*, TRANSFER, insofar as it involves “comparison with another performance that is exceeded” (ibid: 67).<sup>44</sup> In other words, one could object that the prefixes in Pref-Nu verbs express a path or support semelfactivity, simply because that is what Russian verb prefixes do. Moreover, in my database, the idea of excessiveness is in fact attested in verbs like *perepljunut* ‘outdo’ (cf. *pljunut* ‘spit once’), showing that this meaning does occur in Pref-Nu verbs:

- (10) *No vot čem Moskva perepljunula Piter, tak èto bomžami.* [Stolica. 1997]  
 ‘But where Moscow does surpass Petersburg is in terms of homeless people.’

What we do see in the database is that the prefixes interact with the verb meanings in different ways. In most verbs, the prefix seems to alter the verb’s semantics to create a new lexical meaning, for example *pere-* in *perepljunut* ‘outdo, lit. spit over’ (cf. *pljunut* ‘spit once’). In a number of other verbs, the prefix adds Aktionsart semantics. These prefixes are sometimes called “superlexical” insofar as they “do not seem to change the meaning of the lexical root, but add an identifiable extra bit of information relating to how the event progresses” (Ramchand 2004: 340, see also Romanova 2004 and Svenonius 2004). The Aktionsart meanings relevant among Pref-Nu verbs are attenuative (prefixes *po-*, *pod-*, and *pri-*), such as in *podxixiknut* ‘give a little giggle’ (cf. *xixiknut* ‘giggle once’), and *v(o)z-*semelfactive, as in *vzblesnut* ‘flash suddenly’ (cf. *blesnut* ‘flash once’). In *vosprjanut* ‘cheer up’ (cf. *prjanut* ‘jump once, obsol.’), the prefix yields the ingressive meaning of gradually entering into a new state often found in verbs with *voz-* (Endresen 2014: 228-232).

In addition, there are some verbs where the prefix does not seem to add anything new at all. At least its semantic contribution is very vague. This concerns several verbs in *za-* expressing movement, e.g. *zatolknut* ‘push somewhere’ (cf. *tolknut* ‘push once’), or other types of actions, like *zaglotnut* ‘swallow’ (cf. *glotnut* ‘swallow once’), and furthermore some verbs in *s-*, for example *sboltnut* ‘blurt out’, *spljunut* ‘spit’ and *struxnut* ‘act like a coward’ (cf. *boltnut* ‘blurt out once’, *pljunut* ‘spit once’ and *truxnut* ‘act like a coward once’). With regard to these latter verbs, Janda and Dickey (2009) argue that both *-s-* and *-nu-* function as semelfactive markers and that verbs like *sboltnut* ‘blurt out’ therefore are marked for

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<sup>44</sup> The path meaning TRANSFER is, in turn, defined as “movement from one point to another, often with an intervening barrier, such that the movement is usually conceived of as an arc” (Janda et al. 2013: 66-67).

semelfactivity in two ways (ibid: 239).<sup>45</sup> However, they do not explain why a second semelfactive marker is needed. A similar situation is found in verbs like *počerpnut* 'scoop up', *perelistnut* 'flip' and *uščipnut* 'pluck' where the prefix does not modify the verb meaning in any strong way (cf. *čerpnut* 'scoop once', *listnut* 'flip once' and *ščipnut* 'pluck once').

Aktionsart and non-Aktionsart meanings of the prefix can furthermore work together in one verb. By way of example, *vz-* in *vzbryknut* 'kick up backfeet' expresses an UPWARD movement and also abruptness. In *podděrnut* 'pull a little bit up', *pododvinut* 'move a little closer towards' and *pridvinut* 'move a little up towards', the prefix describes movement at the same time as it attenuates (see also Makarova (2014: 146-147).

In view of these observations, I propose that Pref-Nu verbs constitute a system that is largely parallel to that of prefixed perfectives without *-nu-*, in this dissertation referred to as "Pref-Only":

- In both verb types, the prefix can create a new lexical meaning. This is what *v-* does in both *vprygnut* 'jump into' (cf. *prygnut* 'jump once') and *vstroit* 'build into' (from *stroit* 'build'). In Janda's cluster model described in Section 1.1, such Pref-Only verbs are called "Specialized Perfectives";
- In both verb types, the prefix can contribute Aktionsart meanings, as illustrated by the attenuative meaning of *pri-* in *prisvistnut* 'give a little whistle' (cf. *svistnut* 'whistle once') and *priotkryt* 'slightly open' (from *otkryt* 'open'). Janda calls these Pref-Only verbs "Complex Act Perfectives";
- In both verb types, the prefix can overlap with what is already present in the verb. Examples of this include *pere-* in *perelistnut* 'flip, lit. TURN AROUND-flip' (cf. *listnut* 'flip') and *na-* in *napisat* 'write, lit. SURFACE-write' (from *pisat* 'write'). Pref-Only verbs of this kind are called "Natural Perfectives";
- In both verb types, two submeanings of a prefix can be combined in one verb yielding a grey zone between the various subtypes of verbs. For Pref-Nu verbs, this was illustrated above with, for example, *pridvinut* 'move a little up towards' (cf. *dvinut* 'move once'). Among Pref-Only verbs, we find verbs like *prospat* 'oversleep, sleep for a certain time' (from *spat* 'sleep') that was discussed in Section 1.1.

The similarities between the two systems can be observed by comparing Figures 8 and 9 on the next page:

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<sup>45</sup> Gorbova (2016: 61) disagrees and argues that *s-* and *-nu-* contribute different things to the verb meaning and should be analyzed compositionally. However, to support her argument she does not use the verbs mentioned by Janda and Dickey, but rather *skovyρνnut* 'pick off' where *s-* clearly yields something more than a semelfactive meaning, namely the idea of moving something off (cf. *kovyρνnut* 'pluck once').

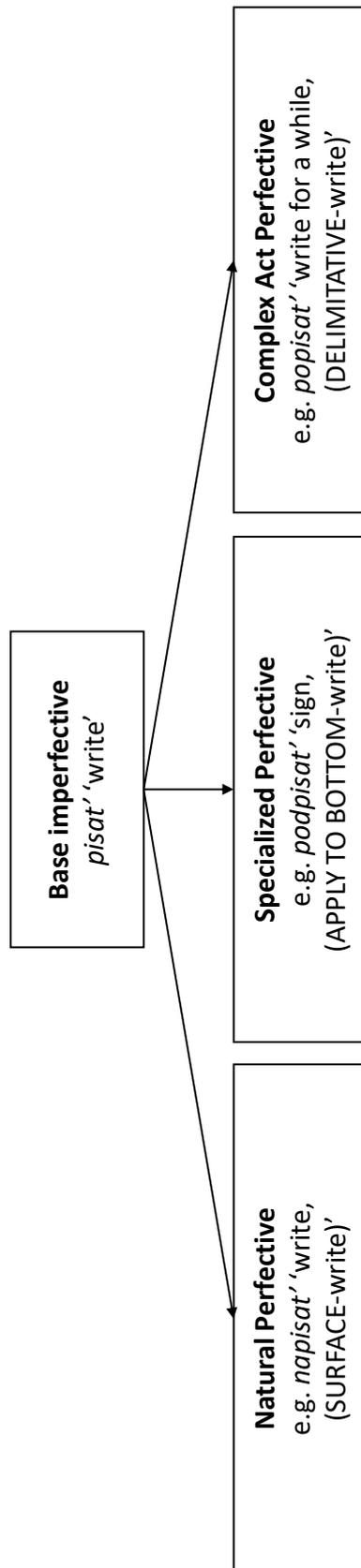


Figure 8 Three functions of prefixes in verbs without the semelfactive suffix *-nu-* in Janda's cluster model (Janda 2007).

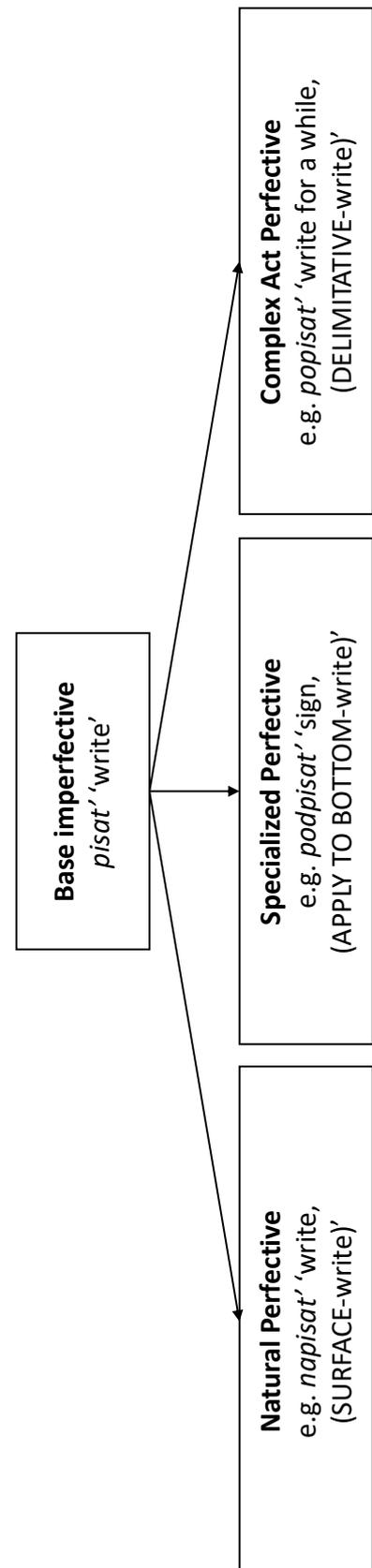


Figure 9 Three functions of prefixes in Pref-Nu verbs.

Despite the similarities between Pref-Nu verbs and Pref-Only verbs in terms of prefix semantics, there are at least three things that make them different:

First, aspectual clusters often contain all three types of Pref-Only verbs. In Figure 8, they could therefore be illustrated with derivations of the same base imperfective (*pisat'* 'write'). As for Pref-Nu verbs, I do not find any cluster in my database that clearly contains examples of all three types of prefix modifications, and in Figure 9 I therefore use illustrations from different clusters.

Second, we can expect different Aktionsart meanings to be typical and possible for Pref-Nu verbs and Pref-Only verbs. While Pref-Nu verbs can have attenuative and *v(o)z*-semelfactive meanings, Pref-Only verbs in addition, and perhaps more often, involve other Aktionsart meanings, such as delimitative (*popisat'* 'write for a while'), ingressive (*zaigrat'* 'begin to play') and accumulative (*nagotovit' edy* 'prepare a lot of food') that are not characteristic of Pref-Nu verbs (and, perhaps, not possible).

Third, and perhaps most interestingly, Pref-Only verbs are derived from an unprefixated imperfective, while the unprefixated counterpart of Pref-Nu verbs (i.e. Only-Nu) is perfective. In the system of Pref-Only verbs shown in Figure 8, the speaker needs a prefix to describe perfective meaning. The choice of prefix depends on the particular meaning they want to express. In the system of Pref-Nu verbs shown in Figure 9, the speaker does not need a prefix to express perfectivity, since the unprefixated verb already is perfective. The question arises as to what governs the choice between the prefixated and unprefixated verbs, a question I will look into in Chapter 3. The answer, I argue, is not obvious.

## 2.6 Secondary imperfectives

As mentioned in Section 1.4.1, scholars agree that Pref-Nu verbs tend to have a corresponding secondary imperfective, usually with *-ivaj-*, and sometimes with *-aj-* (Vinogradov 1947: 501-502, Isačenko 1960 [2003]: 263, Townsend 1975: 106, 139, Avilova 1976: 161-162, Silina 1982: 258-259, Plungjan 2000: 7, Zaliznjak and Šmelëv 2000: 70, Makarova and Janda 2009: 93). My data confirm that this is the case, insofar as a secondary imperfective is attested for all but eight of the 254 Pref-Nu verbs in the database: *naxlynut'* 'surge forward', *otxlynut'* 'surge back', *prixlynut'* 'surge, flood back', *sxlynut'* 'rush back, break up', *obminut'* 'pass by', *(ne) preminut'* 'not miss', *vosprjanut'* 'cheer up' and *vytisnut'* 'squeeze out'.

While Makarova and Janda claim that the secondary imperfectives are derived from the Pref-Nu verbs, Isačenko and Townsend argue that they are derived from the related base imperfective. That is, in their view, *zasovyvat'* 'put somewhere' is not derived from *zasunut'* 'put somewhere', but from *sovat'* 'put'. The present dissertation gives little attention to derivational questions. However, it is worth noticing that six of the eight Pref-Nu verbs that do not have a secondary imperfective in the corpus happen to be from the clusters of *minut'* 'pass by once'

and *xlynut'* 'gush out once' that lack a base imperfective. Although the data are too scarce to draw strong conclusions, this indicates that derivation of a secondary imperfective for Pref-Nu verbs depends on the existence of a base imperfective. This, in turn, gives support to Isačenko and Townsend's understanding of the situation.

Secondary imperfectives of Pref-Nu verbs have been argued to express iterative meaning (*mnogokratnost'*, Avilova 1976: 161-162). An extensive study of secondary imperfectives is beyond the scope of this study, but a search for *stiskivat'* 'squeeze together' in the corpus shows that at least this verb expresses iterative actions (11) as well as processes (12). There is no obvious reason why the secondary imperfectives of other Pref-Nu verbs should not have the same semantic flexibility.

- (11) *Volodja sidel s poluotkrytym rtom, stiskivaja vremena ot vremeni zuby.* [D. Karapetjan and V. Vysockij. 2000-2002]  
 'Volodja sat with his mouth half-open while squeezing his teeth together from time to time.'
- (12) *Ona obnjala ego. Eë ruki stiskivali ego vsë sil'nee. On znal: èta vnezapnaja ljubov' nepoddel'na.* [Ju. Trifonov. 1969]  
 'She embraced him. Her hands squeezed him more and more strongly. He knew: this unexpected love was not fake.'

In a few clusters shown below, the corresponding imperfective of a Pref-Nu verb is formed with *-aj-* or *-vaj-*. This is in line with Townsend's and Silina's observations that some Pref-Nu verbs have a different suffix than *-ivaj-* (Townsend 1975: 139, Silina 1982: 258-259):

- *doxnút'* 'breathe once', cf. *vzdoxnút'* /*vzdyxat'* 'sigh'
- *dunut'* 'blow once', cf. *vdunut'* /*vduvat'* 'blow into'
- *dvinut'* 'move once', cf. *vydvinut'* /*vydvigát'* 'advance, put forward'
- *tknut'* 'stick once', cf. *zatknut'* /*zatykat'* 'stuff into, stop up, plug'

An interesting case is *vzmetnut'* 'toss up' that is found with two imperfectives – *vzmetryvat'* 'toss up' and the imperfective form *vzmetat'* 'toss up'.<sup>46</sup> Although the two forms have identical lexical meanings, the corpus data show that they have different grammatical profiles (Janda and Lyashevskaya 2011). *Vzmetryvat'* is most common in indicative past, present and future forms, while *vzmetat'* primarily appears in gerunds and present active (4 ex.), present passive (2 ex.) and past active (1 ex.) participles.<sup>47</sup>

<sup>46</sup> *Vzmetat'* 'toss up' is bi-aspectual, but only 4 of the 67 examples in the corpus involve the perfective aspect.

<sup>47</sup> Although the grammatical profiles of *vzmetryvat'* and *vzmetat'* are different, both are characterized by a much larger proportion of gerunds (which is an infinite form) than what is typical among Russian verbs in general (Janda and Lyashevskaya 2011: 723).

Verb form	<i>Vzmetyvat'</i> 'toss up' (24 ex.)	<i>Vzmetat'</i> 'toss up' (63 ex.)
Indicative	15 (65%)	17 (27%)
Gerund	8 (35%)	39 (62%)
Participles	0 (0%)	7 (11%)
Total	23 (100%)	63 (100%)

**Table 10 Grammatical profiles of *vzmetyvat'* 'toss up' and *vzmetat'* 'toss up'.**

It is not fully clear what this means, but the facts that a) *vzmetat'* is frequently used as a gerund and b) the function of imperfective gerunds is to express a simultaneous action (Mathiassen 1996: 441) suggest that *vzmetat'* often is used to background another situation. The use of *vzmetat'* as a gerund is illustrated in (13). Corpus examples of *vzmetat'* in non-gerund forms express a process, as illustrated in (14):

- (13) *Kogda vyskočili na ulicu, lejtenant, nelepo vixljaja nogami, vzmetaja sneg, uže počti dobežal do vorot.* [Z. Prilepin. 2006]  
 'When they got out on the street, the lieutenant, whose ridiculous wagging was tossing up snow, had almost ran up to the gates.'
- (14) *Podnjalsja sil'nyj veter i nosil po gorodu obgorelye stranicy, vzmetal k nebu snopy iskr.* [Golos èpoxi. 2012]  
 'A strong wind blew up and carried the charred pages across the city, tossed bundles of sparks up towards the sky.'

The examples of *vzmetyvat'* seem, by comparison, more concerned with iterative meaning, as in (15). This agrees with what is known about the suffix *-ivaj-* from historical records where it clearly is associated with iterativity (Kuznecov 1953: 261-264), but the data are too limited to draw a strong conclusion.

- (15) *Ploskaja kryša magazina, raspoložennogo pod nami, usejana raznoobraznym musorom. Poryvy vetra, osobenno pered groznoj, vzmetryvajut i unosjat čto polegče...* [O. Zajončkovskij. 2008]  
 'The flat shop roof, which is located below us, is covered in all sorts of trash. Wind gusts, especially before thunderstorms, toss up and carry off the lighter things...'

## 2.7 Summary and conclusions

The present chapter has given a bird's eye perspective on the Pref-Nu verbs in the RNC. I have presented a detailed account of how I collected Pref-Nu verbs from the corpus, and I have explored basic properties of the 254 Pref-Nu verbs in my database. My findings can be summarized as follows:

My corpus data confirm that perfectives with a prefix and the suffix *-nu-* constitute a diverse group of verbs in Russian that arguably can be divided into several subgroups. My dissertation focuses on one of these subgroups, namely perfective

verbs that have a prefix, the suffix *-nu-*, and a corresponding Only-Nu verb attested in the corpus (cf. the “conservative approach” in Section 1.4.4).

The 254 verbs in my database are distributed among 71 aspectual clusters that have between one and 17 Pref-Nu verbs each. Pref-Nu verbs are typical in clusters expressing movement, various types of physical impact, and physiological actions (semantic classes Move, Impact and Physiol). Pref-Nu verbs are attested to a lesser degree in clusters expressing Sound and Speech and other types of semantics. The largest clusters in the study represent the semantic class Move, probably because almost all prefixes have a path meaning, which is particularly relevant for verbs describing movement.

Pref-Nu verbs are formed by means of all prefixes in Russian, including prefix stacking. The prefixes have very different type and token frequencies, but the data are not dominated by one or a few in particular. *S-*, *vy-*, *ot-*, *pro-*, *za-* and *vz-* score highest on type frequency; *vz-* stands out in terms of token frequency.

Pref-Nu verbs appear to involve all types of prefix meanings. My study furthermore suggests that the semantic contribution of the prefix can be very vague and resemble what we find in Natural Perfectives, which in my study are subsumed under the wider category label “Pref-Only”. I have suggested that Pref-Nu and Pref-Only verbs in this way involve parallel systems (cf. Figures 8 and 9). At the same time, their systems differ in the sense that the unprefixated verb corresponding to Pref-Only is imperfective, while the unprefixated verb corresponding to Pref-Nu is perfective.

My database confirms the observation made by other scholars that Pref-Nu verbs tend to have a corresponding secondary imperfective in *-ivaj-*. In a few cases, the suffixes *-aj-* or *-vaj-* are observed as alternative suffixes or the only ones possible. In cases of suffix variation, I have speculated that *-ivaj-* and *-aj-* yield slightly different nuances of meaning: a repeated action (*-ivaj-*) vs. a process (*-aj-*). However, more data are required in order to draw a strong conclusion. In most cases, only *-ivaj-* is relevant and is used to express both iterative and processual meanings.

The present chapter explores some key issues with regard to Pref-Nu verbs: their distribution in the language and among aspectual clusters, their verb and prefix semantics, and their derivation of secondary imperfectives. In the remaining part of the dissertation, I will shed light on Pref-Nu verbs by looking at individual cases and comparing them to the other types of perfective verbs in Russian. In the next chapter, I do this by considering the differences in semantics and use between Pref-Nu and Only-Nu, the prefixed and unprefixated verbs involving the semelfactive *-nu-* suffix.



### 3 Nu-dyads in the RNC: Unprefixed vs. prefixed *-nu*-verbs

The previous chapter showed that a given Only-Nu verb can have a number of related Pref-Nu verbs: *švyrnut* ‘hurl once’ has three, *blesnut* ‘flash once’ has two, *děrnut* ‘pull once’ has thirteen, *prygnut* ‘jump once’ has nine, etc. The goal of the present chapter is to explore the semantic relationship between Pref-Nu verbs and Only-Nu verbs in contemporary Russian by means of corpus data from the Russian National Corpus (RNC). The term “Nu-dyad” refers to one unprefixed verb and one prefixed verb that have the same stem, e.g. *prygnut* ‘jump once’ and *sprygnut* ‘jump down’. This, in turn, means that every Pref-Nu verb participates in one Nu-dyad (e.g. *sprygnut* ‘jump down’ – *prygnut* ‘jump once’), while Only-Nu verbs often participate in a number of Nu-dyads depending on how many Pref-Nu verbs there are in their cluster.

This situation is illustrated in Figure 10 with Pref-Nu verbs from the cluster of *prygnut* ‘jump once’. The figure contains two types of relations. The first relation involves the Nu-dyads themselves, i.e. the relationship between the unprefixed and prefixed verbs, and is marked with solid lines in the figure. As mentioned in Section 1.4.1, whether Pref-Nu verbs are derived from the corresponding Only-Nu verbs, as many scholars claim, or in a different way, is a question that is left open in this dissertation, and the lines connecting the two verb types therefore lack arrows. The second relation is represented with a dashed line and concerns the interaction between the various Pref-Nu verbs in a given cluster, e.g. *sprygnut* ‘jump down’, *podprygnut* ‘make a little jump’, and the other Pref-Nu verbs in the cluster of *prygnut* ‘jump once’.

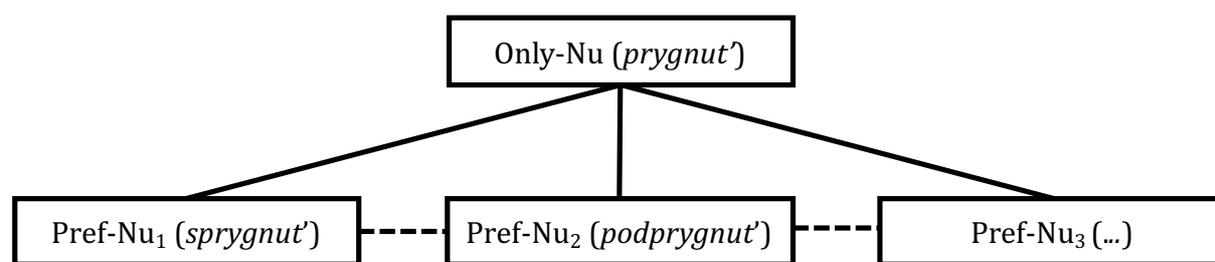


Figure 10 Illustration of the relationships relevant for Nu-dyads: the relationship between Only-Nu and Pref-Nu, e.g. *prygnut* ‘jump once’ and *sprygnut* ‘jump down’ (the topic of this chapter), and the relationship between related Pref-Nu verbs, e.g. *sprygnut* ‘jump down’ and *podprygnut* ‘make a little jump’ (explored in Chapter 2).

In this chapter, I will primarily be concerned with the first of these relationships, namely the relationship between the two verbs in Nu-dyads. The question I ask is whether Pref-Nu and Only-Nu are systematically different, and, if yes, how. The interaction between Pref-Nu verbs, which is the second relationship in the figure, was to some extent explored in Chapter 2 in the sense that the prefixes in Pref-Nu verbs were found to either affect the lexical meaning of the verbs or contribute attenuative or *v(o)z*-semelfactive Aktionsart meaning (cf. Figure 9 in Section 2.5).

Thus, we can distinguish between two subtypes of Pref-Nu verbs: Pref-Nu verbs like *sprygnut* ‘jump down’ where the prefix to some extent changes the lexical meaning of the verb, and Pref-Nu verbs like *podprygnut* ‘make a little jump’ that involve Aktionsart meaning.

With regard to the relationship between Pref-Nu and Only-Nu, I propose the Nu-dyad Hypothesis that is based on previous scholarship and predicts that Pref-Nu verbs differ from Only-Nu verbs in that they have a more specific lexical meaning and express either the result of an action or Aktionsart. The lexical meaning of Only-Nu verbs is, by comparison, less specific and not resultative. By and large, my case studies of the Nu-dyads in three aspectual clusters yield support to this hypothesis, but at the same time I find a lot of variation in terms of exactly how the relationship between Pref-Nu and Only-Nu verbs play out in practice. Whether the given tendencies describe Nu-dyads in general is a question that must be left for future studies.

In the following, I start out by discussing the Nu-dyad Hypothesis and how I will test it (Section 3.1). I then consider the proportion of past passive participles in the corpus data of the two verb types as one way of indirectly exploring resultativity (Section 3.2). In Section 3.3, I present my corpus data for the case studies, and, in Sections 3.4-3.6, I explore the Nu-dyads in three aspectual clusters. My findings and conclusions are summarized in Section 3.7.

### **3.1 The Nu-dyad Hypothesis**

In the present section, I introduce the Nu-dyad Hypothesis. I also discuss some key terms related to it and how the hypothesis can be tested against corpus data.

#### **3.1.1 Predictions of the hypothesis**

The Nu-dyad Hypothesis is based on statements that have been made about the semantics of Only-Nu verbs and Pref-Nu verbs in the scholarly literature. Before considering the hypothesis itself, let us therefore briefly revisit the key claims that have been made. For a more detailed discussion with references, see Sections 1.3 and 1.4.

In the scholarly literature, Only-Nu verbs are referred to as “semelfactives” or “-*nu*-semelfactives”. Semelfactives typically express one repetition (“quantum”) of a multiphasal activity such as simple bodily acts (e.g. *maxnut* ‘wave once’) or sounds (e.g. *skripnut* ‘creak once’) where every repetition is similar to another. Semelfactives can also singularize one repetition of a homogeneous activity, such as blowing (*dunut* ‘blow once’ from *dut* ‘blow’) and scaring (*pugnut* ‘scare once’ from *pugat* ‘scare’). Semelfactive actions are instantaneous in the sense that they are completed in the same moment as they begin. It is generally claimed that semelfactives do not express a result. Semelfactivity is a gradual notion, and Only-Nu verbs can be semelfactive to different degrees.

As for Pref-Nu verbs, scholars have made contradictory claims insofar as some see them as semelfactive, while others see them as only vaguely semelfactive or not semelfactive at all. At the same time, the scholars largely agree that Pref-Nu verbs express the completion or result of an action. They are claimed to express a single instance or repetition of an activity. The prefixes in Pref-Nu verbs have semantic content, which, in turn, implies that they express a more specific situation than the simple events described by the corresponding Only-Nu verbs. In this dissertation, I will refer to such specific meanings as “narrow” to signify that they are compatible with a limited set of contexts. Chapter 2 of this dissertation showed that some Pref-Nu verbs express an attenuative or *v(o)z*-semelfactive Aktionsart semantics.

As we can see, “semelfactive” is a key term for both verb types. However, while Only-Nu verbs are accepted as semelfactive by all scholars, Pref-Nu verbs are analyzed in different ways. Considering that semelfactive is a complex notion associated with several properties (one “quantum”, instantaneousness, no result) and that verbs can be semelfactive to different degrees, a reason why scholars evaluate the semelfactivity of Pref-Nu verbs differently might be that they (implicitly or explicitly) use different criteria to define the term. For instance, one scholar might regard Pref-Nu verbs as semelfactive because they have one or two properties characteristic of the semelfactive category, while another might see them as non-semelfactive because they do not display all the relevant properties.

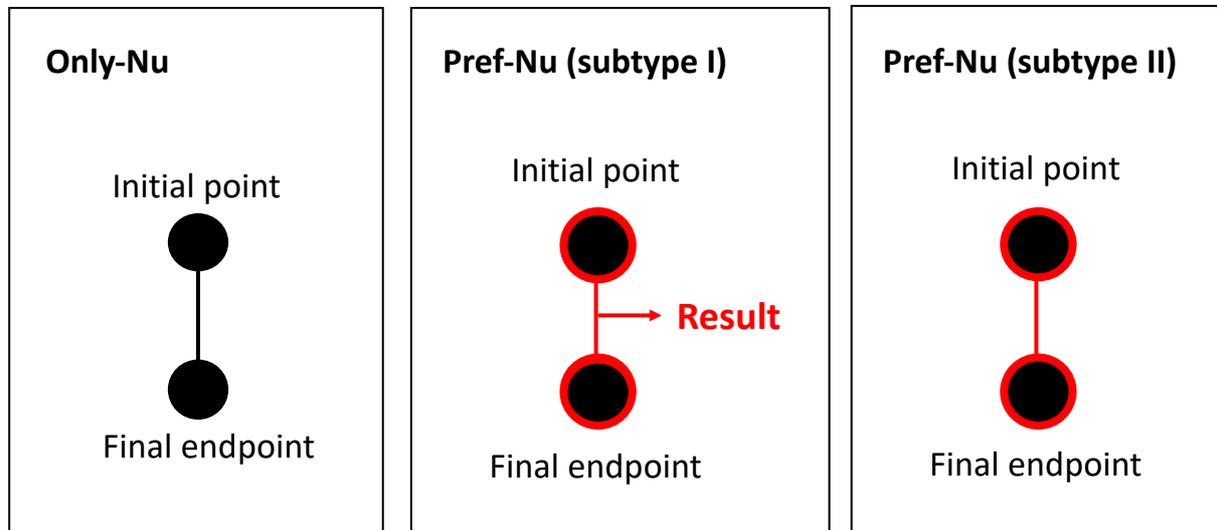
To work around this challenge, in the Nu-dyad Hypothesis, I avoid the term “semelfactive” and rather state the specific properties that it predicts for each verb type. Moreover, since we already know that Pref-Nu verbs involve two subtypes, the Nu-dyad Hypothesis contains different predictions for Pref-Nu depending on whether the prefix affects the lexical meaning of the verb (“Pref-Nu subtype I”) or contributes an Aktionsart meaning (“Pref-Nu subtype II”). The hypothesis can be stated as follows:

The Nu-dyad Hypothesis:

- A. Both Pref-Nu and Only-Nu express one “quantum” of an activity;
- B. Pref-Nu subtype I: Pref-Nu has a narrower lexical meaning than Only-Nu and expresses the result of an action, or;  
Pref-Nu subtype II: Pref-Nu has a narrower meaning insofar as it expresses Aktionsart;
- C. Only-Nu involves a more “basic” lexical meaning than Pref-Nu and is not concerned with a result.

The predictions for Only-Nu and Pref-Nu are illustrated in the two diagrams below. The initial point when the action begins and the end point when it stops take place at the same time, and these points are therefore located directly above each other. The red color in the diagrams for the two subtypes of Pref-Nu verbs indicates the semantic contribution of the prefix. The prefix narrows down the meaning of the verb by bringing in new lexical content or contributing Aktionsart. The red arrow

in subtype I shows that the action culminates in a result. Only-Nu, which does not have a prefix, describes a more “basic” action insofar as it does not state whether or not the action is completed or a result occurs. Although my corpus data show that the Nu-dyads in every cluster behave in slightly different ways, by and large, these predictions receive support from my study.



**Figure 11** The semantic differences between Only-Nu verbs and the two subtypes of Pref-Nu verbs according to the Nu-dyad Hypothesis.

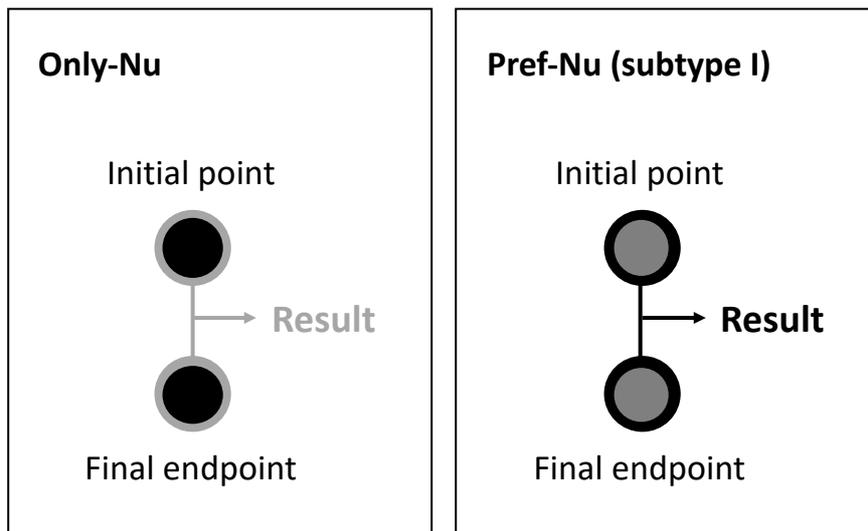
In view of the prediction that subtype I of Pref-Nu verbs express a result and Only-Nu verbs may or may not express a result, the question arises how to interpret this relationship. I will make two suggestions that can be tested on more verbs and data in the future. These ideas primarily concern Nu-dyads where the two verbs can express the same type of action in a given context.

First, using structuralist terminology, the relationship predicted by the Nu-dyad Hypothesis may be analyzed as a privative opposition between a marked and an unmarked member. The idea of privative oppositions goes back to the Prague linguistic circle and the 1930s, and Trubetzkoy, who coined the term, gave the following definition: “*Privative oppositions* are oppositions in which one member is characterized by the presence, the other by the absence, of a mark” (Trubetzkoy 1969 [1939]: 75).<sup>48</sup> Trubetzkoy’s examples of privative oppositions are from phonology: voiced sounds are, for instance, marked [+voice], while voiceless sounds are unmarked [-voice]. Trubetzkoy’s colleague Jakobson developed this idea further and applied it to Russian aspect. Jakobson argued that the perfective aspect is marked with its invariant meaning [+totality/completion], while the imperfective aspect lacks this mark (Jakobson 1932 [1984], see also Maslov 1959:

<sup>48</sup> Although the term “markedness” comes from the 20<sup>th</sup> century structuralist tradition, in linguistic history the notion of markedness can be traced much further back (Andersen 1989) and appears in the works of linguists from other traditions too, including Cognitive Linguistics (e.g. Lakoff 1987: 59-61, Nessel 2010). Perhaps, for these reasons, the idea of markedness has been used a large number of ways, and it has also been criticized (e.g. Janda 1996, Haspelmath 2006).

309, Forsyth 1970). As mentioned in Section 1.1, on this analysis, Russian perfectives always describe total or complete events, while imperfective verbs neither state, nor do not state, these properties. If the predictions of the Nu-dyad Hypothesis are correct, one could argue that we find a parallel situation in Nu-dyads in the sense that subtype I of Pref-Nu verbs can be described as [+result] because they are concerned with the result or completion of an action, while Only-Nu verbs lack this feature.<sup>49</sup>

The second analysis is very similar, but uses principles from Cognitive Linguistics and argues that subtype I of Pref-Nu verbs and Only-Nu verbs, in contexts where the action culminates in a result, focus on different parts of the situation. In other words, they construe the situation in different ways (Langacker 2008: 57-65). Having a prefix, the Pref-Nu verb focuses on whether or not the action is completed in the particular way designated by the prefix; Only-Nu focuses on whether the action took place or not. This is illustrated in Figure 12 where black indicates foregrounding and grey indicates backgrounding.



**Figure 12 Only-Nu and Pref-Nu verbs as devices of foregrounding and backgrounding the result or completion of the action.**

In the present chapter, my main goal will be to test the Nu-dyad Hypothesis. The ideas of Pref-Nu verbs (subtype I) and Only-Nu verbs as a privative opposition or as foregrounding/backgrounding devices in contexts where they express the same type of action are possible interpretations of this hypothesis that I will come back to in the concluding section of the chapter. Whichever interpretation of the

<sup>49</sup> Notice that the unmarked member of a privative opposition may occasionally occur in contexts typical of the marked member. By way of illustration, in its general-factual meaning (*obščefaktičeskoe značenie*), the Russian imperfective denotes a total event. Thus, in *Ja uže čital ètu knigu* 'I have already read that book', the imperfective verb *čitat'* 'read' expresses a completed action just like the perfective *pročitat'* 'read' in the parallel sentence *Ja uže pročital ètu knigu* 'I have already read that book'. The difference between the two sentences is that the imperfective focuses on whether or not the action was performed at all, while the perfective focuses on whether or not the action was completed (for a discussion, see Forsyth 1970: 6-8). Thus, here too, the imperfective remains "unmarked" with regard to the completion/totality of the event.

hypothesis is most explanatory (one of the two suggested or another one), I argue that we gain important insight into the nature of both Pref-Nu verbs and Only-Nu verbs by exploring them together. The Nu-dyad Hypothesis' prediction concerning Pref-Nu verbs with Aktionsart meaning (subtype II) will not be tested insofar as we already know it to be correct from the study in Chapter 2. However, the present chapter will provide several examples of the high relevance of these verbs in the language.

### 3.1.2 How to test the Nu-dyad Hypothesis

To test the Nu-dyad Hypothesis, I will focus on the two properties that are assumed to make Pref-Nu verbs different from Only-Nu, namely (a) the distinction between “narrow” and “basic” verb meanings, and (b) the notion of resultativity. Let us briefly consider these two ideas in turn.

The distinction between “narrow” and “basic” lexical meanings has to do with the level of specificity expressed by the verb. The meaning of Only-Nu verbs is described as “basic” insofar as they typically express one performance of a simple bodily act or production of one simple sound. The meaning of Pref-Nu verbs is, as mentioned above, expected to be narrower since prefixes add semantic content. A way to measure and test this part of the Nu-dyad Hypothesis is to compare the number of submeanings and constructions available for corresponding Only-Nu and Pref-Nu verbs.

The idea of resultativity requires a definition of what we mean by a result and how a result meaning can be recognized in text examples. However, these questions are not straightforward to answer. With the exception of Plungjan (2000: 7) who states that “completives” describe the natural end-point of telic processes (*estestvennyj final predel'nyx processov*), the scholars mentioned in Section 1.4 do not define the notion of resultativity for Pref-Nu verbs. Moreover, if we look beyond the literature on Pref-Nu verbs, we find that resultativity often has been discussed with examples from English (e.g. Halliday 1967, Simpson 1983, Goldberg 1995, Boas 2003, Goldberg and Jackendoff 2004, Beavers 2012), although it is expressed in different ways in different languages (Nedjalkov 1988). In view of this, I will in the following limit myself to the points that will become important in my own discussion.

The first point can be extracted from Makarova and Janda's (2009) discussion of the following examples:

- (16) a. *Dver' xlopnula* ‘The door slammed’  
b. *Ja zaxlopnul rot* ‘I slammed my mouth shut’

Although the two scholars do not specifically define the notion of resultativity, it appears that they understand a resultative meaning to occur when the action definitely culminates in a change of state for one of the verb participants, here the patient (the mouth): “[*xlopnut* ‘slam once’] picks out a unitary act of slamming

which may or may not result in a closed door (since a door can slam and bounce open again). [*Zaxlopnut* 'slam shut']... results in a mouth that is shut and will stay that way" (Makarova and Janda 2009: 96-97). Notice that this passage furthermore is in line with what was stated above, namely that Only-Nu "may or may not" express a result. In my study too, change of state will be considered central for resultativity. If the action does not culminate in a change of state for one of the participants, I will regard the verb meaning as not resultative.<sup>50</sup>

Both transitive and intransitive verb uses can express a change of state (a result). Although the intransitive *Dver' xlopnula* 'the door slammed' describes a sound and is not concerned with a result, other intransitive verb uses can express a concrete result. Consider, for instance, *Ja prygnul v mašinu* 'I jumped into the car' where the action takes the subject to a new location. Conversely, transitive verb uses are not necessarily resultative. In *Ja dërnul šnur* 'I tugged on the cord', the tug does not change the position of the cord permanently, but only shows that someone tugged on it once. The verbs and contexts must therefore be considered individually, and there is no one-to-one relationship between transitivity and a resultative meaning.

The example *Ja prygnul v mašinu* 'I jumped into the car' illustrates another point that is important for resultative meaning, namely the influence of the syntactic construction. Without the prepositional phrase *v mašinu* 'into the car', the verb meaning could, at least potentially, be understood as non-resultative: *Ja prygnul* 'I made a jump'. The idea that constructions can carry resultative meaning (i.e. "resultative constructions") has been much studied within the field of Construction Grammar (e.g. Goldberg 1995, Boas 2003), and an observation that has been made based on English material is that resultative constructions contain a so-called resultative phrase – an adverb or a prepositional phrase that describes a property (e.g. *solid* in *The pond froze solid*) or a spatial path (e.g. *out of the room* in *Bill rolled out of the room*) – that functions as a verbal argument (Goldberg and Jackendoff 2004: 536). In Russian, the situation is slightly different insofar as properties and spatial paths often are (redundantly) expressed by the prefix: in *Ja zaxlopnul rot* 'I slammed my mouth shut', the idea of the English adverb *shut* is expressed by the prefix *za-*, and in *Ja vprygnul v mašinu* 'I jumped into the car', the meaning *into* is expressed twice – by the prefix *v-* as well as by the preposition *v* 'into'. Despite the fact that English and Russian differ in this respect, the observation that there is a relationship between construction and resultative meaning is clearly important.

Russian makes a distinction between (a) objects that represent the target of the action and are expressed in the accusative case and (b) objects that represent the instrument that the action is performed with and are expressed in the instrumental case. Following Wierzbicka (1980), I will consider accusative direct objects, such

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<sup>50</sup> Although participants of a situation are denoted by means of semantic roles, such as agent, patient, theme and experiencer, and although there is no one-to-one relationship between semantic roles and syntactic functions, for the purposes of this study, I will usually refer to the verbs' syntactic arguments, such as their subject and direct object, rather than semantic roles, since they are sufficient to discuss whether or not the action culminates in a change of state.

as *papirosu* ‘cigarette’ (from *papirosa* ‘cigarette’) in (17), as an indication of a resultative meaning and instrumental objects, such as *rulēm* ‘with the steering wheel’ (from *rul’* ‘steering wheel’) in (18), as an indication that the verb is not concerned with a result:<sup>51</sup>

(17) *Ivan krutil papirosu* ‘Ivan was rolling a cigarette’

(18) *Petr krutil rulēm* ‘Peter was turning (lit. twisting with) the steering wheel’  
(Wierzbicka 1980: 15-16)

When the object is expressed in the accusative case (*papirosu*), the goal of the subject is to make something happen to it: the result is reached when the cigarette has been rolled and is ready to use. When the object is expressed in the instrumental case (*rulēm*), the goal of the subject is to affect something else than the instrumental object (here, a car), or it can refer to “idle, aimless activities”, such as *igrat’ ključem* ‘play with a key’ where *ključem* is the instrumental form of *ključ’* ‘key’ (ibid: 16). Notice that both meanings are expressed by a direct object in English. Smith’s illustration of a transitive semelfactive event, *The bird flapped his wing* (Smith 1997: 58), would in Russian be translated with the instrumental object *krylom* ‘with the wing’, rather than the accusative *krylo* ‘wing’: *Ptica maxnula krylom* ‘the bird flapped his wing’.

A final point that can be mentioned is that resultativity in Russian can be expressed by means of the auxiliary verb *byt’* ‘be’ and a past passive participle, as illustrated by *magazin byl zakryt* ‘the shop was closed’ (as an alternative to past tense forms of *zakryt’ magazin* ‘close the shop’). Depending on the verb’s lexical meaning and context, past passive participles can describe a change of state, as in *magazin byl zakryt v sem’ časov* ‘the shop was closed at seven’ (i.e. at this time the shop assistants went home) or a state following from a previous action, as in *magazin byl zakryt ves’ den’* ‘the shop was closed all day’. Although these two uses of past passive participles arguably vary in how closely connected they are with the notion of result (see Knjazev 1983 [1988]), from the perspective of this study, it seems reasonable to expect past passive participles to be more typical of Pref-Nu verbs than Only-Nu verbs insofar as the participle either expresses the change of state itself or the state that follows after this change has taken place. A notable exception is what Knjazev calls “stative participles” such as *pokryta* ‘be covered in, fem.’ in *Bol’saja čast’ ee territorii byla pokryta lesami* ‘The greater part of [Western Europe’s] territory was covered with forest’ (ibid: 344). In these cases, we are dealing with a constant state rather than a change of state, and if such past passive participles occur in Nu-dyads, we would expect them to be derived from Only-Nu verbs rather than from Pref-Nu verbs.<sup>52</sup>

<sup>51</sup> Notice that Wierzbicka’s goal is not to make a statement about resultativity, but to show that accusative and instrumental objects “by no means are equivalent” (Wierzbicka 1980: 15) and that instrumental objects not really are direct objects (ibid: 20). However, her observations are relevant for my study.

<sup>52</sup> In addition, past passive participles occasionally are derived from imperfective verbs where the completion of the action is backgrounded, as in *Zapiski byli pisany ne dlja pečati* ‘the notes were written not for print’ where the focus is on *ne dlja pečati* ‘not for print’ rather than the action itself (Borik and Gehrke

To summarize, the Nu-dyad Hypothesis is based on statements about Only-Nu and Pref-Nu verbs in the scholarly literature. Only-Nu verbs are predicted to have the properties traditionally associated with semelfactive verbs. In particular, they are not concerned with a result. Pref-Nu verbs are predicted to have a narrower lexical meaning than Only-Nu verbs, and they either express a result (subtype I) or Aktionsart (subtype II). Possibly, Pref-Nu (subtype I) and Only-Nu may in certain contexts function as a privative opposition or as a foregrounding/ backgrounding device, but this idea is primarily intended as a starting point for future studies. A result is understood to occur when the action leads to a change of state for one of the participants. Symptoms of resultativity include prepositional phrases and adverbs expressing a spatial path or property, accusative direct objects and past passive participles. In the remaining part of this chapter, I will test the predictions of the Nu-dyad Hypothesis on corpus data.

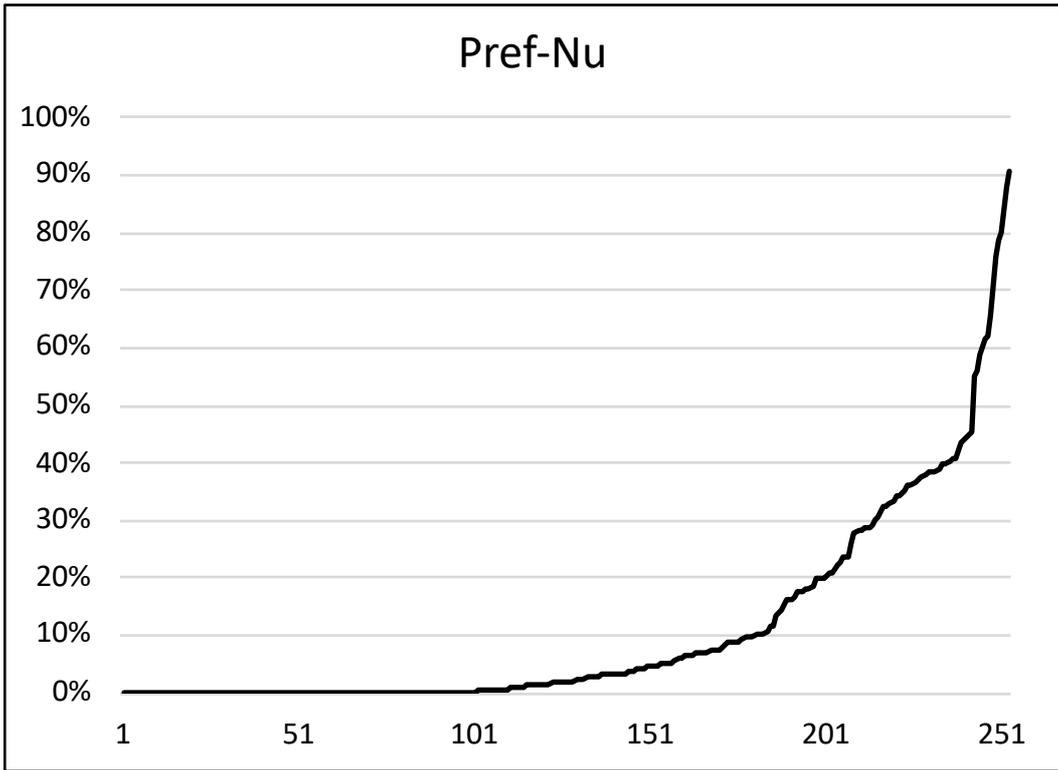
### **3.2 Past passive participles**

I begin by considering the extent of past passive participles in the corpus examples of Pref-Nu and Only-Nu verbs. As argued above, past passive participles are usually concerned with a change of state (here, understood as a result) and are therefore primarily expected for Pref-Nu. My corpus data largely confirm that this is the case. The verbs' token frequencies of past passive participles in the corpus are available in Appendix 2.

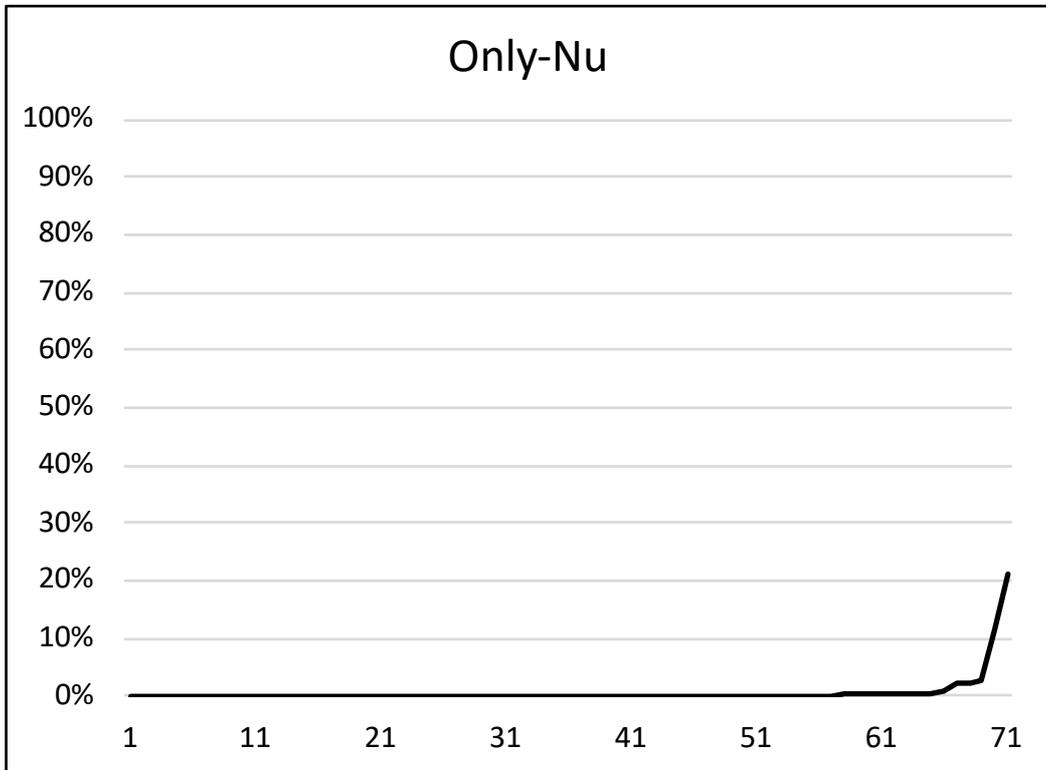
Figures 13 and 14 show the distribution of past passive participles in the data. Although most of the Pref-Nu verbs primarily are used in non-participle forms, the upper diagram shows that some regularly, or even most commonly, are used as past passive participles. Among the Only-Nu verbs, past passive participles are much rarer and usually do not occur at all.

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2018). Imperfective past passive participles are marginal, often overlooked in grammars, and not relevant in the present study.



**Figure 13** Proportion of past passive participles in the corpus examples of the 254 Pref-Nu verbs.



**Figure 14** Proportion of past passive participles in the corpus examples of the 71 Only-Nu verbs.

Looking closer at the verbs that derive past passive participles we can make the following observations:

For Pref-Nu verbs, past passive participles are especially common in certain clusters: *čerknut* ‘scribble once’ (*podčerknut/yj* ‘emphasized’), *dvinut* ‘move once’ (e.g. *prodvinut/yj* ‘advanced’), *dernut* ‘pull once’ (e.g. *zaděrnut/yj* ‘closed (e.g. curtains)’), *kinut* ‘throw once’ (e.g. *pokinut/yj* ‘abandoned’), *pugnut* ‘scare once’ (*vspugnut/yj* ‘scared’), *stegnut* ‘stitch once’ (e.g. *pristěgnut/yj* ‘fastened’), *tisnut* ‘squeeze once’ (e.g. *stisnut/yj* ‘squeezed together’), *tknut* ‘poke once’ (e.g. *votknut/yj* ‘stuck into’), *tronut* ‘touch once’ (*zatronut/yj* ‘touched’) and *vernut* ‘return once’ (e.g. *razvěrnut/yj* ‘flared-out’). All of these clusters derive one or several Pref-Nu verbs where past passive participles account for at least 20% of 100 corpus examples.<sup>53</sup> Some of these participles have a homonymous adjective. *Razvěrnutyj* and *prodvinutyj* have, for instance, the adjectival meanings ‘detailed’ and ‘progressive, advanced’ as in *razvěrnutyj rasskaz* ‘detailed story’, and *prodvinutyj človek* ‘sophisticated person’. In other clusters, past passive participles are usually not derived from Pref-Nu verbs.<sup>54</sup>

By comparison, only one Only-Nu verb is regularly used as a past passive participle – *tronut* ‘touch once’ – where *tronut/yj* ‘touched’ accounts for 1,027 (21%) of the 4,879 corpus examples. *Tisnut/yj* ‘squeezed’ occurs in 11% of the corpus examples with *tisnut* ‘squeeze once’, but since *tisnut* ‘squeeze once’ has a relatively low token frequency, this amounts to only 13 examples with *tisnut/yj* ‘squeezed’. For 20 other Only-Nu verbs, past passive participles are found in less than ten corpus examples or account for less than 3% of the data. Most of these are “invisible” in the figure. For 49 Only-Nu verbs, no past passive participles are attested at all.

Having explored the distribution of past passive participles in the data let us now compare the semantic meaning of *tronut/yj* ‘be touched’ and *zatronut/yj* ‘be touched’ that are both attested widely in the corpus. Neither of these participles are actually concerned with a change of state. However, using Knjazev’s terminology, we could, perhaps, say that the former is a stative participle that points to a constant state where a patient is affected by something, for example grey hair/age in (19). The latter participle is, by comparison, concerned with a result, namely whether the action of touching upon something, for example a question, was took place or not, as in (20):

- (19) *Peredo mnoj stojal mužčina srednix let s akkuratno podstrižennoj borodoj, tronutoj sedinoj.* [*Kommersant*“-*Vlast*”: 2002]  
‘In front of me was standing a middle-aged man with a nicely trimmed beard with a touch of grey hair.’

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<sup>53</sup> Here, I mention verbs attested in at least 100 corpus examples to concentrate on cases where 20% of the examples imply at least 20 occurrences.

<sup>54</sup> For an exploration of the relationship between participle and adjective forms, see Petrunina (Forth.).

- (20) *Takže na vstreče rukovoditelej **byl zatronut vopros** ob Evrolige, no on tak i ostalsja nerešennym.* [Izvestija. 2003]  
 ‘On the leadership meeting, the Euroleague question was touched upon, but remained undecided.’

As for the other participles derived from Pref-Nu verbs, they too arguably express a change of state or the situation following a change of state, as can be illustrated by the participles just mentioned above: *podčērknut/yj* ‘emphasized’, *prodvinut/yj* ‘advanced’, *zadērnut/yj* ‘closed (curtains)’, etc. The meaning of Only-Nu participles is less clear: they describe states (i.e. being embossed, feeling abandoned and being hit by a dust bag in the examples below), but the states have been inflicted by some action, and sometimes they seem close to resultatives:

- (21) *Citata èta vypisana iz znakomoj sinen'koj knigi, na kateroj **tisnuto bronzoj**: «V. I. Lenin». [Junost'. 1971]*  
 ‘This quote was taken out from the well-known blue book where “V. I. Lenin” is embossed in bronze.’
- (22) *V obščem vse dlja togo čtob on ne čuvstvoval sebja **kinutym**.* [Forum. 2005]  
 ‘In general, whatever it takes for him not to feel abandoned.’
- (23) – *Sejčas navedem marafet, – bodro poobeščala Džulija. Ona ubirala, a **on sidel i smotrel** – vse ešče slovno **stuknutyj pyl'nym meškom**.* [Zvezda. 2002]  
 “‘Now we will do a makeover,” Julia cheerfully promised. She was cleaning, and he was sitting and looking, still as if he had been hit by a dust bag.’

To conclude, past passive participles are almost only found among Pref-Nu verbs. As expected from the Nu-dyad Hypothesis, past passive participles derived from Pref-Nu verbs appear concerned with a change of state, a result. The only past passive participle regularly derived from Only-Nu verbs is *tronut/yj* ‘be touched’, which arguably expresses a constant state rather than a change of state. However, the boundary between a resultative meaning and a non-resultative meaning for past passive participles is not fully clear.

### 3.3 Case studies: Choice of aspectual clusters and data

We will now turn to case studies of verbs in individual clusters. Chapter 2 showed that Pref-Nu verbs primarily represent the semantic classes Move, Impact, Physiol and Sound. In order to gain a broad understanding of the semantic relationships that can exist between Only-Nu and Pref-Nu verbs, I decided to choose clusters from different semantic classes as the basis for my study: *prygnut* ‘jump once’ (Move), *xlopnut* ‘slam once’ (Impact) and *kriknut* ‘shout once’ (Sound).

For the case studies, 200 random examples were extracted for each verb from the RNC (years 1950-2018).<sup>55</sup> To reduce potential bias in the data due to individual

<sup>55</sup> The corpus searches were performed in the fall of 2018.

authors' preferences, only one example was allowed per document.<sup>56</sup> For some verbs, less than 200 examples were available in the corpus. For these verbs, I included all examples that were from different documents. This yielded a total of 2961 examples, as shown below:

Only-Nu	#Ex.	Pref-Nu	#Ex.
<i>Prygnut'</i> 'jump once'	200	<i>Naprygnut'</i> 'jump at'	10
		<i>Otprygnut'</i> 'jump away'	128
		<i>Pereprygnut'</i> 'jump over'	200
		<i>Podprygnut'</i> 'make a little jump'	200
		<i>Sprygnut'</i> 'jump down'	200
		<i>Vprygnut'</i> 'jump into'	92
		<i>Vyprygnut'</i> 'jump out of'	200
		<i>Vsprygnut'</i> 'jump up on'	137
		<i>Zaprygnut'</i> 'jump into/onto'	176
<i>Xlopnut'</i> 'slam once'	200	<i>Prixlopnut'</i> 'smack dead'	200
		<i>Zaxlopnut'</i> 'slam shut'	200
<i>Kriknut'</i> 'shout once'	200	<i>Okriknut'</i> 'call up'	18
		<i>Prikriknut'</i> 'yell at'	200
		<i>Vskriknut'</i> 'give a sudden shout'	200
		<i>Vykriknut'</i> 'shout out'	200
Total	600	Total	2361

**Table 11** Number of corpus examples collected for the case studies.

Each example was annotated manually for various factors that were seen as relevant to investigate the verbs in question. The discussions in Sections 3.4-3.6 are based on this annotation.

### 3.4 The cluster of *prygnut'* 'jump once': An example from the semantic class Move

The first case study compares *prygnut'* 'jump once' and nine Pref-Nu verbs related to this verb. These verbs represent the semantic class Move, which, as shown in Section 2.3, is the most widespread semantic class among both Pref-Nu and Only-Nu verbs. It is therefore clearly important to inspect how Only-Nu and Pref-Nu may interact in such clusters. The present section shows how the unprefix verb is used in the corpus and what the various prefixes contribute. As expected from the Nu-dyad Hypothesis, the Pref-Nu verbs are found to have more specific lexical meanings than *prygnut'*. Most of them express a result and represent subtype I of Pref-Nu verbs; one of them expresses Aktionsart (subtype II). The contexts of *prygnut'* primarily describe a result too, but based on the intuition and comments of native speakers, it is suggested that *prygnut'* focuses on the jump itself, rather than on the completion of a trajectory.

<sup>56</sup> This does not fully eliminate the potential influence of authorship. For the case studies in Chapter 4, a stricter approach was chosen whereby one example was allowed per author.

### 3.4.1 Definition of resultativity for Move verbs

First, let us consider the notion of resultativity for *prygnut'* and other verbs from the semantic class Move. Most Move verbs describe situations where either the subject or direct object is transferred to a new place. In other words, we see a change of location, a change of state.<sup>57</sup> At the same time, some movement activities (including jumping) are possible to envision as typical semelfactive events where the subject or direct object arrives back at the starting point after each performance. The jumps in (24) are, for instance, not directed anywhere, but go up and down, as can be understood from the adverbial *na zemle* 'on the ground'. The book in (25) and head in (26) make one flap and one shake, but remain in the same spot. In (27), the boy pulls the tall man by the sleeve to get his attention, not to move his arm to somewhere else.

- (24) – *Ponjal, – perebil ego Letoroslev, nakonec sorvavšis' s mesta i neskol'ko raz prygnuv na zemle.* [V. Kormer. 1987]  
'“I got it,” Letoroslev interrupted him having finally got up and jumped a few times on the ground.'
- (25) *Kniga porxnula v vozduxe, trepešča stranicami, upala.* [M. Elizarov. 2007]  
'The book flapped in the air, fluttered its pages, and fell down.'
- (26) *Egor ogljanulsja i kačnul ukoriznenno golovoj.* [V. Šukšin. 1973]  
'Egor looked around and reproachfully shook his head.'
- (27) *Pomnju, kak-to raz v metro mal'čonka ego dërnul za rukav i govorit: "Djadja, tebe razve ne skučno odnomu tam, naverxu stojat?"* [A. Blum. 1995]  
'I remember once in the metro a little boy tugged on his sleeve and said, "Hey, mister, don't you get bored standing up there all by yourself?"'

For the purposes of the present study, contexts like (24) that involve a jump up and down will be understood as non-resultative. Contexts explicitly expressing a change of location by means of an adverbial, e.g. *v trollejbuse* 'into the trolleybus' in (28), and contexts like (29) that necessarily imply a change of location although this is not expressed overtly by means of an adverbial, will be interpreted as resultative:

- (28) *Podošël pustoj trollejbuse, vse vlezli, posle vsej neožidanno vprygnula v trollejbuse ovčarka.* [Ju. Trifonov. 1969]  
'An empty trolleybus approached, everyone squeezed in, and then suddenly a German shepherd jumped into the trolleybus.'
- (29) *Letčik vprygnul, no sliškom rano raskryl parašjut.* [A. Žigulin. 1988]  
'The pilot jumped out, but opened his parachute too early.'

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<sup>57</sup> I write "most", since a few verbs classified as Move in the RNC describe bodily acts that do not take the subject or direct object to a new location. Examples are *drognut'* 'shiver once' and *maxnut'* 'wave once'.

In terms of the Nu-dyad Hypothesis, Pref-Nu verbs are expected to express resultative actions, whereby a jump follows the direction specified by the prefix. *Prygnut'* should occur in contexts where the jump is not resultative or where the change of location is not in focus. We will see that both of these predictions receive support from the corpus data and/or native speakers' intuitions.

### 3.4.2 Meanings of the Pref-Nu verbs in the cluster of *prygnut'*

The prediction that the prefix in these verbs specifies a trajectory or end-point for the action should be uncontroversial. All Russian verb prefixes except *po-* express a spatial meaning and can be added to a verb to specify the direction of the activity (Dickey 2007).<sup>58</sup> The examples in (28) and (29) illustrate this with *vprygnut'* 'jump into' and *vyprygnut'* 'jump out of' where the prefixes *v-* and *vy-* contribute the ideas of INTO and OUT OF A CONTAINER, respectively.<sup>59</sup> The remaining Pref-Nu verbs in question are illustrated below. *S-* in *sprygnut'* 'jump down' gives the meaning DOWN (30). *Vz-* in *vsprygnut'* 'jump up on' adds the meaning UP (31).<sup>60</sup> The semantic contribution of *ot-* in *otprygnut'* 'jump away' can be described as DEPART (32). *Pere-* in *pereprygnut'* 'jump over' is connected with the idea of TRANSFER (33). *Na-* in *naprygnut'* 'jump at' have a SURFACE meaning, and this verb means that the subject jumps horizontally at someone, for example, to scare them (34). The verb *zaprygnut'* expresses 'jump into' (35) as well as 'jump onto' (36). The semantic contribution of *za-* in *zaprygnut'* is harder to nail down, but can likely be explained by the ability of *za-* to express what Valeeva (2001) calls a "spatial-directional universality" (*prostranstvenno-napravitel'naja universal'nost'*). That is, in this case, *za-* can combine with more than one spatial direction ('into' and 'onto').

- (30) *V jamu sprygnulo srazu sem' devoček.* [S. Golicyn. 1972]  
'No less than seven girls jumped into the hole.'
- (31) *Gospodin za stolom vdrug izdal strannyj prodolžitel'nyj zvuk, poxožij na gromkij vzvizg, i v odno mgnovenie vsprygnul na stol.* [Znamja. 2000]  
'The gentleman by the table suddenly made a strange long sound similar to a loud squeal, and in an instant jumped onto the table'
- (32) *V poslednij moment Napoleon otprygnul v storonu – motocikly promčalis' mimo.* [Ju. Koval'. 1975]  
'In the last moment, Napoleon jumped to the side; the motor cycles flew by.'
- (33) *Opjat' izgorod', on pereprygnul i očutilsja na kladbišče.* [V. Šukšin. 1973]  
'One more fence; he jumped across and found himself in a graveyard.'

<sup>58</sup> Incidentally, there are no attestations of *po-* in combination with *prygnut'* in the RNC.

<sup>59</sup> As pointed out in Section 1.2, when otherwise not stated, I use the prefix meanings proposed by Janda et al. (2013). Prefix meanings are shown in capital letters.

<sup>60</sup> As mentioned earlier, in *v(o)z-semelfactives*, *vz-* furthermore is associated with suddenness (Zaliznjak and Šmel'ev 2000: 110, Endresen 2014: 228-234), and some of the examples with *vsprygnut'* involve this nuance.

- (34) – *S Novym godom! – Vas takže, – probormotal Aleksej i stal spuskat'sja. Spuskalsja – i vdrug szadi kto-to **naprygnul**, zasmeljalsja.* [Bitov. 1960-1963]  
 “Happy New Year!” “You too”, Aleksej mumbled and began climbing down. As he was climbing, someone suddenly jumped at him from behind and started laughing.’
- (35) *Storož ojknul, **zaprygnul na telegu** i xlestnul lošad’.* [Tramvaj. 1990]  
 ‘The caretaker, jumped onto the wagon and whipped the horse.’
- (36) *Nakonec primčalsja poezd – staryj, malovagonnyj, i Golev **zaprygnul v vagon vtorogo klassa.*** [Zvezda. 2002]  
 ‘At last the train – an old one with few wagons – arrived speedily, and Golev jumped into a second-class wagon.’

The last Pref-Nu verb in this cluster, *podprygnut’* ‘make a little jump’, differs from the others insofar as *pod-* contributes an ATTENUATIVE meaning, rather than a path. In other words, *podprygnut’* represents subtype II of Pref-Nu verbs. As mentioned previously in the dissertation, attenuatives are a type of Aktionsart that “refers to actions performed with lower intensity than the activity they are related to” (Makarova 2014: 105), here, to make a little jump. The corpus examples of *podprygnut’* involve jumps up and down. That is, this verb does not express a change of location.

- (37) *Uslyšav o prjanikax, Valentina Andreevna čut’ bylo ne **podprygnula** ot radosti.* [M. Milovanov. 2000]  
 ‘When she heard about the ginger breads, Valentina Andreevna nearly made a little jump of joy.’

### 3.5.3 Meanings of *prygnut’*

The prediction from the hypothesis concerning *prygnut’* is less straightforward to test on corpus data. Although it is possible to determine whether *prygnut’* tends to express one jump up and down or a jump that takes the subject to a new location, the focus of the speaker is a question of interpretation. To learn more about *prygnut’*, I inspected the 200 corpus examples with this verb manually.

Although one could imagine that *prygnut’* usually expresses a typical semelfactive action, i.e. one jump up and down, the corpus data show that this verb too usually expresses a directed jump. In 162 of the 200 examples, the direction is specified by an adverbial, like *na pleco* ‘onto the shoulder’ in (38). In 16 other examples, the directedness of the jump is clear from the wider context. The subject in (39), for instance, jumped from a window. Thus, ignoring the attenuative *podprygnut’*, we see that both Only-Nu and the Pref-Nu verbs in this cluster express jumps that takes the subject to a new place.

(38) *Ved'ma sdelala kotu znak, i on **prygnul ej na plečo**.* [Texnika – molodeži. 1993]

'The witch gave the cat a sign and it jumped onto her shoulder.'

(39) *Igor' priznalsja, čto **prygnul bez postoronnej** «pomošči». Posle operaciji Igor' prišel v sebja, stal nemnogo govorit', uznaval prisutstvujuščix. Na vopros, sam li on vybrosilsja iz okna ili pod vozdejstviem čego ili kogo-libo, Sorin otvetil, čto sdelał svoj poslednij šag SAM.* [Nižegorodskie gubernskie vedomosti. 1998]

'Igor asserted that he had jumped without the "help" of others. After the surgery, Igor came to himself, began talking a bit, recognized those present. On the question of whether something or someone influenced him to throw himself out of the window, Sorin answered that he made his last step HIMSELF.'

The remaining 22 examples arguably involve a non-directed verb meaning or are unclear. Several of them involve the fixed expression *prygnut' vyše (svoej) golovy* which literally means 'jump higher than one's head' and expresses that you try to do something above your capacity. The use of this expression is illustrated in (40). I do not find examples where the given word collocation clearly carries the literal meaning of jumping higher than your head.

(40) *I reklama Nestle – èto prosto popytka **prygnut' vyše golovy**.* [Delo. 2002]

'And Nestle's commercial, that's just trying to outdo yourself.'

A closer look at the examples of *prygnut'* furthermore shows that the unprefix verb appears in the same contexts as the relevant Pref-Nu verbs. The jumps can be directed onto a location higher up like *vsprygnut'* and *zaprygnut'* (38), into a container like *vprygnut'* and *zaprygnut'* (41), down from something like *sprygnut'* (42), out of a container like *vyprygnut'* (43), away from something like *otprygnut'* (44), across something like *pereprygnut'* (45), and at someone like *naprygnut'* (46):

(41) *Togda, uže ne dožidajas' razrešenija ministra, ja sam **prygnul v vertolet**.* [Iskusstvo kino. 2003]

'Then, no longer waiting for the secretary's permission, I jumped into the helicopter myself.'

(42) *Totčas že, otloživ nedočitanuju knigu, junoša **prygnul s balkona vniz golovoj**.* [S. Dovlatov. 1984]

'The young boy lay aside his unfinished book and at once jumped from the balcony head first.'

(43) *I ešče byl obrjad posvjaščenija: nužno bylo šest' raz **prygnut' iz parilki v xolodnuju vodu**.* [Večernjaja Moskva. 2002]

'And there was also an initiation ritual: one had to jump out of the sauna into the cold water six times.'

- (44) *Čuvstvo opasnosti, v samom prjamom smysle navisšej nado mnoj, ostanovilo menja v metre ot gibeli — esli by ja ne **prygnul nazad**, bednjaga ubil by menja svoim telom.* [V. Pelevin. 2014]  
 ‘The feeling of danger that literally was hanging above me stopped me a meter from death; if I hadn’t jumped back, that poor man would have killed me with his body.’
- (45) — *Pryžkami čerez avtobusy sejčas nikogo ne udiviš’... — Esli ponadobitsja **prygnut’ čerez sobor Svjatogo Pavla**, to Èddi voz’metsja!* (E. Veltistov. 1978-1979)  
 “‘Nowadays you won’t amaze anyone by jumping over buses” ... “If what is needed is to jump over the Church of Saint Paul, Eddi will do it.’
- (46) *I v tot moment, kogda menja kololi, sobaka, počuvstvovav, čto mne delajut bol’no, **prygnula na medsestru**.* [A. Bukin, I. Bobrin, N. Bestem’janova. 2000-2001]  
 ‘And in that moment, when they gave me the injection, sensing that I was in pain, the dog jumped at the nurse.’

*Prygnut’* can also appear in contexts similar to those of *podprygnut’*. The examples of this in the database are metaphorical and concern things that can only jump up and down and never move to another location, e.g. *serdce* ‘the heart’:

- (47) — *Ugadaj, čto ja tebe prinesla! U menja **serdce tak i prygnulo**. A vdrug — novye kon’ki?!* [I. Pivovarova. 1986]  
 “‘Guess what I’ve brought you!” My heart made a jump. What if it was new ice skates?!’
- (48) *Vot podarok — voistinu podarok: srazu **serdce podprygnulo**, daže glazam svoim ne poveril.* [V. Ličutin. 1987]  
 ‘Now, that’s a gift – truly a gift: my heart immediately made a little jump, I couldn’t even believe what I saw.’

What we see, then, is that (a) *prygnut’* tends to describe a jump from one location to another, and that (b) it can be combined with all the same trajectories as the prefixed verbs. Neither of these findings is at variance with the Nu-dyad Hypothesis, but at the same time they are not sufficient to understand when Only-Nu is used as compared to Pref-Nu. To shed light on this question, let us therefore zoom in on the contexts of “rivalry”, that is, contexts where both verb types apparently are possible.

### 3.4.4 Rivalry between *prygnut’* and Pref-Nu

The previous section showed that *prygnut’* occurs in most contexts connected with the various Pref-Nu verbs, and the question arises as to when the unprefix verb is preferred if both verb types seemingly are possible. In other words, why is

*prygnut'* selected in examples (38)-(39) and (41)-(48) instead of Pref-Nu? In this dissertation, I will follow (Baayen et al. 2013) and refer to instances where two or more verbs can be used to express a similar lexical meaning as cases of “rivalry”. For the cluster of *prygnut'*, the following observations can be made in this regard:

First, it seems that Only-Nu is avoided in contexts where the jump specifically is directed from somewhere (*iz* ‘out of’, *s* ‘down from’) or over something (*čerez* ‘across’). Although *prygnut'* is possible, Pref-Nu verbs (in particular, *vyprygnut'*, *sprygnut'* and *pereprygnut'*) are clearly preferred. The lower occurrence of *prygnut'* in these contexts does not have to do with this verb having a lower token frequency in the corpus than the relevant Pref-Nu verbs. In fact, *prygnut'* has a much higher token frequency than any of them (2684 ex. vs. 983 ex., 1761 ex. and 428 ex.).

Preposition	<i>Prygnut'</i>	Pref-Nu verbs	Most frequent Pref-Nu
<i>Iz čego</i> ‘out of’	39 ex. (9%)	390 ex. (91%)	<i>Vyprygnut'</i> : 380 ex.
<i>S čego</i> ‘down from’	174 ex. (21%)	646 ex. (79%)	<i>Sprygnut'</i> : 605 ex.
<i>Čerez čto</i> ‘across’	52 ex. (17%)	254 ex. (83%)	<i>Pereprygnut'</i> : 200 ex.

**Table 12** Frequency distribution of *prygnut'* vs. Pref-Nu verbs in the corpus in contexts involving *iz čego*, *s čego* and *čerez čto*. The table shows the number of examples in the RNC 1950-2019 containing the various verbs and prepositional phrases at a distance of “1”.

In contexts where the jump is directed onto (*na*) or into (*vo*) something, *prygnut'*, on the other hand, competes with the prefixed verbs, particularly *sprygnut'*. As shown in Table 13, in the context of *v* ‘into’, *prygnut'* is even slightly more widespread than all the Pref-Nu verbs taken together. It is not obvious what motivates the difference between Tables 12 and 13. However, the spatial paths in Table 12, ‘out of’, ‘down from’ and ‘across’, are arguably “more specialized” than those in Table 13 in the sense that we tend to speak of where we move rather than out of what, from where or across what the movement takes places. To bring focus to these latter types of trajectories, native speakers predominantly use a prefix.

Preposition	<i>Prygnut'</i>	Pref-Nu verbs	Most frequent Pref-Nu
<i>Na čto</i> ‘onto’	347 ex. (32%)	729 ex. (68%)	<i>Sprygnut'</i> : 381 ex.
<i>Vo čto</i> ‘into’	526 ex. (56%)	408 ex. (44%)	<i>Sprygnut'</i> : 144 ex.

**Table 13** Frequency distribution of *prygnut'* vs. Pref-Nu verbs in the corpus in contexts involving *na čto* and *vo čto*. As in the previous table, the frequencies show the number of examples containing the relevant verbs on a distance of “1” in the RNC 1950-2019.

A second observation is that *prygnut'* is the most common verb in contexts that involve both the source and end-point of the trajectory:

- (49) *Spaslis' nemnogie, prygnuv s obryva v reku. Bol'sinstvo pogiblo.* [G. Trošev. 2000-2001]  
 ‘A few were saved by jumping from the cliff into the water. Most died.’

As Table 14 shows, the given tendency is far from clear-cut and *sprygnut'* is clearly possible as well. However, the other Pref-Nu verbs hardly occur in such contexts. An explanation for this might be that the prefixed verbs focus on one part of the trajectory, while *prygnut'*, not having a prefix, is “neutral” and can point to the source (preposition/P + genitive) and the end-point (preposition/P + accusative) at the same time.

Prepositions	<i>Prygnut'</i>	Pref-Nu verbs	Most frequent Pref-Nu
P + gen, P + acc	71 ex. (43%)	94 ex. (67%)	<i>Sprygnut'</i> : 61 ex.

**Table 14** Frequency distribution of *prygnut'* vs. Pref-Nu verbs in the corpus in contexts involving both source and end-point. The frequencies were found by searching for *prygnut'* (Only-Nu) and *\*prygnut'* (Pref-Nu) on a distance of “1” from a prepositional phrase with a genitive object and a prepositional phrase with an accusative object in the RNC 1950-2017. Note that the source and end-point of a trajectory can be expressed by prepositional phrases involving other cases than the genitive and accusative too (e.g. *k 'to'* that governs the dative). However, the genitive and accusative should cover most uses.

Third, in general, *prygnut'* is more common than the Pref-Nu verbs with adverbials like *tuda* ‘thereto’, *obratno* ‘back again’, *sverxu* ‘from above’, *nalevo* ‘to the left’, *vbok* ‘to the side’. Words of this type are found in 29 (14,5%) of the 200 examples of *prygnut'* and 50 (4%) of the 1,143 examples involving Pref-Nu verbs. The difference between Only-Nu and Pref-Nu is statistically significant (p-value: 4.9e-08). The effect size is small, but reportable (Cramer’s V: 0.15).<sup>61</sup> A possible explanation might be that adverbs of this type are not connected with specific prefixes in the same way as prepositions, such as *iz* ‘from’ (often occurring in combination with the prefix *vy-*) and *čerez* ‘across’ (often used in combination with *pere-*). Two notable exceptions to this tendency are *nazad* ‘back’ and the prepositional phrase *v storonu* ‘to the side’ where *v* ‘into’ is not followed by a distinct destination. In these contexts, *otprygnut'* is more common than *prygnut'*:

Adverbial	<i>Prygnut'</i>	Total Pref-Nu	Most frequent Pref-Nu
<i>V storonu</i> ‘to the side’	37 ex. (43%)	49 ex. (57%)	<i>Otprygnut'</i> : 46 ex.
<i>Nazad</i> ‘back’	9 ex. (32%)	19 ex. (68%)	<i>Otprygnut'</i> : 19 ex.

**Table 15** Frequency distribution of *prygnut'* vs. Pref-Nu verbs in contexts involving *v storonu* and *nazad*. As in the previous tables, the frequencies show the number of examples containing the relevant verbs on a distance of “1” in the RNC 1950-2019.

As we can see, rivalry between Only-Nu and Pref-Nu verbs in this cluster appears to be connected primarily with *sprygnut'* and *otprygnut'* in the contexts mentioned in Tables 13-15. Considering the meaning of *s-* in *sprygnut'*, DOWN, actual rivalry between *prygnut'* and this verb should be limited to contexts where the jump goes down from something: if the jump is “horizontal”, only *prygnut'* should be possible.

<sup>61</sup> Here, I do not count *podprygnut'*, which expresses Aktionsart (subtype II of Pref-Nu verbs). The p-value was obtained by doing a chi-squared test of the number of examples with *prygnut'* and Pref-Nu verbs that involve adverbials of this kind (29, 50) and the number of examples with *prygnut'* and Pref-Nu verbs that do not contain such adverbials (171, 1093).

As for *otprygnut'*, it is important to notice that this verb always implies a second participant that the subject jumps away from, e.g. a building, person or vehicle, cf. (32). *Prygnut'* does not entail this participant. It seems reasonable to assume, then, that *otprygnut'* is selected if the subject jumps to the side or backwards specifically to get away from something, while *prygnut'* primarily appears with *nazad* or *v storonu* when a second participant is absent or unimportant.

In addition to these three tendencies found in the corpus data, native speakers suggest a number of contexts where *prygnut'* might be preferred.<sup>62</sup> Some of their intuitions are summarized in Figure 15 below. Both diagrams illustrate the meaning 'jump over', but in A, the focus of the speaker (marked as a circle) is on the beginning of the jump, while in B, the speaker focuses on the actual crossing. Going back to the discussion of the Nu-dyad Hypothesis in Section 3.1.1, both of these claims go well with the ideas that Pref-Nu and Only-Nu function as a privative opposition and/or are used as foregrounding and backgrounding devices.

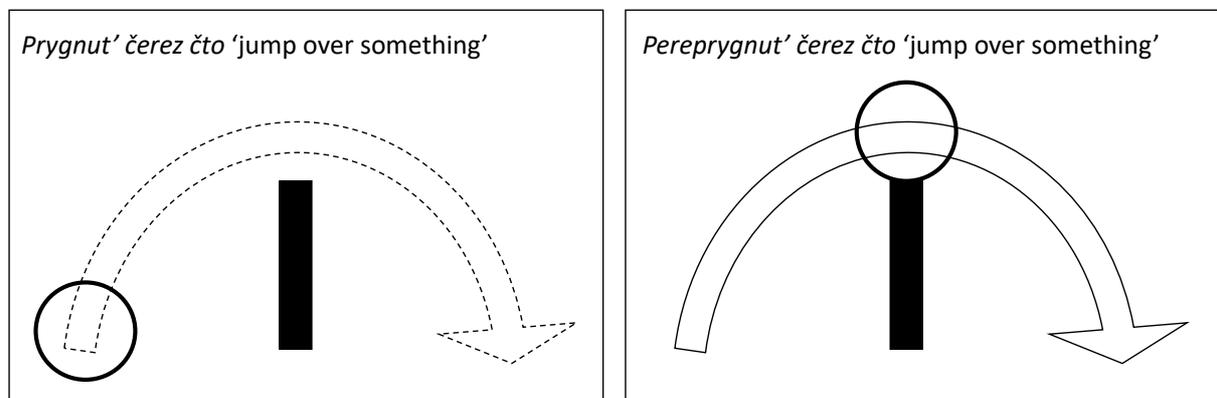


Figure 15 Illustration of native speakers' intuitions with regard to the semantic difference between *prygnut' čerez čto-l.* 'jump over something' and *pereprygnut' čerez čto-l.* 'jump over something'.

Native speakers suggest that *prygnut'* is preferred in contexts where the trajectory ('across', 'out of', 'into', etc.) is backgrounded (the trajectory arrow is shown with a dashed line), while Pref-Nu emphasizes the completion of the path (the trajectory arrow is marked with a solid line). Four contexts are mentioned in particular:

First, it is suggested that *prygnut'* is preferred when the jump is unsuccessful or does not take place. Both verb types can be negated, but, used in the same context, they will give different interpretations. By way of example, *On ne pereprygnul čerez zabor* 'he didn't jump over the fence' means that the subject made a jump, but didn't manage to actually cross the fence, while *On ne prygnul čerez zabor* 'he didn't jump over the fence' means that the subject did not make a jump at all.<sup>63</sup>

<sup>62</sup> I would, in particular, like to thank Sergey Say for incredibly interesting discussions on this topic, and also for coming up with the idea behind the two diagrams in Figure 15. I am furthermore indebted to Mikhail Kopotev, Svetlana Sokolova and many other native speakers of Russian in Norway and Russia who have shared their intuition and thoughts with me.

<sup>63</sup> Notice that we find a similar relationship between imperfective and perfective verb forms in contexts of negation: in *Ivan ne čital étu knigu* 'Ivan has not read the book' the imperfective *čital* 'read' means that Ivan

Second, it is assumed that *prygnut'* is preferred in the case of repeated events, such as the ritual in (43). Here, the result of the jump is arguably annulled after every repetition because the subject resumes their initial position. A prefixed verb would on the other hand be preferred to describe one specific jump performed during one particular event.

Third, *prygnut'* appears to be selected when the subject is inanimate and the verb therefore describes a metaphorical, uncontrolled jump. Although most of the corpus examples involve an animate subject, the example in (50) shows a context where the subject is inanimate:

(50) *No samogo pristol'nogo vnimanija udostoilas' litrovaja butylka viski «Ballantajnz», kotoraja, kazalos', sama prygnula iz sumki v ego levuju (bliže k serdču) ruku, i uže bol'se ne rasstavalas' s nej do samogo konca razgovora. [B. Levin. 1995]*

'But most intently he stared at the liter bottle of whisky "Ballantines", which, as it seemed, had jumped out of the purse into his left hand (closest to the heart) itself, and didn't part with him to the very end of the conversation.'

Fourth, *prygnut'* is suggested to be the standard choice for situations like parachuting (*prygnut' s parašjutom* 'jump with a parachute') and dog agility competitions where the goal of the jump is the jump itself rather than getting somewhere. A prefixed verb may be used when it is important to focus on the trajectory. In the following example, the focus is, for instance, not on the fact that the subject jumped with a parachute, but that he got out of the airplane before it crashed, and *vyprygnut'* is used instead:

(51) *Samolet zaletel očen' daleko v vozdušnoe prostranstvo SSSR, kogda byl sbit. A letčik vyprygnul s parašjutom i naxoditsja v nadežnyx rukax. [O. Grinevskij. 1997]*

'The plane had gotten far into Soviet airspace when it was shot down. But the pilot jumped out with a parachute and is in safe hands.'

In addition, some consultants suggest that *prygnut'* in certain contexts has an extra element of suddenness. For example, *Kot prygnul na koleno Maši* 'the cat jumped onto Masha's knee' is by some argued to express a more unexpected jump than *Kot zaprygnul na koleno Maši* 'the cat jumped onto Masha's knee'. This semantic nuance might not be very strong, since not all my native speaker consultants agree. If, however, it is correct, the suddenness of *prygnut'* might be explained by the figures above as well: while the prefixed verbs zoom in on the trajectory, *prygnut'* has a natural focus on the first stage of the jump, since it simply expresses that a jump took place (or did not take place) at all. This connection with the initial movement

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has not read the book at all, while in *Ivan ne pročital étu knigu* 'Ivan has not read the book', he has not read it all the way through (see e.g. Mathiassen 1996: 381).

may, in turn, be what causes *prygnut'* to have a sense of suddenness, at least in some contexts and to some native speakers.

Notice that these points, interesting as they are, are difficult to test on corpus data insofar as most of them have to do with interpretation (e.g. whether a negated jump signifies that the jump was unsuccessful in terms of an intended trajectory or whether the subject did not make any jump at all). Nevertheless, these observations may serve as a starting point for other studies in the future. It is also worth mentioning that a certain degree of rivalry can be observed between the Pref-Nu verbs themselves, especially between *zaprygnut'* 'jump somewhere' on the one hand and *vprygnut'* 'jump into' and *vsprygnut'* 'jump onto' on the other' (cf. *zaprygnut'* – *vprygnut'* *v avtobus* 'jump into the bus' and *zaprygnut'* – *vsprygnut'* 'jump onto the table'). This situation is not commented on further here, but will be returned to in Chapter 5.

To summarize, the present case study confirms that the Pref-Nu verbs in the cluster of *prygnut'* have a narrow meaning lexical and describe a directed (i.e. resultative) jump or, in the case of *podprygnut'*, Aktionsart. The prefix meaning determines which part of the trajectory they focus. The unprefixated verb is used in all the same contexts as the Pref-Nu verbs, but can furthermore express one jump up and down. In cases of rivalry between Pref-Nu and Only-Nu, the corpus data reveal some tendencies with regard to the choice of verb type, but they are not sufficient to fully explain the use of the verbs in question. Native speakers suggest that *prygnut'* is preferred when the trajectory is backgrounded and/or the speaker focuses on the beginning of the situation, which in certain contexts may motivate a nuance of suddenness.

### **3.5 The cluster of *xlopnut'* 'slam, pop, bang once': An example from the semantic class Impact**

The second case study of this chapter compares the use of *xlopnut'* 'slam, pop, bang once' and the two prefixations *prixlopnut'* 'smack (dead)' and *zaxlopnut'* 'slam shut'. The cluster of *xlopnut'* represents the second-largest semantic class in the database - Impact.

In the RNC, the semantic class Impact is defined as "physical impact" (*fizičeskoe vozdejstvie*) and is illustrated with the imperfective verbs *bit'* 'hit', *kolot'* 'chop' and *vytirat'* 'wipe'. Impact actions are virtually impossible to imagine without a direct object – something or someone that is impacted by the activity. For the purposes of the present case study, it is important that this action may or may not culminate in a new state for the direct object. By way of example, one hitting, chopping or wiping movement does not in itself lead to result. Someone may, for instance, try to chop down a tree with a blunt ax. Although every chop touches the tree, the subject may chop all day without actually cutting it down, and, strictly speaking, the individual chops are therefore not resultative. The only chopping movement that definitely is resultative is the final one that makes the tree fall down.

The verbs in the cluster of *xlopnut'* appear in contexts with accusative direct objects, instrumental objects and prepositional phrases. We also find “bare” examples where the verb has only one argument – the subject. As pointed out in Section 3.1.2, I will follow Wierzbicka (1980) and consider contexts with an accusative direct object as indicative of a resultative meaning, and because of that, the two Pref-Nu verbs are expected to have direct objects. Contexts with an instrumental object will, on the other hand, be regarded as not conveying a result, and in these contexts I therefore expect to find Only-Nu. Contexts like (52) that involve both an accusative object and an instrumental object are considered resultative insofar as the goal of the action is to affect an object (expressed in the accusative):

- (52) *On očen' lovko **prixlopnul** ladon'ju neskol'ko mux.* [Znamja. 2010]  
 ‘With great skill he smacked a few flies with the palm of his hand.’

As for prepositional phrases, the database contains four: 1) *v ladoši* ‘into the palms’, in this cluster used to express the meaning ‘applaud’, 2) *po kakomu-l. količestvu* ‘a certain amount’ where the subject gulps down some quantity of alcohol, e.g. *po stakanu* ‘a glass’, 3) *po čemu* ‘on something’ that occurs in contexts where someone hits their palm against some object, e.g. *po stolu* ‘the table’, and 4) *kogo po čemu* where pats someone, for example, their shoulder (*kogo po pleču*). Notice that this last context always implies an animate accusative object (*kogo*). However, neither this context, nor the others, culminate in a change of state, and in the following, they are therefore regarded as non-resultative and are expected only for *xlopnut'* ‘slam, pop, bang once’, and not for Pref-Nu.

In addition, the database contains intransitive verb uses, such as *dver' xlopnula* ‘the door slammed’. A challenge with these contexts is that the verb behaves more like a Sound verb than a verb of Impact: although the event may result in a closed door, the main point is that the door slams, i.e. moves in a certain way and creates a loud noise, as in (53). This Sound meaning of the verb resembles a typical semelfactive meaning whereby the only outcome of the action is the fact that it has taken place. I will therefore consider intransitive uses in this cluster as not concerned with a result.

- (53) *A potom sosedka določila: stixli i vrode pomirilis', a uxodil on rannim utrom, slyšala, kak **dver' xlopnula.*** [L. Kornešov. 2000]  
 ‘But afterwards the neighbor reported: they had become quiet and seemed to have made peace, and he had left in the early morning, she had heard how the door slammed.’

### 3.5.1 Meanings of the Pref-Nu verbs in the cluster of *xlopnut'*

Let us begin by looking at the prefixed verbs. As in the previous case study, both of them have lexical meanings that are focused by the semantics of the prefix.

*Zaxlopnut'* displays the most homogeneous behavior insofar as all 200 examples of the verb express one meaning – ‘slam shut’. This verb meaning always presupposes an accusative direct object – something that is slammed shut – and is therefore resultative according to the criterion above: the goal of the subject is to affect the direct object. In the example below, the object is a door, by far the most common object in the database (109 ex.). The object can also be a cupboard, a car trunk, a book, a cage, someone’s mouth, or something else that can be slammed shut.

- (54) *Suxo ob"jasniv Talju, čto Botvinnik sobljudaet režim i v dannyj moment spit, ona **zaxlopnula** pered ego nosom **dver'**.* [Nauka i žizn'. 2007]  
 ‘In a dry fashion she explained to Talij that Botvinnik was having his usual nap and slammed the door shut in his face.’

The semantics of *za-* is particularly complex and has been described in several ways (see e.g. Bogusławski 1963: 78-133, Švedova et al. 1980: 358-359, §861, Janda 1986, Zaliznjak 2006, Braginsky 2008, Sokolova and Lewandowski 2010, Janda et al. 2013: 102-106). Janda (1986), who discusses the case of *zaxlopnut'* specifically, suggests that *za-* in this verb contributes the meaning COVER or FILL depending on how one understands the result of the activity (“does a door cover the doorway or does it fill it?”, *ibid*: 132). Regardless of how one names the semantic contribution of *za-* in this case, though, we see that it narrows down the verbs’ lexical meaning and that the situation it describes involves a change of state – a result.

The second prefixed verb, *prixlopnut'*, has a number of submeanings. A common one is ‘smack (dead)’, which occurs in contexts like (52) where the subject slaps a mosquito, fly or other type of insect and kills it. A related use of the verb appears in contexts where the direct object is a human being, cf. (55). In both cases, the verb requires an accusative object and is resultative: the subject kills the direct object.

- (55) *Čelovek sam zaarestoval polovinu ministrov da ešče i **prixlopnul kogo-to iz nix**.* [S. Zalygin. 1976]  
 ‘The man arrested half the ministers himself and even shot some of them.’

In a few examples the accusative direct object is inanimate, e.g. *lavočku* ‘little shop’ in (56): the subject metaphorically “kills” the direct object by putting an end to its existence.

- (56) *Mesjac nazad priexal k nam iz Tveri (gde zanimaljsja tem že «biznesom»). Ego devuška ponačalu ne byla prostitutkoj... no on ee vtjanul. Snjal v poselke Čkalovsk kvartiru... i bukval'no v tečenie trex dnej organizoval tam priton. Porabotal nedelju – i my ego **lavočku prixlopnuli**. A samogo deportirovali obratno v Tver'....* [Kalininradskie Novye koleasa. 2004]  
 ‘About a month ago he arrived to us from Tver (where he was running a similar “business”). At first, his girlfriend was not a prostitute... but he pulled

her into it. He rented an apartment in the small town Čkalovsk... and put together a crack house literally in three days. He worked for a week and then we put an end to his little shop. And he himself we deported back to Tver...'

These senses of *prixlopnut'* are semantically related to verbs like *pridušit'* 'strangle', *prirézat'* 'kill by cutting off the throat', *prikončit'* 'finish off (someone)' and *pristrelit'* 'shoot', all involving the prefix *pri-*. According to Jakunina (2001: 133), this use of *pri-*, which is compatible with verbs expressing murder, death and disappearance (*ubijstvo, smert', isčeznovenie*), is largely overlooked in the scholarly literature and form a subgroup of the prefix meaning she calls "pressure" (*nažim*). The subgroup "pressure" is, in turn, a subgroup of the larger group "contact" (*kontakt*). As we can see, the prefix *pri-* narrows down the verb meaning to (literal and metaphorical) ways of killing/getting rid of an object.<sup>64</sup>

There are also examples in the corpus where *pri-* adds an ATTENUATIVE Aktionsart meaning to the verb, and, here, *prixlopnut'* represents subtype II of Pref-Nu verbs and describes a slightly weaker action than the unprefix verb *xlopnut'* (cf. *podprygnut'* 'make a little jump' in Section 3.4). The attenuative verb *prixlopnut'* occurs in such contexts as *prixlopnut' po stolu* 'lightly hit the table' (cf. *xlopnut' po stolu* 'hit the table') that involves the prepositional phrase *po stolu* 'against the table':

- (57) *Podpisav poslednee rasporjaženie, on **prixlopnul po stolu puxloj ladon'ju.***  
[D. Bykov. 2002]  
'When he had signed the last order, he lightly hit the table with his fat hand.'

We see, then, that the two prefixed verbs derived from *xlopnut'* have lexical meanings motivated by the semantics of their prefix. They largely occur with an accusative direct object and are in this study therefore considered resultative. The only exception is the attenuative use of *pri-* where *prixlopnut'* expresses meanings like 'hit lightly (against something)'. This parallels the situation for *prygnut'* where *podprygnut'* 'make a little jump' has an attenuative meaning, while all the other Pref-Nu verbs describe a result.

### 3.5.2 Meanings of *xlopnut'*

The unprefix verb *xlopnut'* is, by comparison, more diverse. The list below shows its most widespread uses in the database. The 13 examples that are not covered by this list involve a combination of an instrumental object and a prepositional phrase, for example *xlopnut' ladon'ju po stolu* 'hit fist into the table'. Verb meanings not concerned with a result are boldfaced:

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<sup>64</sup> The given use of *pri-* is not obvious from the radial network proposed for this prefix by Janda et al. (2013: 52-53). This radial network is shown in Figure 1 in Section 1.2.

- **Instrumental objects (84 ex.), including:**
  - *xlopnut' dver'ju* 'slam the door' - 77 ex.;
- **Prepositional phrases (43 ex.), including:**
  - *xlopnut' kogo po čemu* 'pat someone somewhere' - 31 ex.
  - *xlopnut' v ladoši* 'applaud' - 10 ex.
- **"Bare" uses (the subject is the verb's only argument) (38 ex.), including:**
  - *dver' xlopnula/xlopnet* 'the door slammed/will slam' - 25 ex.
- **Accusative objects (22 ex.), including:**
  - *xlopnut' (kakoј-l. napitok)* 'gulp down some alcoholic beverage' - 11 ex.
  - *xlopnut' kogo/čto* 'kill someone/get rid off something' - 7 ex.

The observations that *xlopnut'* appears in a number of different meanings and that most of these are not concerned with a result, are in line with the predictions of the Nu-dyad Hypothesis. Notice particularly the perfect distribution of constructions between *xlopnut'* and the prefixed verb *zaxlopnut'* in contexts of doors that account for more than half the examples of both verbs (102 and 109 ex.). Here, *xlopnut'* is always concerned with the noise and slamming movement itself, either with *dver'* 'door' as the nominative subject or with the instrumental object *dver'ju* 'with the door', while *zaxlopnut'* only occurs when *dver'* 'door' is the accusative direct object and a door is slammed shut. The two verbs are never interchangeable and, used in the same sentence, they can give the effect of contrast between a slam where the subject uses the door to make a sound (no change of state), and a resultative slam where the door gets fully shut:

- (58) *Ved' ešče čut'-čut', i mužčina ne prosto xlopnet dver'ju, a zaxlopnet ee za soboj navsegda.* [A. Inin. 1996]  
 'Only a bit longer, and the man will not only slam with the door, but shut it after himself forever.'

A more surprising finding is that *xlopnut'* can combine with accusative objects. Two lexical meanings are relevant. In the first, *xlopnut'* describes drinking some alcoholic beverage. Here, it is important to notice that *xlopnut'* expresses a very different action than slamming, hitting and applauding and semantically, in fact, is closer to verbs from the semantic class *Physiol* (*physiological sphere*), such as *glotnut'* 'swallow once' and *xlebnut'* 'nip once'. Actions of this kind describe "quanta" without inherent end-points: the activity may continue as long as there is another "quantum" to swallow or nip. The goal of the subject is not to Impact a direct object, and the presence of an accusative object is therefore not in itself indicative of a resultative meaning. The accusative objects of *xlopnut'* describe the type or size of the "quantum", for example *stakan* 'glass':<sup>65</sup>

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<sup>65</sup> In examples without quantifiers such as *stakan* 'glass', the direct object can be in the partitive genitive instead of the accusative. An example is *kon'jačku* 'some cognac, gen.part.' that is used instead of *kon'jačók* 'cognac, acc.' in *Pod"exal, posideli s Petrovičem, pogovorili, kon'jačku xlopnuli* [Stolica. 1997] 'I arrived, Petrovič and I hung out, talked, had some cognac'. For our purposes, the most important thing is that these objects are not in the instrumental.

- (59) – *Da ja za Natašku i za tebjja, Igorek, stakan mogu xlopnut!* [Stolica. 1997]  
“For Natashka and for you, Igorek, I can down a glass!”

In the second context involving an accusative object, the subject shoots someone (60) or gets rid of something. Here, *xlopnut'* is used as an Impact verb, and the action can only be seen as resultative. Moreover, there is no reason to believe that the result of the action is backgrounded. Notice that the given use of *xlopnut'* is close to the meanings of *prixlopnut'* in (52) and (55). The examples in question show that the Nu-dyad Hypothesis is not waterproof. However, it correctly predicts most uses of both the unprefixated and the prefixed verbs. The fact that *prixlopnut'* is widely used in the meaning 'kill/get rid of', while there are only seven instances of *xlopnut'* also gives support to this assumption.

- (60) *I tut ponjal Saška, kakaja u nego sejčas strašnaja vlast' nad nemcem. ...On, Saška, sejčas nad žizn'ju i smert'ju drugogo čeloveka volen. Zaxočet – dovedet do štaba živym, zaxočet – xlopnet po doroge!* [V. Kondrat'ev. 1979]  
'And here Saška understood the terrible power he now had over the German... He, Saška, could now decide the life and death of another person. If he wanted to, he could bring him to the headquarters alive; if he wanted, he could shoot him on the way!'

To summarize, the findings in the present section largely agree with the Nu-dyad Hypothesis insofar as the prefixed verbs are found to be specialized and resultative in meaning while the unprefixated verb occurs almost entirely in contexts understood as non-resultative. One of the Pref-Nu verbs can express attenuative Aktionsart. Only a few examples of *xlopnut'* clearly express a resultative action and do not match the predictions of the Nu-dyad Hypothesis.

### 3.6 The cluster of *kriknut'* 'shout once': An example from the semantic class Sound

The third case study explores *kriknut'* 'shout once' and the four related Pref-Nu verbs in the database – *okriknut'* 'call on/up', *prikriknut'* 'shout at', *vsikriknut'* 'give a sudden shout' and *vykriknut'* 'shout out'. In the RNC, *kriknut'* represents the semantic class Sound, and the verb cluster of *kriknut'* is the biggest Sound cluster in the database in terms of how many Pref-Nu verbs it contains. As in the previous case studies, I discuss how the various Pref-Nu verbs are used and compare their behavior with the behavior of the unprefixated verb.

For the semantic classes Move and Impact, we saw that one “quantum” of the activity can culminate or not culminate in a result depending on the context in question (cf. jump once on the spot vs. jump from one spot to another; slam once with the door to make a sound vs. slam the door shut; etc.). The prefixed verbs were associated with a resultative meaning, each specialized in its own way by the prefix. The unprefixated verbs were found in much larger sets of contexts that were less focused, or not focused, on a result. Resultativity was connected with a change of location (e.g. *zaprygnut' na stol* 'jump onto the table') or a direct object in the

accusative case affected by the action (eg. *zaxlopnut' dver'* 'slam the door shut'). For Sound verbs, the situation is more complicated, since it is not obvious what should count as a result. Two main contexts can be distinguished. In the first context, the subject simply lets out a shout, a sound:

- (61) *Pod nevysokoj, no razlapistoj el'ju ležal čelovek v voennoj forme. Marijka ostanovilas' v pjati šagax ot nego, no vdrug **vskriknula** i brosilas' pod el'. Čelovek byl mertv.* [M. Bubennov. 1942-1952]  
'Under a small but branchy pine tree lay a man in military uniform. Marijka stopped five steps away from him, but suddenly screamed and threw herself down below the tree. The man was dead.'

The second context furthermore contains a direct (62) or indirect (63) speech clause:

- (62) *Iz kvartiry na pervom etaže vyšla gorničnaja. — **Privet, Džimmi!** — **kriknula** ona.* [Paradoks. 2004]  
'The housemaid came out of the apartment on the first floor. "Hey, Jimmy!" she shouted.'
- (63) *Fakir rinulsja k lestnice, **vykriknuv** na begu, čto ego gadjuki sbežali.* [Soveršenno sekretno. 2003]  
'The faqir dashed towards the stairs and shouted as he was running that his vipers had escaped.'

The contexts of *okriknut'* tends to have a direct object, the person being called at:

- (64) *Čas spustja... **Zinu okriknul** s ulicy detskij golosok.* [V. Lixonosov. 1965]  
'An hour later... a child's voice called on Zina from the street.'

With regard to these and similar contexts that involve verbs of Sound, the idea of resultativity can be interpreted in at least two ways. On the one hand, there is no actual result of the action in either context: neither subject, nor direct object is directly affected and undergo a change of state. On the other hand, it can be tempting to consider contexts with a speech utterance and/or direct object as "more resultative" in the sense that the shout involves a message directed towards someone with the intention of provoking a reaction. The housemaid in (62), for instance, initiates a conversation and will probably receive a response from Jimmy, and the boy in (63) gives a warning and/or indirectly calls for help. For the purposes of the present study, I will discuss both interpretations of resultativity.

### 3.6.1 Meanings of the Pref-Nu verbs in the cluster of *kriknut'*

The four Pref-Nu verbs derived from *kriknut'* all show unique behavior. Although in two cases it is hard to pinpoint the exact submeaning of the prefix, it is clear that

each of the prefixed verbs has a narrow lexical meaning focused by the prefix. Let us consider each verb briefly in turn.

*Okriknut'* 'call on/up' is a relatively infrequent verb with only 18 attestations from different documents in the corpus. Twelve of these, such as the one in (64), involve an accusative direct object, the person being called upon. It is not fully obvious which submeaning of *o-* is relevant, but we find a similar use of the prefix in *okliknut'* (*kogo*) 'call on (someone)' and *oděrnut'* (*kogo*) in the meaning 'straighten up (someone)'. In the remaining six examples, including (65), the direct object is implied in the context.

- (65) *Stal ètot sad vrode obščestvennogo: vxodi i igraj xot' celyj den' – nikto ne okriknet, ne progonit...* [V. Panova. 1955]  
'This garden has become more or less public: go there and play, even all day – no one will shout [you] up or chase [you] out.'

*Prikriknut'* means to shout at someone in a commanding way, often to make someone (not) do something, cf. (66). Half the contexts specify explicitly who the command is directed towards by means of the prepositional phrase *na kogo* 'at someone' (108 ex.), and most of them involve direct or indirect speech (158 ex.). The command meaning is reflected in such adverbs as *grozno* 'threateningly', *povelitel'no* 'in an authoritative way', *serdito* 'angrily', *strogo* 'strictly' and *surovo* 'harshly'. Although the meaning of *prikriknut'* seems especially strong, native speakers insist that *prikriknut' na kogo* 'shout at someone' sounds milder than the much less common collocation *kriknut' na kogo* 'shout at someone' indicating that *pri-* yields an ATTENUATIVE meaning.<sup>66</sup>

- (66) – *Mika, prekrati! – serdito prikriknula na syna Katja.* [T. Tronina. 2004]  
'"Mika, stop it!" Katja angrily shouted at her son.'

*Vskriknut'* means 'give a sudden shout' and is traditionally described as a verb with what I call "v(o)z-semelfactive" Aktionsart meaning (Avilova 1976: 272).<sup>67</sup> V(o)z-semelfactives express abruptness, instantaneousness, unexpectedness, lack of control on the part of the subject, and intensity (Zaloznjak and Šmelëv 2000: 110). They have also been referred to as "explosive Aktionsart" (*èksplozivnyj sposob dejstvija*) (ibid). The examples of *vskriknut'* in the database reflect this meaning. If the context does not specifically involve an adverbial that emphasizes the given properties, e.g. *ot boli* 'in pain' and *vnezapno* 'suddenly', the unexpectedness, lack of control and intensity are usually clear from the larger context, as illustrated in (67). Direct speech is possible (79 ex.), but not necessary, apparently because it is the scream itself and not the communication of a message that is in focus.

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<sup>66</sup> In the RNC, *prikriknut' na kogo* 'shout at someone' occurs in 328 ex., while *kriknut' na kogo* 'shout at someone' appears in only 14 ex. (word distance of "1").

<sup>67</sup> Avilova herself uses the term *načínatel'nyj sposob dejstvija*, often translated to English as 'ingressive'.

Indicative of this is also the fact that none of the 200 examples involve an explicitly stated addressee.

- (67) *Proizošel nesčastnyj slučaj: vylezšaja iz čerepa mertvogo konja zmeja užalila vyšenazvannogo gr-na O. Veščego v nogu. O. Veščij uspel liš' **vskriknut'** – smert' nastupila vnezapno.* [Texnika – molodeži. 1974]  
'A misfortune took place: a snake that had crawled out of the dead horse's skull bit the above-mentioned Mr. O. Veščij on the leg. O. Veščij only managed to give a scream; death came immediately.'

The prefix *vy-* in *vykriknut'* 'shout out' yields the meaning OUT OF A CONTAINER. In comparison with the other prefixations, this verb focuses particularly on the content or message of the shout, that is, what is shouted out. *Vykriknut'* therefore never appears alone, but is accompanied either by a speech clause (156 ex.), a direct object in the accusative, such as *vopros* 'question' (35 ex.), illustrated in (68), or both a direct object and speech (7 ex.).<sup>68</sup> Very few contexts mention an addressee (4 ex.). Adverbials tend to describe characteristics of the voice or manner with which the action was performed, e.g. *kak možno gromče* 'as loudly as possible':

- (68) *Ja kak možno gromče snova **vykriknula svoj vopros.*** [Stolica. 1997]  
'I shouted out my question as loudly as possible one more time.'

### 3.6.2 Meanings of *kriknut'*

If we now compare the behavior of these prefixed verbs with that of the unprefixated *kriknut'*, we find the following. In the vast majority of the examples, *kriknut'* occurs with a direct or indirect speech clause (181 ex.). In other words, *kriknut'* is nearly always used about communicating a message. However, it does not seem limited to a particular type of content. It is, for instance, not used specifically about commands, like *prikriknut'*, nor does it seem connected with unexpectedness, like *vskriknut'*. Instead, *kriknut'* appears possible in a multitude of settings, including happy ones, like (69) that contains the adverb *veselo* 'cheerfully'. Moreover, *kriknut'* presumes an addressee, sometimes, but not necessarily, stated in the dative (50 ex.). Only in 5 examples, including (70), the verb clearly expresses just a scream.<sup>69</sup>

- (69) – *Anvar, štopor nesi! – **veselo kriknul** Jusup, vzmaxivaja rukoj.* [A. Ganieva. 2010]  
"Anvar, bring the corkscrew!" Jusup shouted cheerfully, waving his hand.'

<sup>68</sup> In addition, come two examples that are difficult to understand and that are therefore marked as "Other".

<sup>69</sup> As a native speaker points out, *kriknut'* can also be used about birds, as in *Kukuška kriknula tri raza i zamolkla.* [Ju. Dombrovskij. 1964] 'The cuckoo cried out three times and then became silent'.

- (70) *My uže podxodili k platforme, kogda neprigljadnaja ženščina kriknula korotko i sdavlenno i upala navznič' — nam pod nogi.* [Zvezda. 2002]  
'We were already approaching the platform when an unattractive woman gave a short, constrained shout and fell down on her back, by our feet.'

What we see, then, is that *kriknut'* largely has its own semantic niche apart from the related Pref-Nu verbs. First and foremost, it is a verb of communication that nearly always implies a particular message and a particular recipient of that message expressed in the dative. In these contexts, the prefixed verbs are not used, since they do not combine with a recipient in the dative or with a recipient at all. Second, *kriknut'* is not concerned with a particular type of situation. The speaker may be happy, angry, concentrated or surprised – in all cases *kriknut'* sounds natural. The message may furthermore contain a command or request, question or statement, appraisal or threat. This makes *kriknut'* different than *prikriknut'* and *vskriknut'* that are connected with commands and suddenness in particular. In its non-typical uses, i.e. where no specific message and/or recipient is implied, *kriknut'* appears to function as a rival form of *vskriknut'* and *prikriknut'*: the use of *kriknut'* in (70) resembles *vskriknut'*, and in the RNC (years 1950-2019) there are 14 examples where *kriknut'* behaves like *prikriknut'* in the sense that it is followed by the prepositional phrase *na kogo* 'at someone'. These examples are extremely marginal, however, and for most practical purposes, the choice of verb should be predictable based on the verbs' lexical meanings and syntactic constructions, as described above. There is no indication that *kriknut'* can express a similar meaning to *vykriknut'*.

### 3.6.3 Discussion

In the beginning of this section, I argued that the Nu-dyad Hypothesis is difficult to test on Sound verbs insofar as it is unclear to what extent we can speak of a result. I furthermore mentioned two ways in which resultativity can be interpreted. Let us now consider the behavior of *kriknut'* and the four prefixed verbs in light of these two interpretations.

According to the first interpretation of resultativity, neither making a sound, nor producing speech are resultative actions insofar as they do not produce a change of state. On this view, then, neither *kriknut'*, nor the four Pref-Nu verbs, can express a result. According to the second interpretation, pronouncing a message is more resultative than just making a sound. Here, we would expect *kriknut'* to be used without speech clauses and the prefixed verbs to be used with speech clauses. The corpus data show that this is not the case. Ignoring *vskriknut'*, which expresses Aktionsart (subtype II of Pref-Nu verbs), both *kriknut'* and the Pref-Nu verbs nearly always involve a speech clause, and *kriknut'* cannot be said to differ from the Pref-Nu verbs in terms of being less able to express a result. To sum up, in the first interpretation, neither verb type is concerned with a result; in the second interpretation, both verb types are resultative. Neither of these outcomes is

expected from the Nu-dyad Hypothesis according to which Pref-Nu is resultative, while Only-Nu is not concerned with a result.

The Nu-dyad Hypothesis furthermore predicts that Pref-Nu verbs have a narrower lexical focus than Only-Nu. The present case study confirms that the prefixed verbs are restricted to particular types of contexts motivated by the semantics of their prefix. As for *kriknut'*, I have shown that this verb too has its own semantic niche, namely that of shouting a message to a particular recipient. The meaning of *kriknut'*, however, is arguably less specific than the lexical meanings of the prefixed verbs insofar as it is not restricted to a particular type of situation, such as a sudden, uncontrolled event (*vskriknut'*) or shouting at someone strictly (*prikriknut'*). *Kriknut'* appears to be the semantically most “neutral” verb and its lexical meaning is in this way more “basic”.

To sum up, it has proven difficult to test the Nu-dyad Hypothesis on the cluster of *kriknut'* in the sense as it is unclear what should count as a result for these verb meanings, and the two interpretations that were suggested did not yield the result expected from the hypothesis. At the same time, my case study has shown that all the relevant verbs are connected with different lexical meanings and contexts, and thus, for all practical purposes, the choice between Only-Nu and Pref-Nu, as well as between the four Pref-Nu verbs, is usually clear.

### 3.7 Summary and conclusions

The present chapter has investigated the semantic relationship between Only-Nu and Pref-Nu verbs by means of corpus data. I have tested the Nu-dyad Hypothesis, which is based on statements in the scholarly literature and claims that Pref-Nu verbs have a narrower lexical meaning than Only-Nu verbs and express a result (subtype I) or Aktionsart (subtype II), while Only-Nu verbs are semantically less specific and not concerned with a result. I have suggested that the relationship between Pref-Nu verbs and Only-Nu verbs may possibly be analyzed as a privative opposition or as a device to foreground and background the result of an action, but both of these interpretations must be tested on more verbs to draw a conclusion. The Nu-dyad hypothesis has been tested by exploring past passive participles from Pref-Nu and Only-Nu verbs in the RNC, and by means of corpus-based case studies of the Nu-dyads in three aspectual clusters. I have found the following:

Past passive participles are regularly formed from many Pref-Nu verbs, but rarely or not at all from most Only-Nu verbs. Past passive participles generally express a change of state or a state following a completed action and are, in this way, concerned with a result. The fact that they hardly occur in the corpus data of Only-Nu verbs makes sense in view of the Nu-dyad Hypothesis. The only past passive participle regularly derived from Only-Nu verbs, *tronut/yj* ‘be touched’, is arguably a stative past passive participle that expresses a constant state, rather than a change of state.

The three case studies confirm that Pref-Nu verbs have a narrower, i.e., more specific, lexical meaning than the corresponding Only-Nu verbs. The lexical meanings of the Pref-Nu verbs are focused by the prefix. The unprefixated verbs have been found to be semantically more neutral in the sense that they are much less restricted with regard to the contexts they can appear in (*prygnut* 'jump once' and *xlopnut* 'slam, pop, bang once') or that they express a more basic notion (*kriknut* 'shout once'). A difference between the three Only-Nu verbs in the study is that *prygnut* 'jump once' appears in the same types of constructions as the related Pref-Nu verbs, while *xlopnut* 'slam, pop, bang once' and *kriknut* 'shout once' are connected with other types of constructions and lexical meanings than their related Pref-Nu verbs.

As expected from the Nu-dyad Hypothesis, my case studies furthermore confirm that Pref-Nu verbs tend to express an action that culminates in a result (subtype I) or Aktionsart (subtype II). At the same time, the case study of the *kriknut* cluster shows that it sometimes is difficult to speak of a result at all, at least if resultativity is defined as a change of state for one of the participants. The prediction that Only-Nu verbs are not concerned with a result is less straightforward to evaluate, especially in the case of *prygnut*. However, we have seen that native speakers claim to understand *prygnut* as focused on the jump itself rather than on the completion of a trajectory.

From a practical point of view, the three case studies show that all the verbs in question have specific functions that makes the choice between them predictable – at least to a large extent. Either they have a lexical meaning different than the related verbs, or they bring focus to different parts of the same situation. What we do not know from this study is how all the other Nu-dyads in Russian behave. This is a question that future studies that can look further into.

#### 4 Pref-dyads in the RNC: Prefixed verbs with and without *-nu-*

In the previous chapter, I explored the semantic relationship between unprefixed and prefixed verbs with the suffix *-nu-* in what I called “Nu-dyads”, e.g. *prygnut’* ‘jump once’ – *sprygnut’* ‘jump down’. In the present chapter, I consider the second relationship important in this dissertation – the relationship between the two prefixed types of perfectives, namely Pref-Nu and Pref-Only, e.g. *zaprygnut’* ‘jump somewhere’ – *zaprygat’* ‘begin to jump’. These pairs of verbs are what I call “Pref-dyads”. As in the previous chapter, I employ data from the Russian National Corpus (RNC). The chapter provides a general overview of Pref-dyads as a phenomenon in Russian as well as case studies of individual verbs.

For the study of Nu-dyads, it was useful to investigate the relationship not only in isolated Nu-dyads, but to consider all the Nu-dyads involving a certain Only-Nu verb. Since both of these verb types involve *-nu-*, the case studies in Chapter 3 shed light on the effect of the prefix. In the study of Pref-dyads, on the contrary, it makes sense to focus on individual cases, rather than entire clusters. In Pref-dyads, the prefix is the same in both verbs, and what we need to find out is the function of *-nu-*, or the effect of not using *-nu-*. The semantic relationship we are interested in is illustrated in Figure 16 with the verbs *zaprygnut’* and *zaprygat’* as examples:



Figure 16 Illustration of the semantic relationship relevant in this chapter: Pref-Nu vs. Pref-Only (e.g. *zaprygnut’* ‘jump somewhere’) vs. Pref-Only (e.g. *zaprygat’* ‘begin to jump’).

The first part of this chapter considers the distribution of Pref-dyads in the corpus as an indication of their status in contemporary Russian. Pref-dyads are found to be a widespread phenomenon, and both verb types are used extensively. This suggests a systematic and predictable relationship between Pref-Nu and Pref-Only, which I then seek to illuminate through a series of case studies. As illustrated with *zaprygnut’* – *zaprygat’*, Pref-dyads may consist of verbs that have clearly different lexical meanings, here ‘jump somewhere’ and ‘begin to jump’. I call these “non-synonymous Pref-dyads”. However, other Pref-dyads display more or less identical lexical meanings, and these will be referred to as “synonymous Pref-dyads”. An example of a synonymous Pref-dyad is *vytrjaxnut’* ‘shake out’ – *vytrjasti* ‘shake out’:

- (71) *Varvara napjalila vodolazku, sxvatila rjukzak i vytrjaxnula iz nego vse baraxliško.* [T. Ustinova. 2003]  
‘Varvara threw on a polo, seized the backpack and shook all kinds of stuff out of it.’

- (72) *Potom my koe-kak vytrjasli pesok iz obuvi, nadeli ee i otpravilis' v gorod.* [E. Zaveršneva. 2012]  
'Afterwards we somehow shook the sand out of our shoes, put them on, and set off for the city.'

On every Pref-dyad selected for a case study I test the Pref-dyad Hypothesis, which claims that the Pref-Nu verb expresses one instantaneous “quantum” of the given activity and that the Pref-Only verb describes an event that consists of several “quanta”. Both verb types can express either an action culminating in a result, or Aktionsart. I find that the hypothesis explains the distribution of lexical meanings in non-synonymous Pref-dyads. However, in the synonymous Pref-dyads the corpus data are often insufficient to tease the verbs fully apart and the distinctions that are found support the hypothesis only to some extent. Native speaker intuition is needed to explain the semantic nuances that exist, but their intuition can, in turn, be hard to test on corpus data, and sometimes differed among my consultants. At the same time, none of the Pref-dyads are found to involve complete synonyms.

The chapter is structured as follows. In Section 4.1, I consider the distribution of Pref-dyads in the corpus. The Pref-dyad Hypothesis is discussed in Section 4.2. In Section 4.3, I discuss how I collected data for the case studies. The investigated Pref-dyads are discussed in two portions: I first consider the non-synonymous Pref-dyads (Section 4.4) and then turn to the synonymous Pref-dyads (Section 4.5). My findings are summarized in Section 4.6.

#### 4.1 Extent of Pref-dyads in the RNC

Before we move on to investigate the behavior of Pref-dyads, let us consider to what extent they occur in the language at all. Since Pref-Only verbs are derived from the base imperfective (e.g. *progljadet'* ‘overlook’ from *gljadet'* ‘glance’), Pref-dyads are not relevant in the cluster of *xlynut'* ‘gush out’ that does not have an unprefixated imperfective. This leaves 250 Pref-Nu verbs that potentially can have a corresponding Pref-Only verb.<sup>70</sup>

Table 16 shows that as many as 124 of the relevant Pref-Nu verbs were found to have a corresponding Pref-Only verb in the corpus. The given relationship therefore holds for exactly half the Pref-Nu verbs in the database showing that Pref-dyads are not a marginal phenomenon.<sup>71</sup>

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<sup>70</sup> The verb *minut'* ‘pass by once’ does not have a base imperfective, but the related bi-aspectual *minovat'* ‘pass by’ can, in principle, derive Pref-Only verbs.

<sup>71</sup> Judging from morphology alone, prefixed verbs with the suffix *-aj-*, such as *prodvigat'* ‘advance, promote’, can mistakenly be understood as prefixed perfectives derived from the corresponding base imperfective (here, *dvigat'* ‘move’) while, in fact, they are secondary imperfectives of the relevant Pref-Nu verbs (here, *prodvinut'* ‘advance, promote’). All potential Pref-Only verbs were manually checked for aspect before they were included into the database. For bi-aspectual verbs, I considered the corpus examples and recorded the token frequency of perfective uses in the corpus.

Pref-Nu verb	#Verbs (%)
Appears in a Pref-dyad	124 (50%)
Does not appear in a Pref-dyad	126 (50%)
Total	250 (100%)

**Table 16** Extent of Pref-dyads in the database.

Recall from Section 2.2. that Pref-Nu verbs were included in the database only if they were found in at least ten examples in the RNC (years 1950-2017). Many of the Pref-Only verbs in Table 16 are not well attested in the corpus. In the remainder of this section, I will therefore focus on the 65 Pref-dyads where not only Pref-Nu, but also Pref-Only occurs in at least ten corpus examples.

In Chapter 2, it was shown that the aspectual clusters of Pref-Nu verbs primarily represent the semantic classes Move, Impact, Physiol and Sound. A question one could ask is whether Pref-dyads are more common in one/some of these semantic classes than others. Table 17 shows that Pref-dyads are most widespread in the semantic classes Move and Impact, but that they occur in the semantic classes Physiol and Sound too. The second column in Table 17 shows the number of individual Pref-Nu verbs connected with each semantic class in the database. The third column shows the proportion of these verbs that have a corresponding Pref-Only verb attested in at least ten examples in the RNC.

Semantic class	#Pref-Nu verbs	#Pref-Nu verbs with a related Pref-Only (%)
Move	114	30 (26%)
Impact	59	15 (25%)
Physiol	22	3 (14%)
Sound	11	2 (18%)
Other classes	48	15 (31%)
Total	254	65 (100%)

**Table 17** Distribution of the 65 most widespread Pref-dyads across semantic classes. Notice that the second column shows the number of Pref-Nu verbs from the various semantic classes, and not the number of aspectual clusters containing Pref-Nu verbs like Table 8 in Section 2.3.

A second question one could ask is whether one of the verb types in Pref-dyads tends to be used more extensively than the other. With regard to this question, Table 18 shows that, in the 65 relevant Pref-dyads, Pref-Nu verbs are more widespread in the corpus than Pref-Only. The Pref-Only verbs have, in general, a lower token frequency and roughly account for one quarter of the examples.<sup>72</sup>

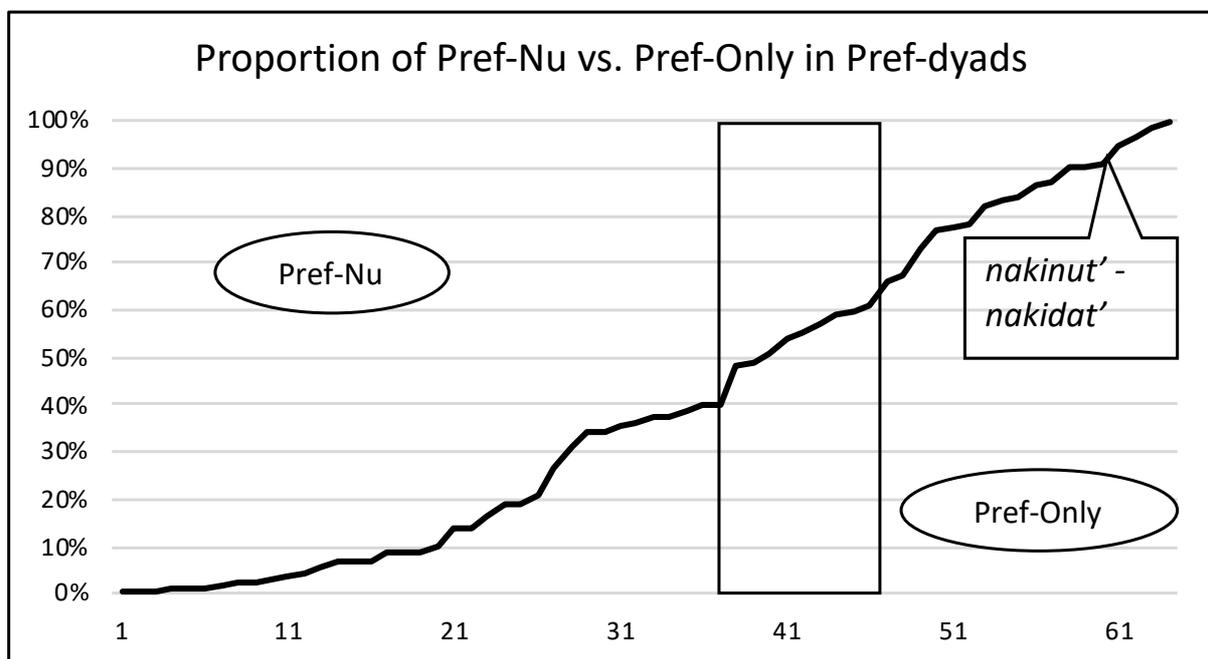
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<sup>72</sup> Notice that the relevant distribution is based on the 65 Pref-dyads where both verbs were found in at least ten corpus examples. Without this frequency threshold, Pref-Only verbs would have a much higher token frequency in the corpus than Pref-Nu verbs that form a relatively small group of verbs in comparison. The distribution in Table 18 is therefore slightly misleading, but provides at the same time valuable insight into the Pref-dyads where both verbs are used with some regularity in the language.

Verb type	#Examples	%Examples
Pref-Nu	57,476	73%
Pref-Only	20,929	27%
Total	78,405	100%

**Table 18** Distribution of corpus examples involving Pref-Nu vs. Pref-Only in Pref-dyads.

This frequency distribution of corpus examples between Pref-Nu and Pref-Only shows that both types of perfectives are used extensively. However, if we look at the proportion of corpus examples involving Pref-Nu vs. the proportion of corpus examples involving Pref-Only in the individual Pref-dyads, we see that, in most cases, one verb tends to be used more often than the other. This is shown in Figure 17 where the x-axis represents the 65 relevant Pref-dyads organized in ascending order according to their proportion of examples involving the Pref-Nu verb. The y-axis represents all the examples associated with a given Pref-dyad, e.g. 1,914 (100%) for the Pref-dyad *nakinut'* - *nakidat'* where *nakinut'* 'throw onto' accounts for 1,743 of the examples (91%) and *nakidat'* 'throw a lot (of something)' accounts for the remaining 171 examples (9%). The rectangle box towards the right of the diagram singles out the nine Pref-dyads with the most balanced frequency distribution. In these Pref-dyads, each verb accounts for 40-60% of the corpus examples. The fact that only nine Pref-dyads are of this type shows that most of them involve one verb that is used much more than the other.



**Figure 17** Proportion of Pref-Nu vs. Pref-Only in the 65 Pref-dyads where both verbs are attested in at least ten corpus examples.

## 4.2 The Pref-dyad Hypothesis

Like the Nu-dyad Hypothesis discussed in Chapter 3, the Pref-dyad Hypothesis is based on what has been said about the verb types in question, here Pref-Nu and Pref-Only, in the scholarly literature. For an overview with references, see Sections 1.2 and 1.4. Below, I introduce and discuss this hypothesis in detail.

Let us first consider the hypothesis itself. It may be formulated as follows:

### The Pref-dyad Hypothesis:

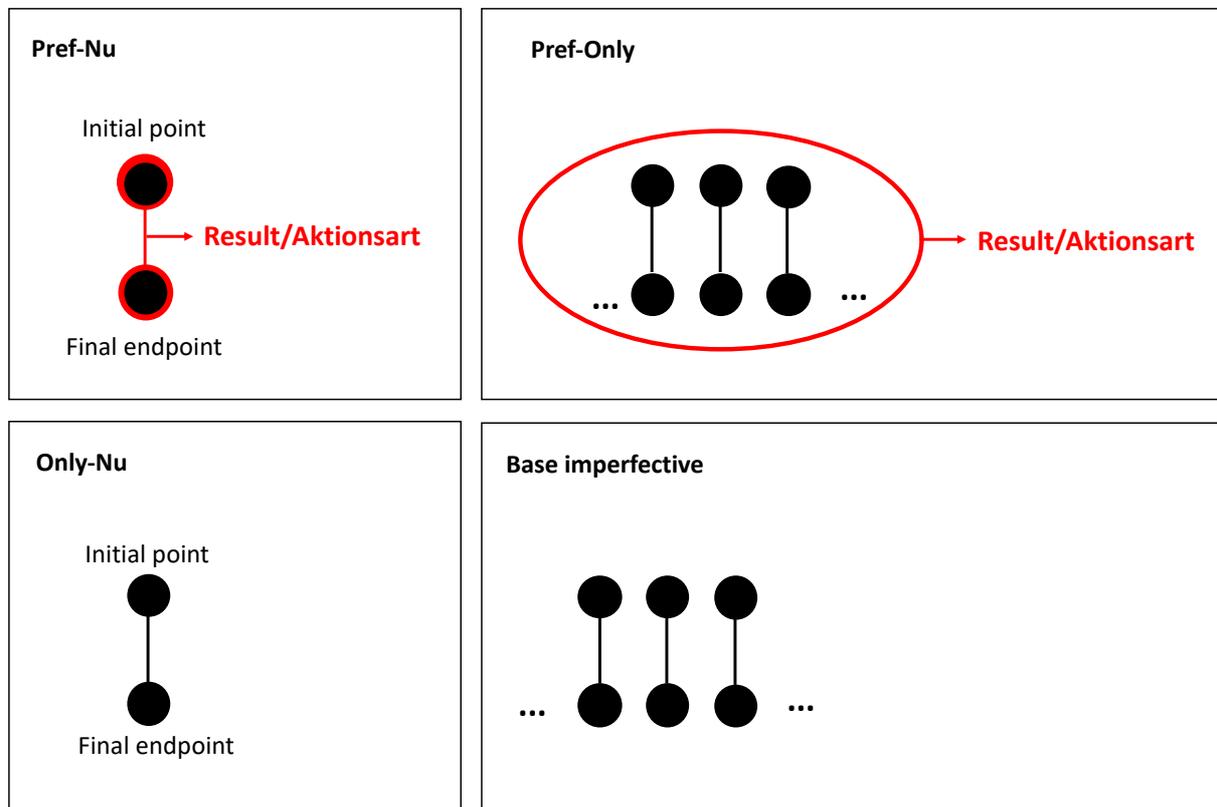
- A. In both Pref-Nu and Pref-Only, the prefix narrows down the meaning of the verb and makes the verb meaning resultative or adds Aktionsart;
- B. Pref-Nu describes one “quantum” of the activity;
- C. Pref-Only describes an event that presumes multiple “quanta”.

The idea that Russian prefixes narrow down the lexical meaning of a verb (point A) has already been discussed at several points in the previous chapters. In Section 2.5, it was argued that the prefix meanings found in Pref-Nu verbs are the same as the prefix meanings described previously for Pref-Only verbs. Moreover, both verb types can express a result or not express a result depending on whether the prefix contributes a lexical meaning, like *s-* in *sprygnut'* ‘jump down’ (cf. *prygnut'* ‘jump once’), or an Aktionsart meaning, like *pod-* in *podprygnut'* ‘make a little jump’).

Points B and C of the Pref-dyad hypothesis go back to the works of Dickey (2001) and Feldstein (2007) that were discussed in Sections 1.4.3.2 and 1.4.3.3. Together with other scholars that were mentioned in footnotes, Dickey and Feldstein argue that Pref-Nu verbs express a semelfactive meaning (understood as one “quantum” of an action) and that Pref-Only verbs express a distributive meaning (i.e. multiple “quanta”). A parallel system of this has been found to exist in other Slavic languages, especially among the western Slavic languages, but the situation in Russian has been less explored. The Pref-dyad hypothesis predicts that Pref-Nu is selected if the result of the action is achieved by means of one performance (one “quantum”), while Pref-Only is used if more than one performance is needed for the result of the action to take place. Aktionsart meanings that are compatible with the idea of one “quantum” are predicted to occur among Pref-Nu verbs; Aktionsart meanings that imply multiple “quanta” are expected for Pref-Only verbs.

The difference predicted between Pref-Nu and Pref-Only verbs is connected with the meaning of the corresponding unprefixed verbs: the suffix *-nu-* in Only-Nu verbs yields the semelfactive meaning of a single “quantum”, while the corresponding base imperfectives usually describe repetitions of a multiphasal activity, although they too in certain contexts can express one performance of the relevant action (see Isačenko 1960 [2003]: 256). Pref-Nu and Pref-Only verbs differ from these unprefixed verbs in the sense that they involve the additional semantic content contributed by the prefix and describe an action that culminates in a result, or Aktionsart.

This expected difference between the four verb types is illustrated in Figure 18. The two upper diagrams show the semantics of the verb types studied in this chapter. The two lower diagrams reduplicate Figure 2 in Section 1.3 and illustrate the semantics of the two corresponding unprefixated verb types – Only-Nu and the base imperfective.



**Figure 18** The semantic difference between Pref-Nu and Pref-Only according to the Pref-dyad Hypothesis, and the semantic difference between Only-Nu and base imperfectives.

The structure of these diagrams is already familiar to the reader. One repetition of an activity is shown as a two-headed bar. The two ends of the bar represent the beginning and end of the activity, and the fact that they are directly above each other symbolize that the repetition is completed in the same moment as it is begun. Pref-Nu and Only-Nu express one repetition (leftmost diagrams); Pref-Only and base imperfectives express situations that imply more than one repetition. The semantic contribution of the prefix is shown in red. The prefix often makes the verb meaning resultative: Pref-Nu describes a result that is achieved by means of one repetition, while Pref-Only describes the result of many repetitions together. The prefix alternatively contributes Aktionsart. The unprefixated verbs in the bottom diagrams lack a specific semantic focus and do not express or focus a result.

In order to test the Pref-dyad Hypothesis it is necessary to determine whether the verbs in question express one repetition or several. I will do this by exploring individual Pref-dyads using three sources of information:

First, I will use dictionaries to consider the lexical meanings of the verbs, that is, the semantic outcome when a given verb is combined with a given prefix meaning. By way of example, *zaprygnut'* means to jump from one specific place to another and can only be read as involving one jump, while *zaprygat'* has the ingressive meaning 'begin to jump' and describes the beginning of a homogeneous situation consisting of repeated "quanta" where the beginning of the situation is similar to its middle and end (Zaliznjak and Šmelëv 2000: 107). *Zaprygat'* does not describe the beginning of a single jump. For these two verbs, then, we see that the first one describes a single "quantum", while the lexical meaning of the second verb entails several "quanta". In some cases, however, as they are presented in dictionaries, the lexical meanings of the verbs are insufficient to determine whether one or more than one repetition is needed to achieve a result, and we need more information.

Second, for near-synonymous verbs like *vytrjaxnut* 'shake out' – *vytrjasti* 'shake out', I consider corpus examples of the verbs and see what they reveal about the verbs' meaning(s). This enables me to consider the contexts of the verbs in great detail.

Third, in cases where neither of these methods yields sufficient insight, I consult with native speakers about their intuitions. Because of the subtle nuances between some of the verbs, their native speaker judgments come in as a necessary tool to understand how seemingly similar contexts can be understood in different ways.<sup>73</sup>

### 4.3 Case studies: Data and tagging

In the remaining part of this chapter, I use data from the RNC (years 1950-2017) to test the Pref-dyad Hypothesis on the 20 Pref-dyads in Table 19. These are the only Pref-dyads in the database where both Pref-Nu and Pref-Only each occurs in at least 30 examples from different authors.<sup>74</sup> The frequency criterion of 30 is chosen because 30 examples should be sufficient to reveal main tendencies in the verbs' behavior. The fact that all of them are from different authors shows that the verbs are used by more than a few people, and by including only one document per author we avoid author bias in the results. For the purposes of the study, up to 100

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<sup>73</sup> I would particularly like to thank Daria Kosheleva, Dmitrij Matveev, Elena Bjørgve, Mikhail Kopotev, Sergey Say, Svetlana Sokolova and Uliana Petrunina for taking time to discuss corpus examples and share their intuitions. Many other native speakers of Russian in Norway and Russia were occasionally asked about specific verbs and contexts and gave useful comments. Not all opinions can be shared in the chapter. I have included those that appeared most widespread and/or particularly insightful.

<sup>74</sup> In fact, five more Pref-dyads in the database meet the frequency criterion of  $\geq 30$  examples from different authors. All of them are from the cluster of *vernut'* 'return once': *navernut'* 'screw on, wrap into' (91 ex.) – *navorotit'* 'pile up' (298 ex.), *povernut'* 'turn' (7,484 ex.) – *povorotit'* 'turn' (96 ex.), *razvernut'* 'wrap' (5,459 ex.) – *razvorotit'* 'throw to sides, make whole, smash' (522 ex.), *svernut'* 'collapse, turn' (5,438 ex.) – *svorotit'* 'turn to side, move' (163 ex.), *vyvernut'* 'turn inside out, unscrew' (1,453 ex.) – *vyvorotit'* 'pull out, turn inside out' (281 ex.). The reason why these were not included in the study has to do with the way I created the database of Pref-Nu verbs. For a long time, I only considered Pref-Nu verbs that have an unprefixated counterpart regarded as semelfactive in authoritative dictionaries, and *vernut'* 'return once' is usually not classified as semelfactive. Thus, for a long time, I used a stricter criterion for Pref-Nu verbs than the criteria of the "conservative" approach described in Section 1.4.4, and the five Pref-Nu verbs in question did not match this criterion.

randomly selected sentences were extracted for every verb. For verbs attested in less than 100 examples, I included all examples available from different authors. This yielded a total of 3,551 examples, as shown in Table 19.<sup>75</sup>

Cluster	Prefix	Pref-Nu	#Ex.	Pref-Only	#Ex.
<i>děrnut'</i> 'pull once'	<i>za-</i>	<i>zaděrnut'</i>	100	<i>zaděrgat'</i>	100
<i>gljanut'</i> 'glance once'	<i>pro-</i>	<i>progljanut'</i>	100	<i>progljadet'</i>	100
<i>kinut'</i> 'throw once'	<i>na-</i>	<i>nakinut'</i>	100	<i>nakidat'</i>	100
	<i>po-</i>	<i>pokinut'</i>	100	<i>pokidat'</i>	100
	<i>za-</i>	<i>zakinut'</i>	100	<i>zakidat'</i>	100
<i>kriknut'</i> 'shout once'	<i>vz-</i>	<i>vskriknut'</i>	100	<i>vskričat'</i>	100
<i>listnut'</i> 'flip once'	<i>pere-</i>	<i>perelistnut'</i>	66	<i>perelistat'</i>	100
<i>liznut'</i> 'lick once'	<i>s-</i>	<i>sliznut'</i>	100	<i>slizat'</i>	79
<i>maxnut'</i> 'wave once'	<i>ot-</i>	<i>otmaxnut'</i>	44	<i>otmaxat'</i>	81
<i>pixnut'</i> 'shove once'	<i>za-</i>	<i>zapixnut'</i>	100	<i>zapixat'</i>	100
<i>prygnut'</i> 'jump once'	<i>za-</i>	<i>zaprygnut'</i>	100	<i>zaprygat'</i>	100
<i>ščělknut'</i> 'click once'	<i>za-</i>	<i>zaščělknut'</i>	100	<i>zaščělkat'</i>	100
<i>tolknut'</i> 'push once'	<i>na-</i>	<i>natolknut'</i>	37	<i>natolkat'</i>	100
	<i>za-</i>	<i>zatolknut'</i>	35	<i>zatolkat'</i>	100
<i>topnut'</i> 'stamp once'	<i>pri-</i>	<i>pritopnut'</i>	60	<i>pritopat'</i>	38
<i>trjaxnut'</i> 'shake once'	<i>vy-</i>	<i>vytrjaxnut'</i>	100	<i>vytrjasti</i>	100
	<i>pere-</i>	<i>peretrjaxnut'</i>	70	<i>peretrjasti</i>	41
<i>truxnut'</i> 'act like a coward once'	<i>s-</i>	<i>struxnut'</i>	100	<i>strusit'</i>	100
<i>tknut'</i> 'poke once'	<i>u-</i>	<i>utknut'</i>	100	<i>utýkat'</i>	100
<i>xlopnut'</i> 'slam once'	<i>za-</i>	<i>xaxlopnut'</i>	100	<i>xaxlopat'</i>	100

**Table 19** The 20 Pref-dyads included in the case study.

The fact that only 20 Pref-dyads have a high enough token corpus frequency in the corpus to be included in this study shows that most Pref-dyads consist of one or two perfectives that are relatively rare in use. At the same time, considering that half the Pref-Nu verbs in my database are connected with a Pref-dyad (Table 16), it seems that we have to do with a systematic relationship between two verb types that gives native speakers the option to choose or coin a verb with or without *-nu-* as needed for a specific situation. The case studies below aim to shed light on this system.<sup>76</sup>

<sup>75</sup> A preliminary version of this study furthermore included *poděrnut'* 'shrug, twitch' – *poděrgat'* 'pull a few times/for some time, shrug' that are attested in 340 and 352 examples, respectively. It turned out, however, that 299 (89%) of the examples containing *poděrnut'* involved the past passive participle *poděrnut(yj)* (*čem-l.*) 'be covered with a thin layer (of something)', which probably is related to the reflexive verb *poděrnut'sja* (*čem-l.*) 'get covered in a thin layer (of something)'. Only 27 examples from different authors contained active forms clearly connected with the verb *poděrnut'*, and the given Pref-dyad was therefore excluded from the case study. Past passive participles derived from reflexive verbs lose the ending *-sja*, cf. *vljuběn(nyj)* 'be in love' from *vljubit'sja* 'fall in love'.

<sup>76</sup> The Pref-dyads in Table 19 represent all parts of the x-axis in Figure 17, ranging from *nakinut'* 'throw on' – *natolkat'* (*čego*) 'throw a lot of (something)' where the Pref-Nu verb accounts for 91% of the examples to

As mentioned earlier, one way to determine whether a verb meaning implies one or more “quanta” of a certain activity is to consider its lexical meanings as it is presented in dictionaries. For the purposes of the present study, I decided to use *Malyj akademičeskij slovar'* (MAS, Evgen'eva 1999) and annotate each example in the database with the relevant lexical meaning listed in MAS.<sup>77</sup> Since most verbs are polysemous, when considering a corpus example, this operation usually meant to select between a number of related lexical meanings. The annotation of the corpus examples was carried out as follows:<sup>78</sup>

Some verbs, like *zaščelknut'* ‘latch’, are ascribed only one lexical meaning in MAS, here ‘latch’ (*zakryt', zaperet', zastegnut', ščelknuv zaporom, zastežkoj*), and all the examples in the database involve this meaning. For such verbs, all examples in the database were given the same label, e.g. MAS\_latch.

For polysemous verbs like *vytrjasti*, the examples were annotated with different labels depending on their lexical meaning in the various contexts, here ‘shake out’ (*trjasja, vysypat', vybrosit'*) and ‘shake off’ (*trjasja, očistit' ot sora, pyli*). Fixed expressions like *vytrjasti karman* ‘spend up all one’s money (lit. empty one’s pocket)’ were marked as “fixed\_expression”.

In a few cases, the corpus examples involved lexical meanings that were not captured by MAS. By way of example, 35 attestations of *zadërgat'* involved the ingressive meaning ‘begin to pull’, which is not mentioned in MAS, but is included in other dictionaries, such as Efremova (2000). For these verb uses, I created a corresponding label in the database, here “Ingressive”. As we will see, several of the verbs were found to express lexical meanings that, in the dictionary, are connected only with the other verb in the given Pref-dyad.

This way of tagging showed that the relevant Pref-dyads fall into two groups. The first group contains eleven non-synonymous Pref-dyads, i.e. Pref-dyads where the two verbs express different lexical meanings. In most of them, the prefixes, which are polysemous, contribute Aktionsart meaning in one verb and a different type of semantic content in the other verb. These verbs are discussed in Section 4.4. The second group involves nine synonymous Pref-dyads, i.e. Pref-dyads where the

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*zatolknut'* ‘push somewhere’ – *zatolkat'* ‘push somewhere’ where the Pref-Nu verb accounts for 9% of the examples.

<sup>77</sup> MAS includes approximately 90,000 words and is considered to be among the most authoritative dictionaries of Russian. The vocabulary and word descriptions in MAS reflect Russian in the 19<sup>th</sup> and 20<sup>th</sup> centuries. Two other authoritative dictionaries are of about the same size: Ušakov’s dictionary (first ed. 1935-1940) contains 90,000 words, and the 21<sup>st</sup> edition of Ožegov and Švedova’s dictionary (first ed. 1949) contains 70,000 words. These dictionaries furthermore reflect language use in more or less the same time period as MAS. A fourth dictionary edited by Efremova (2000) is much larger (136,000 word entries) and focuses on Russian in the 20<sup>th</sup> and 21<sup>st</sup> centuries. Efremova’s dictionary does not hold the same authoritative status as MAS, but was consulted in a few cases where MAS did not mention a relevant verb meaning. This is mentioned in the text.

<sup>78</sup> I would like to express my gratitude to Daria Kosheleva, Anastasia Timošina and Kirill Aksenov for taking time to look through a number of examples in which, at first glance, the verb meaning was unclear.

prefix yields the same semantic content in Pref-Nu as in Pref-Only. In two of these Pref-dyads, *vskriknut* ‘give a sudden shout’ – *vskričat* ‘exclaim’ and *struxnut* ‘become fainthearted’ – *strusit* ‘act like a coward’, the prefix is traditionally claimed to yield Aktionsart semantics. In the remaining Pref-dyads, the prefix contributes other types of semantic content. The synonymous Pref-dyads are discussed individually in Section 4.5.

#### 4.4 Non-synonymous Pref-dyads

In eight of the eleven non-synonymous Pref-dyads, the prefix contributes Aktionsart meaning in one verb and a different semantic content in the other. By way of example, *na-* yields accumulative Aktionsart meaning in *nakidat* (*čego*) ‘throw a lot (of something)’, derived from *kidat* ‘throw’, and the idea of surface contact in the related Pref-Nu verb *nakinut* (*na čto*) ‘throw (onto something)’. In the three other Pref-dyads, Aktionsart comes in as a peripheral submeaning of one of the verbs, and, in most contexts, the prefix contributes other semantic meanings to the verbs.

In the non-synonymous Pref-dyads, the lexical meanings of the two verbs are so different that the choice of verb in a given context is always obvious. For the purposes of the present study, a detailed analysis of each verb’s behavior is not seen as relevant, since the main point is that the two verb types are easy to tease apart and, as we will see, that their behavior conforms to the predictions of the Pref-dyad Hypothesis.

In the following, I first explore the eight Pref-dyads where one verb always expresses Aktionsart. Five Aktionsart meanings are important: accumulative (*na-*), attenuative (*pri-*), distributive (*po-*), delimitative (*po-*) and ingressive (*za-*). Most of the given Aktionsart meanings occur in the Pref-Only verbs and express events that by necessity involve more than one “quantum”. The Pref-Nu verbs in the same dyads express one “quantum” of a related activity. One Aktionsart meaning, attenuative, is connected with Pref-Nu. In this case, the related Pref-Only verb describes an event that requires repetitions of the action to achieve a result. In the three remaining non-synonymous Pref-dyads, Pref-Nu and Pref-Only also follow the same principle of one vs. several “quanta” of the activity. I argue that all of these observations are in line with the Pref-dyad Hypothesis.

In both this section and Section 4.5, the English translations of the verbs are sometimes slightly simplified to save space, and I only mention verb meanings that were attested in the database. For some verbs, the Russian definitions in MAS are provided in brackets.

#### 4.4.1 Accumulative Aktionsart (*na-*)

Accumulative Aktionsart (*kumuljativnyj, partitivno-kumuljativnyj, nakopitel'nyj sposob dejstvija*) is expressed by means of the prefix *na-* and signifies the “accumulation of the result of the action” (*nakoplenie rezul'tata*” *dejstvija*, Zaliznjak and Šmelëv 2000: 114). As mentioned above, *nakidat' (čego)* has the accumulative meaning ‘throw a lot (of something)’. Accumulative Aktionsart is usually derived from transitive verbs, here *kidat' ‘throw’*, and the direct object tends to appear in the partitive genitive form (instead of the accusative) or be accompanied by quantifiers, such as *mnogo ‘lots of’*, *massu ‘a mass of’*, *ujmu ‘heaps of’*, etc. This is illustrated in (73) where we find the genitive plural forms *vsjakix banok i paketikov ‘all kinds of cans and bags’* instead of the accusative plural *vsjakie banki i pakietiki*.<sup>79</sup>

- (73) *Bassejn my vykopali god nazad. A kogda my tuda priexali, estestvenno, turisty nakidali tuda vsjakix banok, paketov. [Pjatoe izmerenie. 2003]*  
 ‘We dug out the pool one year ago. But when we came there, tourists had naturally thrown all kinds of cans and bags there.’

Table 20 shows the two Pref-dyads involving accumulative meaning in the study.

Pref-Nu	Lexical meaning	Pref-Only	Lexical meaning
<i>Nakinut' (na čto)</i>	Throw on top	<i>Nakidat' (čego)</i>	Throw (a lot)
<i>Natolknut' (na čto)</i>	Lead to (idea)	<i>Natolkat' (čego)</i>	Push (a lot)

Table 20 Pref-dyads where Pref-Only expresses accumulative Aktionsart meaning.

The accumulative meaning of ‘a lot’ naturally entails repetition of the action. By way of example, the tourists in (73) did not throw only one can or only one bag on one occasion. Rather, the situation presumes a large quantity of cans and bags that over time have been thrown into the pool. The two Pref-Nu verbs describe, by contrast, one particular throwing or pushing movement. In these verbs, the prefix *na-* contributes the idea that the action brings the direct object on(to) a physical or abstract object, as in *Nina nakinula platok na golovu ‘Nina threw a shawl on her head’* and *Stat'ja natolknula menja na odnu ideju ‘the article gave me an idea (lit. the article pushed me onto an idea)’*.

The data reveal one context that is not mentioned in MAS and where both verbs appear possible: *nakidat' – nakinut' plan ‘make a plan’*, illustrated in (74) and (75). A search in Google suggests that *nakidat'* is most typical in this context (121 vs. 3,120 hits).<sup>80</sup> To speculate, it is possible that the preference for *nakidat'* is

<sup>79</sup> Since accumulative meaning describes the result of the action, it arguably “gets close to a purely lexical meaning” (*približaetsja k značeniju čisto leksičeskomu*, Isačenko 2003/1960: 249). However, Isačenko (ibid: 248-249), Zaliznjak and Šmelëv (2000: 114-116) and Švedova et al. (1980: 601, §1435) all include it as a separate subtype of Aktionsart. In Isačenko’s overview, accumulatives are described as a subtype of resultative Aktionsart (*rezul'tativnaja soveršaemost'*).

<sup>80</sup> I admit that numbers from Google may not be reliable, but the large difference in search hits between *nakinut' plan* and *nakidat' plan* strongly supports the idea that *nakidat'* combines with *plan ‘plan’* more often than *nakinut'* does.

motivated by the fact that plans are made by “throwing out” (coming up with) lots of ideas. The use of *nakinut'* could be motivated by a focus on the result, a finished plan, rather than the process of planning. The main observation in this study, however, is that the two Pref-dyads, in the majority of their uses, match the expectations of the Pref-dyad Hypothesis insofar as the two Pref-Nu verbs, *nakinut'* and *natolknut'*, point to some action that is performed or happens once, while the Pref-Only verbs concern actions that are repeated more than once.

- (74) *Krome togo, my kraten'kij biznes-plan nakidali – sčitaem, v pervyj god finansirovanie tem polnost'ju obespečim za sčet arendy.* [S. Daniljuk. 2004]  
 ‘Besides, we made a little business plan; we think that in the first year we will fully cover the financial costs with the rent.’
- (75) *Na polu melom nakinuli plan, i po ètomu čertežu master povël umom.* [B. Šergin. 1930-1960]  
 ‘We made a plan with chalk on the floor and based on this sketch the craftsman began brainstorming.’

#### 4.4.2 Attenuative Aktionsart (*pri-*)

As mentioned at previous points in this dissertation, attenuatives express to “do something slightly, not adding a lot of effort, for a short time” (*delat' nečto slegka, ne prilagaja usilij, nedolgo*) and primarily involve the prefixes *po-*, *pod-* and *pri-* (Zaliznjak and Šmelëv 2000: 120-121). In my dataset, one Pref-dyad involves the given Aktionsart meaning – *pritopnut'* ‘make a little stamp’ – *pritopat'* ‘arrive on foot’. Both verbs are connected with the idea of stamping, but in different ways. *Pritopnut'* refers to a single stamp (*stuknut', udarit' nogoj ob pol, ob zemlju*) and is sometimes used in the context of speech to express disapproval, anger or another strong emotion, cf. (76). Although the stamp may be performed with emotion, native speakers confirm that *pri-* attenuates the verb meaning and that *pritopnut'* therefore refers to a slighter stamp than the unprefixated *topnut'* ‘stamp once’.

- (76) – *Ujdi s glaz moix! Ne zli! – pritopnula nogoj žena.* [A. Žitkov. 2000]  
 “‘Get out of my face! Don’t make me angry!’ his wife made a little stamp with her foot.’

*Pritopat'* describes a situation where someone arrives on foot, or, in other words, “stamps” many times to get to a certain destination, such as home (77). Thus, both of these verbs behave as expected according to the Pref-dyad Hypothesis, since in order to arrive by foot (*pritopat'*) one needs to make many steps, while a little stamp (*pritopnut'*) presumes only one step.

- (77) *Odnaždy my nastol'ko uvleklis', čto pritopali domoj očen' pozdno, uže temnelo.* [A. Jakovlev. 2001]  
 ‘Once we got so carried away that we got home really late, it was already getting dark.’

#### 4.4.3 Delimitative and distributive Aktionsart (*po-*)

The verb *pokidat'* in the Pref-dyad *pokinut'* 'abandon, leave' – *pokidat'* 'throw for some time, throw everything into a disorderly heap', is polysemous and arguably connected with two types of Aktionsart. In the meaning 'throw for some time' (*kidat' nekotoroje vremja*), it expresses delimitative meaning, that is, some "portion" of the action "that is considered small and limited in terms of the time in which it was performed" (Zaliznjak and Šmelëv 2000: 111).<sup>81</sup> The second meaning, 'throw everything into a disorderly heap' (*kinut' vsë, mnogoe, obyčno v besporjadke, kak popalo*), is closer to distributive Aktionsart, which expresses "an action that affects all entities denoted by the direct object of transitive verbs or the subject of intransitive verbs" (ibid: 124).<sup>82</sup> Both uses of *pokidat'* clearly imply several performances of the throwing activity, and they therefore match the predictions of the Pref-dyad Hypothesis. The two Aktionsart meanings of *pokidat'* are illustrated in the examples below:<sup>83</sup>

(78) – *Znaeš', Lena, – govorju ja, – mne kažetsja, čto ljubaja subkul'tura – èto liš' povod sobrat'sja vmeste, pomaxat' obščimi flagami, pokidat' doxlyx košek za zabor drugoj vraždebnoj subkul'ture...* [Sibirskie ogni. 2012]

"'You know, Lena", I said, "I think any subculture is just an excuse to get together and spend some time waving common flags and throwing dead cats over the fence at another hostile subculture..."

(79) *Valerka prosnulsja ot zvonka budil'nika. Kak vseгда. Bystro sbegal v duš, xlebnul čaja na kuxne, pokidal knižki v sumku i vyskočil, opazdyvaja na lekciju.* [M. Traub. 2012]

'Valerka woke up at the sound of the alarm clock. As always. He took a quick shower, gulped down some tea in the kitchen, threw the books into his bag and jumped out, not making it on time for the lecture.'

The second verb in this Pref-dyad, *pokinut'*, expresses various situations of leaving or abandoning people, places or activities (80). In a sense, the verb describes one metaphorical "throw", one repetition, where the subject moves itself away, and the use of *pokinut'* is therefore also in line with the predictions of the Pref-dyad Hypothesis.

(80) *Režisser s prodžuserom rešili dosročno pokinut' Niderlandy.* [Izvestija. 2003]  
'The director and producer decided to leave the Netherlands earlier than planned.'

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<sup>81</sup> "Glagoly ètogo klassa opisyvajut nekotoruju "porciju" dejstvija, ocenivaemuju kak nebol'suju i ograničennuju vremenem, v tečenie kotorogo ono proizvodilos'" – Translation to English by MN.

<sup>82</sup> "Glagoly distributivnogo sposoba dejstvija oboznačajut dejstvie, zatragivajuščee vse ob"ekty iz množestva nazvannogo prjamym dopolnieniem u perexodnyx glagolov i podležaščim - u neperexodnyx" – Translation to English by MN.

<sup>83</sup> Notice that most examples of *pokidat'* in the corpus involve the imperfective verb *pokidat'* 'abandon, leave', which is the aspectual partner of *pokinut'* and not relevant for this study.

#### 4.4.4 Ingressive Aktionsart in *za-*

Ingressive Aktionsart (*načínatel'nyj, ingressivnyj, inxoativnyj sposob dejstvija*) can be expressed by means of several prefixes, including *za-*, *po-*, *ob-* and *vz-* (Zaliznjak and Šmelëv 2000: 106-111). Each of these prefixes yields a slightly different nuance of ingressive meaning, but the prefixes have in common that they focus on the beginning of some action (*pristup k dejstvuju*, Isačenko 1960 [2003]: 224). Ingressives in *za-*, which are relevant in this section, are derived from intransitive verbs that describe “homogeneous situations that neither have a beginning or final phase that differ from their middle” (Zaliznjak and Šmelëv 2000: 107).<sup>84</sup> By way of example, *prygat'* ‘jump’ refers to the homogeneous activity of jumping, and *za-* in *zaprygat'* ‘begin to jump’ signals that the activity begins, as illustrated in (81). The fact that ingressives in *za-* describe the beginning of a homogeneous process means that they imply a situation involving several “quanta”. It therefore makes sense that they appear in Pref-Only verbs, and not in Pref-Nu verbs.

- (81) *Zagroxali startovye pistolety – zabegali, zaprygali zrelye, požilye, sovsem starye stariki i staruški. [Ogonek. 1991]*  
 ‘The starting pistols went off and mature, elderly and really old men and women started to run and jump.’

Table 21 shows the four Pref-dyads connected with ingressive Aktionsart in *za-*:

Pref-Nu	Lexical meaning	Pref-Only	Lexical meaning
<i>Zaděrnut'</i>	Close curtains	<i>Zaděrgat'</i>	Begin to pull
<i>Zaprygnut'</i>	Jump somewhere	<i>Zaprygat'</i>	Begin to jump
<i>Zaščělknut'</i>	Latch	<i>Zaščělkat'</i>	Begin to click
<i>Zaxlopnut'</i>	Slam shut	<i>Zaxlopat'</i>	Begin to slam, applaud, etc.

Table 21 Pref-dyads where Pref-Only expresses ingressive Aktionsart meaning.

The four Pref-dyads follow the pattern expected from the Pref-dyad Hypothesis. As mentioned above, the Pref-Only verb describes the beginning of a homogeneous situation and implies several repetitions. Pref-Nu singles out one repetition of a specific type. In other words, while *zaděrgat'* means ‘begin to pull’, *zaděrnut'* means to pull once in the specific context of curtains; *zaprygat'* means ‘begin to jump’, while *zaprygnut'* means to make one jump in a certain direction; etc. The specific type of repetition involved is determined by the prefix. As mentioned in Section 3.5.1, the semantics of *za-* is particularly complex, and, in the relevant verbs, *za-* arguably contributes the ideas of covering (*zaděrnut'* ‘close (curtains)’, *zaxlopnut'* ‘slam shut’), direction (*zaprygnut'* ‘jump somewhere’) and attachment (*zaščělknut'* ‘latch’).

<sup>84</sup> “*Inxoatvnyj sposob dejstvija obrazuetsja... ot obozna-čenij gomogennyj situacij, ne imejuščix ni načal'noj, ni konečnoj fazy, otličnoj ot sredinnoj*” – Translation to English by MN.

Before wrapping up this section, it should be mentioned that *zadërgat'* additionally has the lexical meaning 'exhaust, torment'. In the examples of *zadërgat'*, both meanings are widespread: 35% of the examples involve the ingressive meaning 'begin to pull', while 65% describe situations where someone exhausts or torments someone with recurring requests and demands (or, in the case of horses, with excessive whipping). Both meanings of *zadërgat'* entail multiple "quanta". The metaphorical meaning 'exhaust, torment' most commonly occurs in past passive participles with the meaning 'exhausted, tormented', as illustrated in (82):

- (82) *Telekanal TNT, poxože, rešil proverit', čto slučitsja, esli polnuju svobodu predostavit' zadergannym trebovanijami «formata» televizionščikam.* [Ogonek. 2013]  
 'It seems that the TV channel TNT has decided to check what will happen if they give complete freedom to the broadcasters who are exhausted by the "format" requirements.'

#### 4.4.5 Non-synonymous Pref-dyads where Aktionsart is less important

In the three remaining non-synonymous Pref-dyads in my dataset, the prefix primarily yields other meanings than Aktionsart. In the following, I briefly present each Pref-dyad and show that all of them involve the semantic relationship predicted by the Pref-dyad Hypothesis.

##### 4.4.5.1 *Otmaxnut'* 'wave away' – *otmaxat'* 'cover a certain distance in a certain time'

*Otmaxnut'* means to wave something away (*otgonjat', maxaja čem-l.*). The prefix contributes the path meaning DEPART, which means that the subject leaves or makes the direct object leave its position, as in the following example:

- (83) *I togda Vera, otmaxnuv so lba volosy, šagnula k professoru.* [È. Šim. 1976]  
 'And then Vera waved the hair from her forehead and stepped towards the professor.'

In addition to this meaning of *otmaxnut'* listed in MAS, several metaphorical uses of the verb were discovered in the corpus data, including 'chop off' illustrated in (84). Importantly for us, what these verb meanings seem to have in common is that they describe one movement of the hand, as expected for Pref-Nu verbs from the hypothesis.

- (84) *U nas daže v lučšie vremena prodavščicy v prodmagax ne želali kolbasu ili tot že syr narezat', a vse norovili kuskom otmaxnut'.* [S. Nosov. 2005]  
 'Even in the best of times, the saleswomen in our grocery stores did not want to cut the sausage or cheese into slices, but always insisted on cutting off a chunk.'

The verb *otmaxat'* is polysemous. The majority of the examples in the database (64 of 81 ex.) involve the metaphorical meanings 'cover a big distance in a short time'

(*bystro projti, proexat' bol'šoe rasstojanie*), illustrated in (85), and 'do something in a certain time' (8 ex.), illustrated in (86). Both of these meanings come close to finite Aktionsart where a transitive verb expresses that some portion of an action was completed (Isačenko 1960 [2003]: 244). Unlike typical finite Aktionsart verbs, however, *otmaxat'* does not seem to occur with the direct object *svoë* 'lit. one's own', cf. *otrabotat' svoë* 'complete one's share of work'. The remaining nine examples in the database involve the verb meanings 'wave for some time' (*provesti kakoe-l. vremja, maxaja čem-l.*), 'exhaust hands from waving' (*utomit' ruki maxaniem*) and 'quickly perform some work' (*bystro, lovko i t.p. sdelat', ispolnit' čto-l.*). All the lexical meanings of *otmaxat'* describe complex events presuming a time span over which some action happens repeatedly.

(85) *Uspeem do temnoty otmaxat' ešče kilometrov tridcat'*. [O. Divov. 1998]  
'We'll manage another thirty kilometers before it gets dark.'

(86) *Možno za trista dnej služby otmaxat' sto pjat'desjat karaulov, a mnogo èto ili malo – nado sprosit' u otsluživšix*. [Zvezda. 2001]  
'In 300 days of service one can manage 150 sentries, but whether that's a lot or little is a question for those who have finished their service.'

#### 4.4.5.2 *Progljanut' 'appear' – progljadet' 'overlook, skim through'*

*Progljanut'* means that something appears (*pokazat'sja, pojavit'sja, stat' vidimym na vremja*) and is intransitive. The prefix *pro-* contributes the idea that something moves THROUGH something, for example fog:

(87) *Na obratnom puti čerez tuman neožidanno progljanul Èl'brus*. [Surgutskaja tribuna. 2000]  
'On our way back, Elbrus suddenly appeared through the fog.'

The polysemous verb *progljadet'* is transitive and usually expresses the ideas of overlooking something (83 ex., *po nevnimatel'nosti, oplošnosti ne uvidet', ne zametit'*) or skimming through some material (13 ex., *naskoro poznačomit'sja s čem-l., beglo pročitat'*). In the meaning 'overlook', *pro-* adds the notion of passing something (as in *proexat' stanciju* 'miss the station', cf. *exat'* 'drive'). In the meaning 'skim through', *pro-* adds the same notion as in *progljanut'* 'appear' – THROUGH. These two main meanings of *progljadet'* are illustrated below:

(88) *Na protjaženii marta i aprelja posol'stvo SŠA v Moskve progljadelo ser'eznye izmenenija, kotorye proizošli i v samom rukovodstve, i v ego politike*. [O. Grinevskij. 1997]  
'In the course of March and April the American embassy in Moscow overlooked the serious changes that took place in the leadership itself and its politics.'

- (89) *Gazety Nikolaj Grigor'evič progljadel migom, otkrytki tože ne predstavljali interesa.* [Ju. Trifonov. 1981]  
'Nikolaj Grigor'evič skimmed through the newspapers in a moment, and the postcards were not interesting to him either.'

The situations described by *progljadet'* are arguably complex in the sense that overlooking often entails a time span when something could have been noticed, as in (88), and skimming through presumes looking through an entire object, even if it happens quickly, as in (89). These observations match the Pref-dyad Hypothesis in the sense that Pref-Nu expresses a single movement that makes something appear, while the lexical meanings of Pref-Only imply time and repeated actions within the event.<sup>85</sup>

#### 4.4.5.3 *Zakinut'* 'throw somewhere' – *zakidat'* 'cover by throwing'

The last Pref-dyad in this section is a third Pref-dyad from the cluster of *kinut'* 'throw once'. In the database, *zakinut'* most often describes moving something, usually a body part, into a new position (*pridat' čemu-l. kakoe-l. položenie rezkim dviženiem nazad, vverx ili v storonu*), as illustrated in (90). The verb can also mean to throw something somewhere (*kinut', brosit' kuda-l. (obyčno s siloj ili daleko)*), e.g. a fishing net into the sea, and throw something onto something else (*brosiv, zacepit'*), e.g. a bag over one's shoulder. In all three meanings, *za-* seems to show that the movement is directed *somewhere*, rather than the specific trajectory (Valeeva 2001), and the verb describes one throwing movement, one "quantum", that brings the direct object to a new place. That is, it entails a result.

- (90) *Larisa legla v krovat', zakinula ruki za golovu i medlenno, dolgo ulybnulas'.*  
[A. Stepanov. 1984]  
'Larisa lay down in the bed, threw her hands behind her head and made a slow and long smile.'

By comparison, *zakidat'* means that the subject covers some object with something, e.g. tomatoes in (91). In Janda et al. (2013)'s study, this meaning of *za-* is called "COVER". It can also be used about stoning (*zakidat' kamjami*), or metaphorically about asking lots of questions (*zakidat' voprosami*), throw lots of filthy comments at someone (*zakidat' pakostjami*), etc. All these situations clearly involve many "throws", and the use of *zakidat'* therefore matches the predictions of the Pref-dyad hypothesis.<sup>86</sup>

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<sup>85</sup> According to MAS, *progljadet'* furthermore has the perdurative Aktionsart meaning 'examine, observe something for some time' (*provesti kakoe-l. vremja rassmatrivaja, nabljudaja čto-l.*), but this verb meaning is not attested in my data.

<sup>86</sup> According to MAS, *zakidat'* furthermore has the ingressive meaning 'begin to throw', but this use of the verb is not attested in the data.

- (91) *Sčítaju, čto detjam, a osobenno devočkam, nado učít'sja so školy umet' odevat'sja krasivo, razvivat' čuvstvo vkusa, èstetiki, učít'sja ženstvennosti, na moj vzgljad èto poglavnee učeby (èto moe mnenie, možete zakidat' menja pomidorami).* [Forum. 2007-2010]

'I think that children, especially girls, should learn, beginning in school, how to dress well, develop a sense of taste and aesthetics, learn femininity; in my view that's more central than studies (that's my opinion, you may throw tomatoes at me).'

#### 4.4.6 Summary

The present section has inspected the 11 non-synonymous Pref-dyads in my data. In most of these, one verb expresses Aktionsart. All the relevant Pref-dyads yield support to the Pref-dyad Hypothesis: Pref-Nu describes events that involve one single repetition of the action, while Pref-Only expresses an event with internal structure in the sense that it implies more than one repetition of the action.

#### 4.5 Synonymous Pref-dyads

In the present section, I investigate the nine synonymous Pref-dyads. As Croft (2000: 176) writes, and many scholars agree with him, "there is a strong tendency to avoid complete synonymy, that is, multiple forms with the same meaning and the same social (community) value" (see also Cruse 1986: 270, Goldberg 1995: 67, Szymanek 2005, Nessel and Makarova 2018). In the present study, I assume that the verbs in these Pref-dyads are not fully synonymous and that the subtle differences between them can be identified by investigating their contexts and behavior in the corpus. The given Pref-dyads are referred to as "synonymous" (rather than "near-synonymous") for the sake of simplicity.

In synonymous Pref-dyads, the prefix contributes the same semantic content in Pref-Nu and Pref-Only, and the only difference between the verbs is therefore that the former contains *-nu-*, while the other does not. In MAS and other dictionaries, such verbs are usually attributed the same, almost the same, or some of the same lexical meaning(s), for example 'shake out' for *vytrjaxnut'* and *vytrjasti*.

In the following, the synonymous Pref-dyads are discussed one by one. I consider the semantic contribution of the prefix and show that the same meaning is relevant in both verbs. As elsewhere in this dissertation, I primarily rely on the prefix meanings proposed by Janda et al. (2013). I furthermore provide their definitions in MAS and, if more than one lexical meaning is relevant, I show how these are distributed between the verbs in the database. In several cases, I find that the two verbs in a Pref-dyad share more lexical meanings than what is reflected in the dictionary. I then use corpus data to shed light on the semantic relationship between Pref-Nu and Pref-Only based on factors that appear relevant in the individual Pref-dyads and based on what we know about the suffix *-nu-* from the scholarly literature. In most cases, corpus data is not enough to fully tease apart the relevant verbs and I therefore draw on native speaker intuitions as well. The

findings for each Pref-dyad are discussed in light of the Pref-dyad Hypothesis. Although some of the Pref-dyads yield full or partial support to the hypothesis, for a number of others the corpus data do not reveal any strong differences between the two verbs or no differences that match the predictions of the hypothesis.

#### 4.5.1 *Perelistnut'* – *perelistat'* 'flip'

Before we explore the corpus data of *perelistnut'* and *perelistat'*, let us consider the following information concerning their morphology and semantics:

- Base imperfective: *listat'* 'flip'
- Meaning of *pere-*: TURN OVER
- Definitions in MAS:
  - > *Perelistnut'*: Not included in MAS;
  - > *Perelistat'*: 1) Turn pages/sheets (*perevernut' stranicy, listy čego-l.*).

*Perelistat'* is associated with one lexical meaning in MAS – 'flip'. *Perelistnut'* is not included in this dictionary, but all 66 examples in the database describe the idea of flipping a page. With regard to their lexical meanings, then, *perelistnut'* and *perelistat'* are close synonyms. The meaning of *pere-* is arguably present in the imperfective base verb and hardly adds new semantic content.<sup>87</sup> If the Pref-dyad Hypothesis is correct, we can expect *perelistnut'* to occur in contexts describing one flip ("quantum"), and *perelistat'* to describe events involving several page flippings.

In order to test the hypothesis predictions on the data, a distinction was made in the database between 1) examples where the direct object refers to one single sheet or page, e.g. *stranicu* 'page', 2) examples where the direct object refers to several individual sheets or pages, e.g. *stranicy* 'pages', and 3) examples involving objects that are made up of several pages, e.g. *knigu* 'book' and *knigi* 'books' ("complex objects"). The following is expected. When the action is directed towards one page, several flips are impossible, and I expect to find *perelistnut'*. When more than one page is involved, either separate ones or as part of a complex object, it is natural to expect several flips and the use of *perelistat'*. Table 22 shows the frequency distribution of these three types of direct objects in the data:

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<sup>87</sup> Although *pere-* does not seem to add new semantic content to these verbs' meaning, Janda et al. (2013: 71) consider *perelistat'* a Specialized Perfective. The reason for this is likely that Janda et al. classify a verb as a Natural Perfective only if it is listed as an aspectual correlate of the corresponding base imperfective (here, *listat'* 'flip') in Evgen'eva (1999), Ožegov and Švedova (2001 [1949]) and/or Cubberly (1982) and was confirmed to have this function by a panel of native speakers. Thus, if the perfective in question does not appear in any of the given sources and does not express Aktionsart (Complex Act Perfectives), it must be regarded as a Specialized Perfective.

Direct object	<i>Perelistnut'</i>	<i>Perelistat'</i>
One page	28 (42,0%)	0 (0,0%)
Several pages	23 (35,0%)	30 (30,0%)
Complex objects	7 (11,0%)	70 (70,0%)
Other (incl. metaphorical uses)	8 (12,0%)	0 (0,0%)
Total	66 (100,0%)	200 (100,0%)

**Table 22** Distribution of direct objects in the corpus data for *perelistnut'* and *perelistat'*.

The distribution of direct objects in Table 22 confirm that the two verbs in this Pref-dyad are different, but, at first glance, it yields only partial and not full support to the Pref-dyad Hypothesis. On the one hand, it is clear that only *perelistnut'* occurs in contexts with a single page. Thus, *perelistat'* appears impossible in contexts that can only involve one flip. At the same time, 35% of the examples with *perelistnut'* occur in contexts with several pages. This appears to contradict the hypothesis.

A closer look shows that the contexts marked "Several pages" in Table 22 can be understood in at least two ways. The subject may flip through many pages, one by one. In this case, the action involves repeated flips and, according to the Pref-dyad Hypothesis, *perelistat'* is expected. In another scenario, the subject flips several pages at the same time, thus performing one repetition, a situation that is more likely to match the meaning of *perelistnut'*. The examples in the database show that *perelistnut'* indeed appears more often in the latter context. Below, for instance, the verb essentially means 'skip' and therefore flip several pages in one turn:

- (92) *Esli že, moj Uvažаемyj Čitatel', Vas malo interesuet istorija kazaxstanskogo kejtinga, perelistnite èti stranički.* [K. Serafimov. 1978-1996]  
 'If, my Dear Reader, the history of Kazakh caving is of little interest to you, you may skip over these pages.'

In the examples with *perelistat'*, the goal is, on the other hand, to look through the various pages. They describe perfective whole events, but the events involve more than one flip (repetition). These observations provide support to the hypothesis. The metaphorical use of *perelistat'* below illustrates this point:

- (93) *Poèтому nam pridetsja na nekotoroè vremja otojti ot Dostoevskogo, čtoby perelistat' neskol'ko drevnix i počti vovse ne osveščennyx u nas stranic istorii žanrov.* [M. Baxtin. 1963]  
 'For this reason, we need to leave Dostoevskij for some time to look through some of our old and hardly illuminated pages in the history of genres.'

However, to say that only *perelistat'* can occur when the subject flips through many pages oversimplifies the picture. Although *perelistat'* can be used, so can *perelistnut'*, cf. (94). Some native speakers suggest that *perelistnut'* in these contexts brings focus to the distinct flips, in other words, that the subject looks at each page, while *perelistat'* does not necessarily imply this focus. If this is the case,

Pref-Nu is concerned with individual flips, but not necessarily one only, as is predicted by the Pref-dyad Hypothesis. This potential nuance in meaning is interesting, but has to do with how the sentences are interpreted by the reader and is impossible to test objectively on corpus data.

- (94) *V èto vremja Sverčok, ktoromu popala v ruki sberegatel'naja knižka, perelistnul stranicy i našel to, čto drugie ne zametili.* [A. Pristavkin. 1992]  
'At this time, Sverčok who had gotten a hold of the passbook, flipped through the pages and found what the others had not noticed.'

Contexts with so-called complex objects can only be interpreted as involving more than one flip. To illustrate, *perelistat' knigu* means 'flip through the book'; this can only mean flip through the various pages of the book, and not from one page to another. The high frequency of *perelistat'* in this context makes sense. *Perelistnut'* is, on the contrary, not expected. Among the seven examples with *perelistnut'* in this context, we find a few where the goal of the subject in fact is to get from one specific page to another specific page, rather than looking through the individual pages. An example of this is given in (95) where this meaning of the verb is clear from the prepositional phrase *na čistuju stranicu* 'to a blank page'. The remaining handful of examples show that the Pref-dyad Hypothesis is not completely waterproof although it explains and correctly predicts almost all the examples.

- (95) *Perelistnuv tetrad' na čistuju stranicu, ty risueš' dom.* [T. Solomatina. 2011]  
'When you have turned the notebook to a clean page, you draw a house.'

#### 4.5.2 *Peretrjaxnut'* – *peretrjasti* 'turn around, rummage through'

*Peretrjaxnut'* and *peretrjasti* are polysemous and arguably connected with at least two submeanings of *pere-*:

- Base imperfective: *trjasti* 'shake'
- Meaning of *pere-*: TURN OVER, THOROUGH
- Definitions in MAS:
  - > *Peretrjaxnut'*: 1) Turn around to cleanse or make fluffy (*trjaxnut' neskol'ko raz, vstrjaxivaja, pereložit' (očiččaja ot čego-l., delaja bolee pyšnym, i t.d.)*, 2) Thoroughly re-examine (*podvergnut' tščatel'nomu peresmotru*);
  - > *Peretrjasti*: 1) Shake out to clean from trash or dust (*vytrjasti, očiččaja ot sora, pyli*), 2) Rummage through (*vstrjaxivaja, peregovačivaja, perebrat', peresmotret' (obyčno v poiskax čego-l.)*).

*Peretrjaxnut'* and *peretrjasti* are given different definitions in MAS, but as we will see, each lexical meaning regularly occurs in the corpus data of both, and this is why they are included among the synonymous Pref-dyads in the present study. In the network of meanings associated with the prefix *pere-*, TURN AROUND and THOROUGH stand out as particularly relevant, since, for these verbs, the subject

performs their action by moving objects around and/or shaking or examining them thoroughly (Janda et al. 2013: 106-111). Notice that the given verb meanings are incompatible with the idea of a single “quantum” expected for Pref-Nu, and we will see that *peretrjaxnut'* and *peretrjasti* indeed are very similar in use and difficult to analyze in terms of the Pref-dyad Hypothesis.

Table 23 shows how the four lexical meanings in question are distributed between the verbs in question. Illustrations of the direct objects they may combine with (in brackets) are from MAS. The metaphorical extension of the meaning ‘Turn around’ is not mentioned in the dictionary, but since the literal and metaphorical uses of this meaning are distributed differently between the verbs, they are useful to show in separate rows. From the table, it is clear that the verbs regularly occur in the same contexts.

MAS entries		<i>Peretrjaxnut'</i>	<i>Peretrjasti</i>
<i>Peretrjaxnut'</i>	Turn over (lit., e.g. hay)	4 (6%)	6 (14%)
	Turn over (metaph., e.g. a political cabinet)	27 (39%)	7 (17%)
	Re-examine (e.g. a criminal case)	4 (6%)	4 (10%)
<i>Peretrjasti</i>	Shake to make clean (e.g. a carpet)	5 (7%)	3 (7%)
	Rummage through (e.g. a house)	25 (36%)	20 (49%)
	Unclear examples	5 (6%)	1 (3%)
	Total	70 (100%)	41 (100%)

**Table 23 Lexical meanings of *peretrjaxnut'* and *peretrjasti* in MAS and how they are distributed in the corpus data.**

The frequency distribution in Table 23 is visualized in Figure 19 where the lexical meanings that in MAS are attributed to *peretrjaxnut'* have blue shades, while lexical meanings attributed to *peretrjasti* are in red:

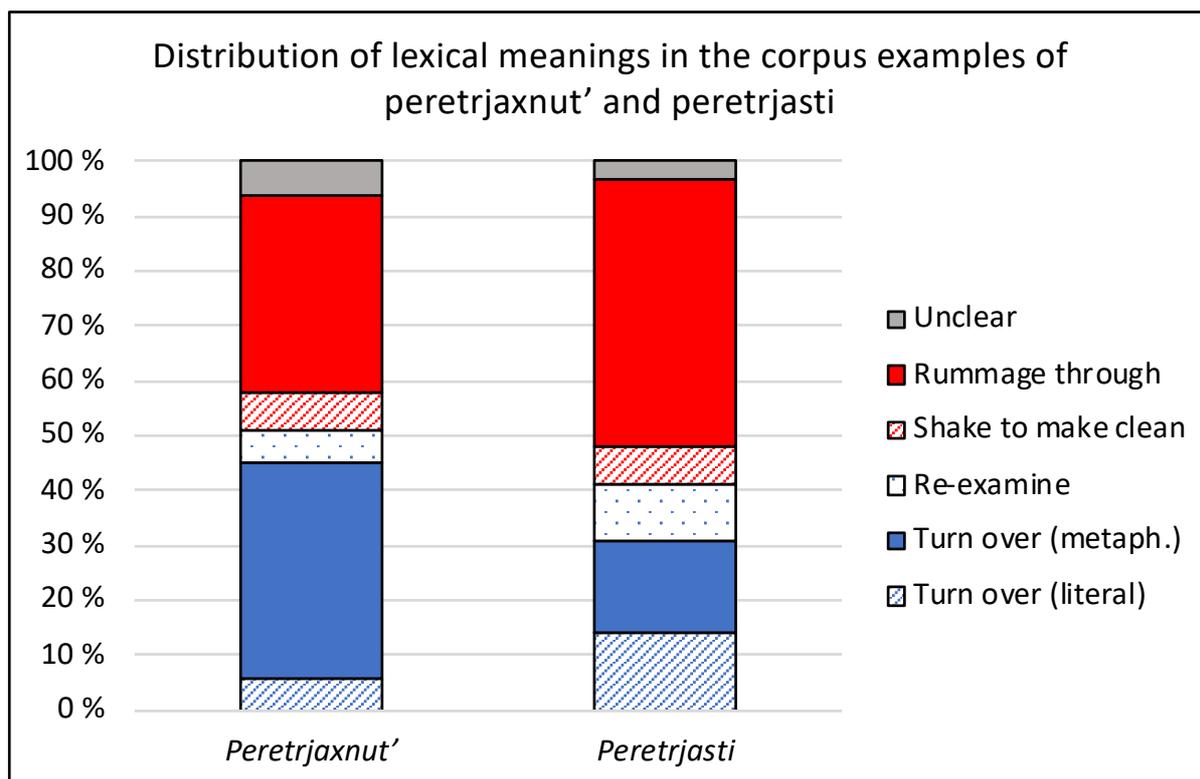


Figure 19 Distribution of lexical meanings in the corpus examples of *peretrjaxnut'* and *peretrjasti*.

The results above show that *peretrjaxnut'* and *peretrjasti* are very similar. In order to pinpoint potential differences, we must consider the contexts they occur in. For the purposes of the present study, I will focus on the two lexical meanings that are most frequent for both – ‘rummage through’ and ‘turn around (metaph.)’. Like the other submeanings of the verbs, neither of these are compatible with the idea of one “quantum”: in the definition of ‘turn around’, MAS states specifically that the shake is performed “a few times” (*trjaxnut' neskol'ko raz*), and rummaging something, e.g. a house, in order to find something definitely requires more than a single ‘turn’. *Peretrjaxnut'*, then, does not match the prediction for Pref-Nu verbs stated in the Pref-dyad Hypothesis. At the same time, considering that languages tend to avoid full synonymy, it is reasonable to believe that this verb has semantic nuances of its own that make it distinct from *peretrjasti*. In order to explore how the verbs might be different in the two relevant meanings, I will consider their direct objects and adverbials.

The metaphorical meaning ‘turn around’ is the most frequent one in the sample of *peretrjaxnut'*. This meaning is much less frequent, but still widespread for *peretrjasti*. There are no clear differences between the direct objects and adverbials of the verbs in these contexts. Both are used about leaderships, councils and other groups of people. For both, the few adverbials that are attested concern intensity and suddenness: *gluboko* ‘deeply’, *izrjadno* ‘pretty well’, *neožidanno* ‘unexpectedly’, *osnovatel'no* ‘thoroughly’, *v odnočas'e* ‘in no time’, *vser'ez* ‘seriously’

and *za ètu noč* ‘in this night’. The two examples below illustrate the maximal similarity of the verbs insofar as they describe the exact same political event:

- (96) *Čtoby ne sozdat' sliškom razitel'nogo kontrasta s rešitel'nost'ju Prezidenta, kotoryj bukval'no v odnočas'e peretrjaxnul ves' silovoj blok, pojavilis' idei ob "edinenii neskol'kix vedomstv.* [Rossijskaja gazeta. 2003]  
‘In order to prevent a too sharp contrast with the decisiveness of the President, who had turned around the whole power bloc in literally one moment, it was suggested to unite some agencies.’
- (97) *Načalom novogo političeskogo sezona povejalo tol'ko v marte: prezident neožidanno i vs'er'ez peretrjas edva li ne ves' silovoj blok pravitel'stva, praktičeski ne ob"jasniv pričin takogo massovogo perexoda vysšix činovnikov iz kabineta v kabinet.* [Profil'. 2003]  
‘The beginning of the new political season appeared on the horizon only in March: the president unexpectedly and efficiently turned around almost the whole power bloc of the government, practically not explaining the reason for such a massive transfer of higher officials from one cabinet to another.’

In the meaning ‘rummage through’, the verbs describe that someone searches for something by physically turning things around. Here too, they involve the same types of direct objects: buildings/places (e.g. *dom* ‘house’), containers (e.g. *sumki* ‘bags, purses’) and various other things (e.g. *odeždu* ‘clothes’). Many of the direct objects are accompanied by the pronoun *ves* ‘whole’, e.g. *vse kladovki* ‘all the pantries’ in (98) and *vsju kvartiru* ‘the whole apartment’ in (99). Arguably, this emphasizes the intensity of the situation insofar as the activity is described as performed to its maximal degree. However, *ves* ‘whole’ appears regularly in both samples – there is no difference between the verbs. As for adverbials, the sample of *peretrjaxnut* contains four: three indicate instantaneousness (*bystro* ‘quickly’, *stremitel'no* ‘rapidly’, *vmig* ‘instantly’) – one does not (*suetlivo* ‘whimsily’). The examples of *peretrjasti* contain none, but the data are too scarce to conclude whether this is incidental or not.

- (98) *Oni bystro peretrjaxnuli dom, vse kladovki ego, našli avtomat, pistol, dve granaty.* [B. Ekimov. 1999]  
‘They quickly rummaged through the house, all its pantries, and found an assault rifle, a gun and two grenades.’
- (99) – *Čego slučilos'?* – *Govorit, prihodili opera, iskali tebjja. Vsju kvartiru peretrjasli tvoju.* [Z. Prilepin. 2006]  
‘“What happened?” “He says that the police came looking for you. They turned your whole apartment upside-down.”’

To summarize, the present study of *peretrjaxnut* and *peretrjasti* shows that the verbs in this Pref-dyad are semantically closer than what is suggested in MAS. The

situations involved presume more than one “quantum” of the activity, and the use of *peretrjaxnut'* therefore contradicts the Pref-dyad Hypothesis. *Peretrjaxnut'* and *peretrjasti* display slightly different frequency distributions of lexical meanings, but in the two most common uses of the verbs, ‘turn around (metaph.)’ and ‘rummage through’, the corpus data are not sufficient to reveal any clear differences between them.

#### 4.5.3 *Vytrjaxnut'* – *vytrjasti* ‘shake out/off, empty’

Let us now turn to the second Pref-dyad involving verbs from the cluster of *trjaxnut'* ‘shake once’ where the following information is relevant:

- Base imperfective: *trjasti* ‘shake’
- Meaning of *vy-*: EMPTY A CONTAINER, EXHAUST A SURFACE
- Definitions in MAS:
  - > *Vytrjaxnut'*: 1) Shake out (*trjaxnuv, vysypat', vybrosit', vyronit'*);
  - > *Vytrjasti*: 1) Shake out (*trjasja, vysypat', vybrosit'*), 2) Shake off dust/rubbish (*trjasja, očistit' ot sora, pyli*).

In MAS, *vytrjaxnut'* is ascribed one lexical meaning, while *vytrjasti* is associated with two. Based on MAS alone, the verbs appear near-synonymous in the meaning ‘shake out’, but, as we will see, the meaning ‘shake off’ is possible for both verbs as well, although it is marginal. The semantic difference between the two meanings is subtle, but judging from the illustrations in MAS, the former is relevant when the subject shakes the contents out of a container (e.g. *vytrjasti pesok iz obuvi* ‘shake out sand from shoes’), while the latter occurs when the shaking is performed to clean a surface (e.g. *vytrjasti kovër* ‘shake out a carpet’). The prefix *vy-* shows that the goal of the subject is to EMPTY A CONTAINER (‘shake out’) or EXHAUST A SURFACE (‘shake off’).

Although this is not stated directly in MAS, the dictionary seems to suggest that *vytrjaxnut'* describes one shake, since it is defined by means of the semelfactive gerund *trjaxnuv* ‘having shook once’. The two meanings of *vytrjasti* are, on the contrary, defined by means of the imperfective gerund *trjasja* ‘while shaking’, an action that implies multiple shakes. The definitions in MAS, then, are arguably in line with the predictions of the Pref-dyad Hypothesis, but whether the dictionary and hypothesis are correct is not straightforward to test on corpus data, since a context rarely mentions how many times the subject shook something. In the following, I will focus on the distribution of lexical meanings in the examples of the verbs and how the verbs are used in the various contexts.

As Table 24 shows, both *vytrjaxnut'* and *vytrjasti* predominantly express ‘shake out’ while the meaning ‘shake off’ is very marginal. A third scenario, whereby the subject shakes a container in order to empty it, is not included in MAS but occurs in the database (e.g. *Ivan vytrjas vedro* ‘Ivan poured out the bucket’). In Table 24, this lexical meaning is referred to as ‘empty’. This meaning falls between the other two, insofar as it presumes a container (like ‘shake out’), but the direct object is the

thing being shaken rather than what comes out or off (like ‘shake off’). In addition, both verbs can appear in fixed expressions involving the direct objects *dušu (iz kogo)* (‘torment someone’) and *karman (komu)* (‘(make someone) spend all one’s money’), but here *vytrjasti* is the most common verb. The higher frequency of *vytrjaxnut’* in the meanings ‘shake off’ and ‘empty’ is not statistically significant (p-value: 0.13), but, even if it was, the corpus data at hand would arguably be too small to draw strong conclusions.<sup>88</sup>

Lexical meaning	<i>Vytrjaxnut’</i>	<i>Vytrjasti</i>
Shake out	84 (84%)	80 (80%)
Shake off	3 (3%)	1 (1%)
Empty	7 (7%)	2 (2%)
Fixed expressions	2 (2%)	17 (17%)
Unclear	4 (4%)	0 (0%)
Total	100 (100%)	100 (100%)

**Table 24** Distribution of lexical meanings for *vytrjaxnut’* and *vytrjasti*.

A closer look at the examples shows that the meaning ‘shake out’ is used in literal ways, such as in (100) and in metaphorical ones, like in (101):

(100) *Po narodnoj primete segodnja položeno vytrjaxnut’ iz matrasov staruju solomu i nabit’ ix novoj.* [Stolica. 1997]

‘According to modern folklore, one should shake old straw out of the mattresses and fill them with new [straw].’

(101) *Iz košel’kov žitelej respubliki vytrjasli 70 milliardov rublej.* [Obščaja gazeta. 1997]

‘They shook 70 billion rubles out of the wallets of the republic’s citizens.’

As shown in Table 25, in the corpus data, *vytrjaxnut’* is used primarily in the literal meaning ‘shake out’, while *vytrjasti* most often is used metaphorically. This finding does not relate to the predictions of the Pref-dyad Hypothesis, but shows that the verbs are preferred in different contexts in the modern language.

<sup>88</sup> This p-value is calculated by means of Pearson’s chi-squared test of the verbs’ token frequencies in the meaning ‘shake out’ (84, 80) and their token frequencies in the meanings ‘shake off’ and ‘empty’ combined (10, 3). Notice that a statistically significant relationship has been discovered for near-synonymous perfectives derived from the same base imperfective by means of prefixation (Sokolova 2012). By way of example, the Natural Perfectives of *gruzit’* ‘load’ interact with different load-constructions: *pogruzit’* ‘load’ is largely restricted to the Theme-Object construction (where the theme is the direct object of the verb, e.g. *kamen’* ‘stone’ in *pogruzit’ kamen’ na gruzovik* ‘load the stone onto the truck’), *nagruzit’* ‘load’ prefers the Goal-Object construction (where the goal is the direct object of the verb, e.g. *sebja* ‘oneself’ in *nagruzit’ sebja rabotoj* ‘load oneself with work’), while *zagrunit’* ‘load’ has a nearly even distribution between the two constructions. Possibly, such relationships are relevant in synonymous Pref-dyads as well, but in order to establish this more data and more verbs would be needed.

'Shake out'	<i>Vytrjaxnut'</i>	<i>Vytrjasti</i>
Literal use	64 (76%)	30 (37%)
Metaphorical use	20 (24%)	50 (63%)
Total	84 (100%)	80 (100%)

**Table 25** Literal vs. metaphorical uses of *vytrjaxnut'* and *vytrjasti* in the meaning 'shake out'.

In the literal meaning 'shake out', the verbs appear to be used very similarly. Thus, the difference between the verbs is not *how* they are used in this meaning, but that this meaning is more common for *vytrjaxnut'* than for *vytrjasti*. In these contexts, the direct object is often a mass noun, such as *solomu* 'straw' in (100) above (*vytrjaxnut'* – 24 ex./37%, *vytrjasti* – 12 ex./43%), but count nouns in the singular or plural are also possible for both. In Section 1.3, it was mentioned that the semelfactive suffix *-nu-* can add an additional nuance of instantaneousness, abruptness and force, but there are no indications that *vytrjaxnut'* stresses any of these properties in the corpus data. On the contrary, the only attested adverb related to these notions, *bystro* 'quickly', occurs in combination with *vytrjasti*:

(102) *Iz nagrudnogo karmana Ignat nezametno dostal malen'kij cellofanovij paketik s kokainom i bystro vytrjas ženščine na ladon' gorku belogo poroška.* [V. Gromov. 2000]

'While no one noticed, Ignat took out a little cellophane bag with kokain from his breast pocket and quickly shook out a heap of white powder onto the woman's palm.'

However, in the metaphorical uses of 'shake out', the verbs do appear to be used in different ways. *Vytrjasti*, which is most common in metaphorical contexts, tends to describe situations where someone tries to get money (18 ex.) or information (17 ex.) from someone, as illustrated in (103) and (104):

(103) *Kak èto ni smešno, u Kudinkina pojavilsja dopolnitel'nyj stimul vytrjasti dolžok iz Brexunca.* [O. Nekrasova. 2000]

'Funny as it may sound, Kudinkin received an extra impetus to shake the debt out of Brexunec.'

(104) – *Ja vytrjasu iz tebjà ètu tajnu, starik.* [V. Gubarev. 1998]

"I'll shake this secret out of you, old man."

In the 20 metaphorical uses of *vytrjaxnut'*, it is harder to find a pattern. The only recurring metaphor is 'shake people out of somewhere', in other words, make them leave a place (6 ex.). The fact that this use of *vytrjaxnut'* is metaphorical is emphasized by the fact that the verb often is given in quotation marks. Consider, for instance, the following example:

(105) *Davno perestali byt' dikovinoj obraščenija graždan v sud na zastrojščikov, sami sud'i teper' značitel'no lučše orientirujutsja v žiliščnyx voprosax. Odnim slovom, prosto tak vzjat' i «vytrjaxnut'» žitelja iz ego kvartiry ne tak legko – i uže ogromnoe količestvo investorov oblomalo zuby, pytajas' realizovat' proekty rekonstrukcii.* [Mir & Dom. City. 2004]

'Judicial appeals from citizens against builders are long since rare, and the judges themselves are now much more familiar with housing problems. In short, to simply go and "shake" residents out of their apartment is not that easy, and a huge number of investors have already failed when trying to realize their construction projects.'

The examples below illustrate the use of *vytrjaxnut'* in the meanings 'shake off' (106) and 'empty' (107). The number of examples involving these uses is too low to make an insightful comparison of the two verbs.

(106) *Potom ona vytrjaxnula **matras** na balkone.* [Oktjabr'. 1996]

'Afterwards she shook out the mattress over the balcony.'

(107) *Potom **vytrjaxnula korobku s lekarstvami** na stol i stala glodat' vse podrjad: prosročennye serdečnye i ot izžogi, ot astmy i ot pečeni.* [Znamja. 2010]

'Afterwards she shook the box with medicine out on the table and started to swallow everything: expired heart medication and drugs for heartburn, asthma and the liver.'

To recapitulate, the present case study shows that both *vytrjaxnut'* and *vytrjasti* mostly express the meaning 'shake out'. Based on corpus data alone, the main difference between the verbs seems to be that *vytrjaxnut'* most often is used in a literal meaning, while *vytrjasti* most often is used metaphorically. This distinction is not captured in MAS. No difference is found between the verbs in the literal uses of 'shake out', but they appear connected with different metaphors. It is not clear from the contexts whether the verbs express one or several shakes, and the corpus data can therefore neither confirm, nor disconfirm, the predictions of the Pref-dyad Hypothesis.

#### 4.5.4 *Sliznut'* 'lick off' – *slizat'* 'lick off'

Let us now turn to a Pref-dyad belonging to the cluster of *liznut'* 'lick once'. In MAS, the two verbs in question are described as semantically very similar:

- Base imperfective: *lizat'* 'lick'
- Meaning of *s-*: AWAY (DOWN)
- Definitions in MAS:
  - > *Sliznut'*: 1) Semelfactive of *slizyvat'* (*odnokr. k slizyvat'*), 2) Same as *slizat'* in its second meaning (*to že, čto slizat' vo 2 znač.*)
    - o *Slizyvat'*: Imperfective partner of *slizat'* (*nesov. k slizat'*);
  - > *Slizat'*: 1) Lick off (*sčistit', snjat', provodja jazykom*), 2) Make disappear, devour (about fire, water)' (*uničtožit', poglotit' (ob ogne, vode)*).

*Sliznut'* and *slizat'* are connected with the same semantics in MAS. It is pointed out that *sliznut'* is semelfactive (*odnokr.*) in its first lexical meaning, otherwise they are presented as similar. The prefix *s-* contributes the idea that something is moved off or away, which in Janda et al. is subsumed under the meaning DOWN (“movement off or away from in a downward direction”, Janda et al. 2013: 97). To make the semantic contribution of *s-* in these verbs clearer, I call this prefix meaning AWAY with the meaning DOWN included in brackets.

Table 26 shows the distribution of lexical meanings in my database. I do not differentiate between semelfactive and non-semelfactive ‘lick off’, since the contexts themselves rarely are specific with regard to whether they refer to a single lick or more. Notice that a third meaning was discovered for *slizat'* – ‘copy’. A few sentences involve other very marginal meanings or were unclear (“other”).

Lexical meaning	<i>Sliznut'</i>	<i>Slizat'</i>
Lick off	60 (60%)	35 (44%)
Make disappear (metaphorical)	33 (33%)	23 (29%)
Copy	0 (0%)	18 (22%)
Other	7 (7%)	3 (4%)
Total	100 (100%)	79 (79%)

Table 26 Distribution of lexical meanings in the data samples of *sliznut'* and *slizat'*.

The table shows that the verbs differ with regard to how often they express the various lexical meanings. However, both meanings listed in MAS are very relevant for both, and in order to find out how *sliznut'* and *slizat'* differ semantically, we must take a closer look at the actual contexts.

In the literal meaning ‘lick off’, a subject removes something with a lick of their tongue. Keeping in mind the Pref-dyad Hypothesis, one could expect that *sliznut'* is selected if the subject uses one lick, and that *slizat'* is used in other cases, but, as just mentioned, the number of licks is rarely stated explicitly in the text. One way to test the hypothesis indirectly is to consider the grammatical number and type of direct objects of the verbs. A countable item in the singular, such as a tiny crumb of opium in (108), is hard to imagine as being removed by several licks, and this is a context that matches the expected meaning of *sliznut'*. If there are several crumbs, as in (109), more licks are more likely, possibly motivating the use of *slizat'*. For masses, such as *sous* ‘sauce’ in (110), one could imagine both one and several licks, and thus both verbs, depending on the amount of the mass and how it is distributed over the relevant area (here, a finger).

- (108) *Pilija otščipnul ot opiuma kroxotnuju krošku i kinul na stol. Kukusik prjamo so stola s xripom sliznul ee.* [M. Gigolašvili. 2007]  
 ‘Pilija nipped off a tiny crumb of opium and threw it on the table. Kukusik licked it right off the table with a wheeze.’

(109) *Glebov tščatel'no sgrëb so stola xlebnye kroški v levuju ladon' i, podnesja eë ko rtu, berežno **slizal kroški** s ladoni.* [V. Šalamov. 1954-1961]  
 'Glebov meticulously shoveled the bread crumbs off the table into his left palm, lifted it towards his mouth and licked the crumbs carefully off his palm.'

(110) *Mao **sliznul** s pal'ca **orexovyj sous** i vernulsja ko mne.* [N. Džin. 1980-1998]  
 'Mao licked the nut sauce off his hands and came back to me.'

Table 27 gives some support to these expectations insofar as countable items are usually in the singular in the contexts of *sliznut'*, but more often in the plural in the contexts of *slizat'*. Masses are widespread in the examples of both.

Direct object	<i>Sliznut'</i>	<i>Slizat'</i>
Count noun singular	25 (42%)	5 (14%)
Count noun plural	12 (20%)	14 (40%)
Mass noun	23 (38%)	13 (37%)
Direct object not mentioned	0 (0%)	3 (9%)
Total	60 (100%)	35 (100%)

Table 27 Type and grammatical number of the direct objects in the examples of *sliznut'* and *slizat'*.

The strongest restriction seems to be on *slizat'* in combination with countable items in the singular, and a closer look at the five relevant examples show that they, in fact, refer to situations that by necessity require more than one lick, as illustrated in (111). The contexts of *sliznut'* involving countable items in the plural, e.g. (112), are possible to interpret as involving more than one lick, indicating a freer use of this verb than what is predicted by the Pref-dyad Hypothesis:

(111) *A ja tebja ždal, i palec makal v solonku, i slizyval – tak men'she est' xotelos'. **Vsju solonku i slizal.*** [A. Bitov. 1991]  
 'And I was waiting for you and dipped my finger in the salt-cellar and licked [from it]; in that way I got less hungry. I licked up the whole salt-cellar.'

(112) – *Mama, ty ljubiš' dožd'?* – *Da, ljublju.* – *Ja tože. Davaj lizat'?* *I jazykom pytaetsja **sliznut'** so ščeki i s verxnej guby **doždevye kapli.*** [A. Panteleev. 1966]  
 "‘Mom, do you like rain?’ ‘Yes, I do’ ‘So do I. Shall we lick it? She tried to lick the rain drops from her cheek and upper lip.’

Both *sliznut'* and *slizat'* are sometimes used in contexts where there is a large amount of the object and the goal of the subject specifically is to eat (12 and 3 ex.). Here, *sliznut'* seems specifically to refer to instantaneous events and may be accompanied by such adverbials as *migom* 'in a moment' in (113). *Slizat'*, on the other hand, apparently emphasizes that the eating was repeated, cf. (114).

(113) *Medved' položil mordu na stol i migom sliznul polkilo vetčiny.* [Ju. Mamleev. 1975-1999]

'The bear placed his snout on the table and devoured half a kilo of ham in an instant.'

(114) *Za den' murav'ed možet slizat' do tridcati tysjač murav'ev i termitov!* [Tramvaj. 1991]

'In one day, an ant eater can lick up as many as 30.000 ants and termites!'

Native speakers suggest that *sliznut'* has an extra nuance of instantaneousness. Unfortunately, this is difficult to test, since only four examples in the database include an adverbial emphasizing such meaning (*bystro* 'quickly', *odnim vzmaxom jazyka* 'with one movement of the tongue', 2 x *migom* 'in an instant'). What we can say, however, is that all four occur in contexts of *sliznut'*, yielding some support to the native speakers' intuition. At the same time, *sliznut'* is found with two adverbs that give the opposite meaning – *akkuratno* 'carefully' and *protjažno* 'slowly', illustrated in (115). This shows that, although *sliznut'* in many contexts may refer to one instantaneous lick, other contexts are possible too. The use of *slizat'* seems more restricted: there are no indications in my database that it can refer to a single lick and it is furthermore not connected with instantaneousness.

(115) *Ona protjažno sliznula krov'.* [A. Garros, A. Evdokimov. 2001]

'She slowly licked away the blood.'

As for the two other meanings in Table 26 there is less to say. In the metaphorical meaning 'make disappear', 25 of the 33 examples involving *sliznut'* and 21 of the 23 examples involving *slizat'*, contain variations of the fixed expression *kak korova jazykom sliznula/slizala* 'as if swallowed up by the ground (lit. as if a cow had licked [something] away with its tongue)'. The expression seems to be used identically regardless of which verb it contains, and native speakers agree that it is hard to pinpoint a difference. At the same time, some consultants feel that *sliznut'*, in this expression as in other contexts, might point to a more sudden event than *slizat'*.

The remaining examples of the verbs in the meaning 'make disappear' confirm that *sliznut'* has an additional nuance of unexpectedness, intensity and force: most of them describe disasters involving fire and water, e.g. (116). The two examples of *slizat'* are, on the other hand, both concerned with snow that disappears after the winter, e.g. (117). This situation is less dramatic and furthermore implies time and repetition, something that is also signaled by the fact that the subject, *vetry* 'winds' is in the plural (*veter* 'wind').

(116) «*Bol'saja čast' Evropy uže pod vodami, a my, ucelevšie, na krajnem Zapade, smotrim na volnujuščuju sja bezdnu, podstupajuščuju k nam, gotovuju **sliznut' ostatki materika***». [Oktjabr'. 2001]

“‘The greater part of Europe is already under water, and we, survivors in the far West, look at this disturbing abyss that is coming towards us ready to devour the last pieces of dry land.’

(117) *Tam, gde vetry **slizali sneg**, zemlja po nočam gulko lopaetsja*. [F. Raskol'nikov. 1986-2000]

‘In places where the winds have blown away (lit. licked away) the snow, the ground bursts open during the nights with a hollow sound.’

The last lexical meaning in Table 26, ‘copy’, is only attested in the examples of *slizat'*. In this context, then, the verbs cannot be compared. The following example illustrates this metaphorical use of *slizat'*:

(118) *Poxože, **termin** prosto **slizali** iz zapadnogo zakonodatel'stva, no sodržaniem ne napolnili*. [Gazeta. 2003]

‘It seems that they have simply copied the term from Western legislation, but not filled it with content.’

The present case study confirms that *sliznut'* and *slizat'* are very close in lexical meaning, but at the same time have individual semantic nuances. It is suggested that *sliznut'* is preferred in contexts that imply one lick and/or instantaneousness, suddenness and force. In my data, *slizat'* is not attested with these meanings. The boundary between *sliznut'* and *slizat'* is not absolute, and it is possible that some contexts are equally natural for both. The case study therefore yields partial, but not full support to the Pref-dyad Hypothesis.

#### 4.5.5 *Struxnut'* ‘become fainthearted’ – *strusit'* ‘act like a coward’

In MAS, the semantic difference between *struxnut'* and *strusit'* appears quite subtle:

- Base imperfective: *trusit'* ‘act cowardly’
- Meaning of *s-*: ONCE (SEMELFACTIVE)
- Definitions in MAS:
  - > *Struxnut'*: 1) Same as *strusit'*, become afraid, coll. (*razg. strusit', ispugat'sja*);
  - > *Strusit'*: 1) Give in to fear, display cowardice (*Poddat'sja čuvstvu straxa, projavit' trusost', robst' pered kem-, čem-l.*).

*Struxnut'* and *strusit'* stand out from most of the other synonymous Pref-dyads considered in this chapter insofar as both are associated with Aktionsart. Janda and Dickey (2009) analyze them as semelfactives: in their study, *struxnut'* receives the English gloss ‘act like a coward’ and is described as “synonymous with *strusit'*” (ibid: 239). In *strusit'*, semelfactivity is expressed with the semelfactive meaning of

*s-*, while in *struxnut'* semelfactivity is expressed with both the prefix and *-nu-*.<sup>89</sup> Švedova et al. (1980: 597, §1422) and Zaliznjak and Šmelëv (2000: 120), on the other hand, mention *struxnut'* as an example of diminutive Aktionsart with the meaning 'slightly act like a coward (*slegka strusit'*)'. On their analysis, the two verbs are not complete synonyms insofar as *struxnut'* expresses a less serious action than *strusit'*.

Neither of these analyses are in line with the Pref-dyad Hypothesis: on the former, the verbs are fully synonymous, and on the latter, they differ in terms of intensity, rather than one "quantum" vs. multiple "quanta". The goal of the present section is to explore whether corpus data can shed light on their semantic difference.

One way to do this is to consider accompanying adverbials. If *struxnut'* has a diminutive meaning, the "slightness" of the action could be emphasized by other words in the contexts. Table 28 shows that *struxnut'* combines with adverbials more often than *strusit'*. Only a few of these adverbials, however, emphasize a slight action (in boldface). Most, on the contrary, express that the action was performed to a strong degree. The four adverbials of *strusit'* are also varied in meaning. The main observation we can make from Table 28 is that adverbials are more common for *struxnut'*. This alone indicates that *struxnut'* does not necessarily express a slighter action than *strusit'*.

Verb	Adverbials (#)
<i>Struxnut'</i>	<i>izrjadno</i> 'fairly' (2), <i>javno</i> 'clearly' (2), <b><i>malost'</i></b> 'a little bit' (2), <b><i>na mgnovenie</i></b> 'for a moment' (1), <b><i>nemnogo</i></b> 'a little' (5), <i>ne na šutku</i> 'seriously' (4), <i>porjadkom</i> 'seriously' (1), <i>po vsem pravilam</i> 'in all respects' (1), <b><i>slegka</i></b> 'slightly' (3), <i>s očevidnost'ju</i> 'with obviousness' (1), <i>tak... što</i> 'so much so that' (1), <i>užasno</i> 'terribly' (2), <i>zdorovo</i> 'really' (2)
<i>Strusit'</i>	<i>nastol'ko što</i> 'so much so that' (1), <b><i>nemnogo</i></b> 'a little' (1), <i>ne na šutku</i> 'seriously' (2)

Table 28 Adverbials of *struxnut'* and *strusit'* in the data. The numbers in brackets indicate the number of corpus examples involving the given adverbials.

However, if we take a closer look at individual examples, there are, in fact, indications that *struxnut'* describes a slighter action than *strusit'*. In the examples with *strusit'*, the subject refrains from doing something specific out of cowardice, i.e. they chicken out. This "something" can be expressed by an infinitive clause following the verb, as in (119), or be understood from the context. In (120), the subject was, for instance, expected to flee captivity, but didn't:

<sup>89</sup> As mentioned in Section 1.3, although *-nu-* is the primary marker of semelfactivity in Russian, the prefix *s-* is also relevant, along with the suffix *-anu-* and the prefix *u-* (Zaliznjak and Šmelëv 2000: 119-120).

(119) *Nedarom Ben kak-to (posle očerednoj korrespondencii) sravnil tebja s ženoi Garibal'di, kotoraja s pistolom v rukax zaskočila v trjum, čtoby vygnat' na palubu matrosov, **strusivšix drat'sja!*** [Ju. Danièl'. 1966-1970]

'Not without reason Ben (after yet another correspondence) compared you at some point with Garibal'di's wife who, with a gun in her hands, swung by the belowdecks to chase the sailors who were afraid of fighting out onto the deck.'

(120) *Sergej Timofeevič imel vse osnovanija bojat'sja! Vo-pervyx, on dezertir! Votoryx, on **strusil** i dobrovol'no sdalsja v plen.* [F. Šaxmagonov. 1977]

'Sergej Timofeevič had every reason to be afraid! First, he is a deserter! Second, he gave in to cowardice and voluntarily surrendered to captivity.'

The examples with *struxnut'* also express that the subject loses courage, but they are concerned with the feeling of fear, as in (121) and (122), rather than acting upon it. In the first of these examples, the subject in fact does what he is afraid of:

(121) – *S jaxtoj sovladaeš'? Antip **na mgnovenie struxnul**, podumal i otvetil, čto, nado byt', sovladaet.* [Ju. German. 1952]

'"Will you manage the yacht?" For a moment, Antip lost courage, thought a little and answered that, probably, he would.'

(122) *Na vstupitel'nyx èkzamenax po matematike i fizike ja nadelal kuču ošibok i **porjadkom struxnul**, no menja vytjanuli na četverki.* [M. Elizarov. 2007]

'On the entrance exams in mathematics and physics I made a bunch of mistakes and seriously lost courage, but they pulled me up to a grade of four.'

The observation that *strusit'* expresses actions made out of fear and *struxnut'* tends to express the feeling of fear itself arguably confirms that *struxnut'* is "weaker", i.e. diminutive, in meaning in the sense that the subject does not actually commit a cowardly act. Most native speakers that were asked agree with this proposition. One consultant furthermore suggests that *struxnut'* communicates sympathy towards the person who lost courage, while *strusit'* does not and therefore involves a stronger level of criticism. The fact that *struxnut'* has more adverbials than *strusit'* in the dataset (Table 28) can be taken to show that native speakers more often use adverbials to describe the latter situation (a feeling) than the former (acting upon a feeling).

Since both verbs refer to one instance, i.e. one repetition of the activity, the present case study does not yield support to the Pref-dyad Hypothesis. Arguably, one could say that acting like a coward (*strusit'*) is an action that involves "stages" and therefore a more complex event structure than the emergence of a feeling (*struxnut'*), but this is clearly an interpretation of the matter.

#### 4.5.6 *Utknut'* 'stick towards/into' – *utýkat'* 'stick all over'

To explore this Pref-dyad, let us begin by considering the following information:

- Base imperfective: *týkat'* 'poke'
- Meaning of *u-*: PLACE/FIT
- Definitions in MAS:
  - > *Utknut'*: 1) Place against something (*ustanovit'*, *uperet' vo čto-l.*), 2) Push into/hide in (*pogruzit'*, *sprjatat' vo čto-l.*), 3) Same as *votknut'*: Stick into something (*to že, čto votknut': zastavit' vojti, proniknut' vnutr', vglub' čto-l. ostroe, tonkoe*));
  - > *Utýkat'*: 1) Stick a big amount of something into a certain area (*votknut' v bol'som količestve čto-l. na kakom-l. prostranstve, gde-l.*), 2) Fill whole by stuffing into (*plotno vpixivaja čto-l., zapolnit' ščel', otverstie i t. p. na čem-l., gde-l.*).

*Utknut'* – *utýkat'* stands out from the other synonymous Pref-dyads insofar as the two verbs are used in clearly different contexts. They are included among the synonymous Pref-dyads because the prefix *u-* yields the same meaning in both – PLACE/FIT, defined by Janda et al. (2013) as “putting something or someone away, in a container or in a more settled state, where the object is under better control and may also be less accessible” (ibid: 35). As a result, both verbs have to do with sticking something towards or into something. *Utýkat'*, however, is used specifically about sticking things all over something, a situation that requires more than one “quantum” of the action. The three lexical meanings of *utknut'*, on the other hand, imply one single movement. This distribution of meanings perfectly matches the predictions of the Pref-dyad Hypothesis. From a practical perspective, a second difference between the verbs is also important: the verb *utknut'* is primarily used in indicative verb forms, while *utýkat'* primarily is used as a past passive participle, i.e. *utýkan(nyj)* 'stuck all over'.

In the database, most of the examples of *utknut'* involve the second lexical meaning attributed this verb in MAS, namely to stick something, usually a body part, somewhere in order to hide it (69 ex.). An example of this verb use is given in (123). The other two meanings are distributed among the remaining 31 examples. The meaning 'place against something' is illustrated in (124) where someone pushes a weapon against a person. We also find the metaphorical expressions *utknut' glaza kuda* 'fix eyes somewhere' and *utknut' nos vo čto* 'read obsessively (lit. stick nose into something)'. The meaning 'stick into' is illustrated in (125).

(123) *Ona utknula svoe lico v pidžak Potapova i tjaželo vzdohnula.* [G. Gorin. 1960-1985]  
'She buried her face in Potapov's jacket and made a heavy sigh.'

(124) *Utknuv v spinu Kalpaka kop'ja, dvinulis' vperéd.* [A. Ivanov. 2000]  
'They stuck a lance in Kalpak's back and moved forward.'

(125) – *Vyvodi i kladi, – skomandoval on Valjušku, utknuvšemu igol'nik šoferu v uxo.* [O. Divov. 1999]  
 “Lead [him] out and put [him] down”, he commanded Valjušok who had stuck the needle gun into the driver’s ear.’

The 100 examples of *utýkat’* in the database all describe the first meaning in MAS where something is scattered all over some area, such as stars on the night sky:

(126) *Nebo bukval'no utykano jarkimi zvezdami, četko vidiš' Mlečnyj Put', pytaeš'sja vspomnit' nazvanija sozvezdij i... zasypaeš'.* [Sportsmen-podvodnik. 1965]  
 ‘The sky is literally studded with bright stars, you clearly see the Milky Way and try to remember the names of the constellations and... fall asleep.’

#### 4.5.7 *Vskriknut’ ‘give a sudden shout’ – vskričat’ ‘exclaim’*

The Pref-dyad *vskriknut’ - vskričat’* resembles the case of *struxnut’* ‘become fainthearted’ – *strusit’* ‘act like a coward’ in the sense that both verbs are connected with Aktionsart and that the prefix involves a semelfactive meaning.<sup>90</sup> Unlike *struxnut’* and *strusit’*, however, *vskriknut’* and *vskričat’* are ascribed different lexical meanings in MAS:

- Base imperfective: *kričat’* ‘scream’
- Meaning of vz-: SEMELFACTIVE (Endresen 2014: 232-234)
- Definitions in MAS:
  - > *Vskriknut’*: 1) Shout suddenly, abruptly (*vnezapno, otryvisto kriknut’*);
  - > *Vskričat’*: 1) Say something loudly, excitedly (*gromko, vozbuždenno skazat’ čto-l.*), 2) Call on someone, obsolete and colloquial (*ustar. i prost. Pozvat’, kriknut’ kogo-l.*).

Before we look at the corpus data themselves, it is worth mentioning that *vskričat’* traditionally is analyzed as an example of *v(o)z*-ingressive Aktionsart along with such verbs as *vozljubit’* ‘begin to love’ (from *ljubit’* ‘love’) and *vožželat’* ‘start wanting’ (from *želat’* ‘wish’) (Endresen 2014: 231). Since *v(o)z*-ingressives describe a “gradual entry into a new state of affairs” (ibid: 2014: 231) and *vskričat’* expresses a single “quantum” of an action rather than ‘start shouting’ (ibid: 233), I will follow Endresen and treat both verbs in the Pref-dyad *vskriknut’* and *vskričat’* as *v(o)z*-semelfactives.

As discussed in Section 1.3, unprefixated *-nu*-semelfactives describe instantaneous “quanta” of activities that do not culminate in a change of state. The prefix *vz-* adds to this a sense of abruptness, unexpectedness and unpredictability (Zaliznjak and Šmelëv 2000: 110), but the verb meaning remains unconcerned with a result. In the case of *vskriknut’ - vskričat’*, the verbs express a sudden scream that, in many cases, involves speech, as illustrated below:

<sup>90</sup> Here, I rely on the prefix label and discussion of *vz-* in Endresen (2014: 232-234), since Janda et al. (2013), whom I usually follow for prefix meanings, do not use a separate label for this use of *vz-*.

(127) – *Vy s uma sošli!* – *vskričal* Aleksandr Antonovič serdito. [A. Žitkov. 2000]  
 “‘You have lost your mind!’ – Aleksandr Antonovič shouted angrily.”

With regard to the semantic difference between *vskriknut'* and *vskričat'*, Avilova (1976: 275) suggests that the suffix *-nu-* makes the verb meaning even more intense (“*polučaetsja osobaja intensivnost' v značenii načinatel'nogo i odnokratnogo glagola*”). However, *vskričat'* too is connected with intensity (ibid).<sup>91</sup> According to MAS, however, the difference between the verbs is lexical: *vskriknut'* expresses a sudden shout and *vskričat'* is used to communicate speech.<sup>92</sup>

To investigate the use and semantic difference between *vskriknut'* and *vskričat'* on corpus data, two factors were considered. First, if the verbs differ in terms of whether or not they occur with speech, as suggested in MAS, we would expect to find speech clauses in the contexts of *vskričat'*, but not in the contexts of *vskriknut'*. To check this, a distinction was made in the database between sentences involving (direct or indirect) speech and sentences without a speech clause (cf. study of the Nu-dyads involving *kriknut'* ‘shout once’ in Section 3.6). Second, if *vskriknut'* invokes a stronger sense of suddenness than *vskričat'*, as argued by Avilova, this could possibly be reflected in their adverbials. All adverbials in the contexts were therefore recorded in the database.

With regard to the first factor, the corpus data confirm MAS’s definition of *vskričat'* insofar as this verb almost always is accompanied by speech. The two examples that do not contain speech are from a religious text and poetry where non-standard language use may be more expected. At the same time, the results in Table 29 show that *vskriknut'* is relatively frequent with speech too. In other words, we see that speech contexts are open for both verbs, while contexts without speech largely are reserved for *vskriknut'*.

Speech	<i>Vskriknut'</i>	<i>Vskričat'</i>
Includes speech	39 (39%)	98 (98%)
Does not include speech	61 (61%)	2 (2%)
Total	100 (100,0%)	100 (100,0%)

Table 29 Distribution of speech clauses in sentences with *vskriknut'* and *vskričat'*.

With regard to the second factor, the corpus data show that adverbials are more frequent in the examples of *vskriknut'* than in the examples of *vskričat'* (Table 30). This in itself does not yield support to the hypothesis that the shouts described by

<sup>91</sup> “*Vse glagoly v sočetaanii s pristavkoi vz- v ingressivnom značenii imejut dopolnitel'nyj ottenok intensivnosti, èkspressivnosti v značeni dejstvija*” ‘In combination with the prefix *vz-* in ingressive meaning all verbs have an additional nuance of intensity and expressivity in the action meaning’ – Translation to English by MN.

<sup>92</sup> Several native speakers I have talked with furthermore suggest that *vskričat'* sounds more bookish than *vskriknut'*, but this is difficult to conclude based on corpus data. What we do see in the RNC is that *vskričat'* has a particularly high token frequency in texts created between 1820 and 1840 and gets increasingly lower over time, and that *vskriknut'* over the last decades has the highest token frequency of the two.

*vskriknut'* are more sudden, but the type of adverbials they involve do. The sample of *vskriknut'* are dominated by the prepositional phrase *ot čego* 'from something' (9 ex.) which expresses that the shout was produced in response to some emotion (e.g. *ot straxa* 'from fear'), *vdrug* 'suddenly' (8 ex.) and other adverbials that clearly speak of a sudden, uncontrolled action: *diko* 'wildly', *neožidanno* 'unexpectedly', *nevol'no* 'unintentionally', *rezko* 'abruptly', etc. In the contexts of *vskričat'*, most of the adverbials are concerned with other properties of the action, such as the tone of the subject's voice (*serdito* 'angrily', *toržestvujuščje* 'triumphantly', *trebovatel'no* 'demandingly', etc.).

Adverbial	<i>Vskriknut'</i>	<i>Vskričat'</i>
Contains adverbial	36 (36%)	21 (21%)
Does not contain adverbial	64 (64%)	80 (79%)
Total	100 (100%)	100 (100%)

Table 30 Distribution of adverbials in the examples of *vskriknut'* and *vskričat'*.

A closer look at the contexts of *vskriknut'* shows that they often describe situations where the scream indeed is natural to imagine as sudden, unexpected and not controlled by the subject. By way of illustration, consider the example in (128). The contexts of *vskričat'* are generally shorter and focused on the speech utterance, cf (127). Together with the findings for adverbials, this suggests that Avilova is correct: both verbs imply intensity, but *vskriknut'* brings more focus to this nuance.

(128) *On popytalsja uspokoit' ee, priznavalsja ej v ljubvi, no kak tol'ko u nego vyrvalis' slova «tvoj staryj muž», ona vskriknula i s rydanijami brosilas' k dveri.* [Znanie-sila. 2012]

'He tried to calm her down, spoke of his love for her, but as soon as the words "your old husband" came out, she screamed and threw herself towards the door sobbing.'

To summarize, the present case study confirms that *vskriknut'* and *vskričat'* have slightly different meanings, but also shows that they are possible in similar contexts. Because of the semelfactive abruptness meaning of *vz-*, both describe a sudden shout, but *vskričat'* always goes with speech, while *vskriknut'* is concerned with the shout itself, although a speech clause is possible. Since both verbs refer to one particular shout, this Pref-dyad does not yield support to the Pref-dyad Hypothesis.

#### 4.5.8 *Zapixnut'* – *zapixat'* 'cram into'

The last two synonymous Pref-dyads both involve the prefix *za-*. The first of these Pref-dyads come from the cluster of *pixnut'* 'shove once':

- Base imperfective: *pixat'* 'push, shove, elbow'
- Meaning of *za-*: UNIVERSIAL SPATIAL MEANING (Valeeva 2001)

- Definitions in MAS:
  - > *Zapixnut'*: 1) Cram into (*pixnuv*, *vtisnut' kuda-l.*; *zasunut'*, *zatołknut'*);
  - > *Zapixat'*: 1) Cram into (*pixaja*, *tolkaja*, *vtisnut'*, *zasunut' kuda-l.*).

For *zapixnut'* and *zapixat'*, MAS suggests a similar distinction as it does for *vytrjaxnut'* – *vytrjasti* ‘shake out’. Both are ascribed the meaning ‘cram into’, but *zapixnut'* is defined by means of the semelfactive gerund ‘*pixnuv*’ ‘having shoved once’, while the definition of *zapixat'* involves the imperfective gerunds *pixaja* ‘while shoving’ and *tolkaja* ‘while pushing’. The prefix *za-* in these verbs appears to function in much the same way as in *zaprygnut'* ‘jump somewhere’ insofar as it simply focuses on the fact that the movement is directed somewhere (Section 3.4, see also Valeeva 2001).

As in the case of many other Pref-dyads, we can only guess whether a given context involves one or several “quanta” of the relevant action. In (129), the situation likely involves more than a single push, since the direct object, Nikolaj Averkievič, tries to resist the pushes, and there is furthermore more than one subject involved, each one contributing its own push. However, although this is the most likely scenario, the number of pushes involves remains an interpretation. In another example, shown in (130), the subject stuffs cotton into his nostrils. Since a person has two nostrils, this situation almost definitely implies at least two small pushes, but, again, this is not explicit in the text. To reduce subjectivity in my study, I will therefore consider other factors that might shed light on the semantic difference between the verbs.

(129) *Nikolaja Averkieviča udalos' usadit' v mašinu cenoj nemalyx usilij, vernee, zapixnut', potomu čto on uporno soprotivljalsja, siljas' vernut'sja nazad.* [E. Parnov. 1990]

‘Only with much effort did they manage to get Nikolaj Averkievič into the car, or rather cram him in, as he was resisting, trying to get back.’

(130) *Dalee ja pomčalsja k našej aptečke i, sxvativ dva kusočka vaty, zapixal ix sebe v nozdri, otčego oni nekrasivo ottopyrilis'.* [S. Alešin. 2001]

‘I then dashed off to our pharmacy, grabbed two pieces of cotton and stuffed them into my nostrils; they bulged out in an ugly way.’

On the face of it, the examples of *zapixnut'* and *zapixat'* are extremely similar. They have the same argument structure: a subject, a direct object and a prepositional phrase denoting a container. Most of the examples – 93 of each – involve a literal meaning. In these contexts, the direct object is usually a thing, as in (130), but it can also be a person, as in (129). *Zapixnut'* is slightly more common than *zapixat'* with an animate direct object, but the difference is not statistically significant (p-value: 0.4).<sup>93</sup>

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<sup>93</sup> The p-value is calculated by means of Pearson’s chi-squared test of the two rows in Table 31 (32, 26, 61, 67).

Type of direct object	<i>Zapixnut'</i>	<i>Zapixat'</i>
Person	32 (34%)	26 (28%)
Thing	61 (66%)	67 (72%)
Total	93 (100%)	93 (100%)

**Table 31** Type of direct objects in the examples of *zapixnut'* and *zapixat'*.

With regard to the Pref-dyad Hypothesis, one could imagine that one push (one “quantum”), in general, is more likely if the direct object is a count noun in the singular, and that more pushes tend to be required if there are several objects involved. Table 32 confirms that count nouns in the plural are more common in the sample of *zapixat'*. The difference between count nouns in the “singular” and count nouns in the “plural” in the two samples is statistically significant (p-value: 0.02), and the effect size is small, but reportable (Cramer’s V: 0.17).<sup>94</sup> At the same time, both verbs most often appear with a count noun in the singular, and count nouns in the plural are also clearly possible for both. The example in (129) illustrates how contexts with count nouns in the singular (here, a person) can entail several pushes and furthermore that *zapixnut'* can be used in such contexts.

Direct object	<i>Zapixnut'</i>	<i>Zapixat'</i>
Count noun singular	57 (57%)	43 (43%)
Count noun plural	23 (23%)	38 (38%)
Other (e.g. <i>vsě</i> ‘everything’)	13 (13%)	12 (12%)
Total	100 (100%)	100 (100%)

**Table 32** Type and grammatical number of direct objects in the examples of *zapixnut'* and *zapixat'*.

The few examples containing metaphorical uses indicate that the verbs are preferred for different types of metaphors. Six of the seven metaphorical contexts involving *zapixnut'* describe that someone is forced into some activity. In some, the activity is referred to by means of the metonymy INSTITUTION FOR ACTIVITY, such as COLLEGE FOR STUDYING in (131).<sup>95</sup> There is only one such example of *zapixat'*. The metaphorical examples of *zapixat'* are instead concerned with various types of impressions on the mental level, including knowledge (132). In terms of the Pref-dyad Hypothesis, “the activity metaphor” is arguably closest to the idea of a single push (“quantum”): the point is that someone ends up somewhere, not how it happened. “The impressions metaphors”, on the other hand, imply a time period and process and in this way a series of instances. If this is correct, it seems that the

<sup>94</sup> The p-value is calculated by means of Pearson’s chi-squared test of the two first rows in Table 32 (57, 43, 23, 38).

<sup>95</sup> Other examples describe situations where someone is forced into an institution to live there, receive help, etc. These examples arguably represent a boundary case between literal and metaphorical usage, and for the purposes of this study, I have not considered them metaphorical, since the point is that the direct object actually is taken into a certain building, such as a mental house in the following sentence: *Da, priznalas' ona, v psixušku zapixnula menja ona, po sobstvennoj iniciative, a esli čestno, iz straxa za moju žizn'*. [Zvezda. 2002] “Yes, she admitted, she got me into the mental house on her own initiative, and, to tell the truth, because she feared for my life.”

distribution of metaphors matches the predictions of the hypothesis, but there is too little data available to draw firm conclusions, and the metaphorical uses are in any case much less widespread than the literal uses of these verbs.

(131) «*Vspomni dolgi, v kotorye ja vlezla, čtoby **zapixnut' tebja v metodistskij kolledž**, – vsxlipyvaja, govorila mama, – vspomni otca – on vseгда mečtal dat' tebe dostojnoe obrazovanie!*» [Domovoj. 2002]

“Remember how I took on debts in order to get you into the Methodist college”, mom said sobbing, “remember your dad; he always dreamt of giving you a worthy education.”

(132) *No vsju Ameriku ne zapixaeš' v glaza za odin mesjac.* [V. Rozov. 1960-2000]  
 ‘But you can’t cram all of America into your eyes in one month.’

The examples contain few adverbials and do not reveal a semantic difference between the verbs. Most of the attested adverbials express effort: *ele-ele* ‘hardly’, *nasil’no* ‘by force’, *s usilijem* ‘with effort’ and *cenoj nemalyx usilij* ‘with much effort’ in the sample of *zapixnut’*, and *koe-kak* ‘somehow’, *nasil’no* ‘by force’, *ne bez truda* ‘not without effort’, *pospešno* ‘hastily’, *s bol’simi trudami* ‘with many efforts’ and *vpopyxax* ‘in a hurry’ in the sample of *zapixat’*.

By way of summary, my case study of *zapixnut’* and *zapixat’* shows that they are extremely close synonyms. No clear semantic differences between the verbs have been revealed: both are typically used in a literal meaning and with the same types of direct objects. In literal contexts, *zapixat’* appears with count nouns in the plural more often than *zapixnut’* and the metaphorical contexts of *zapixat’* are arguably more compatible with the idea of a complex event than the metaphorical use of *zapixnut’*. Both of these observations make sense in terms of the Pref-dyad Hypothesis, but they are not very solid. My main finding is therefore that the two verbs are very similar.

#### 4.5.9 *Zatolknut’* ‘push somewhere’ – *zatolkat’* ‘push somewhere’

The last synonymous Pref-dyad in this chapter comes from the cluster of *tolknut’* ‘push once’ and appear very synonymous:

- Base imperfective: *tolkat’* ‘push’
- Meaning of *za-*: UNIVERSIAL SPATIAL MEANING (Valeeva 2001), EXCESS, BEGIN
- Definitions in MAS:
  - > *Zatolknut’*: 1) Push somewhere (*tolčkom vpixnut’, zastavit’ vojti, vdvint’ sja kuda-l.*);
  - > *Zatolkat’* 1: 1) Push somewhere (*tolkaja, vvesti, zastavit’ vojti kuda-l.*), 2), Exhaust/torment by pushing (*tolčkami utomit’, zamučit’, pričinit’ ušiby, bol’*);
  - > *Zatolkat’* 2: 1) Begin to push’ (*načat’ tolkat’*).

In MAS, *zatołknut'* is connected with one lexical meaning – ‘push somewhere’. Unlike the other verbs in this study, *zatołkat'* appears to be treated as a homonym insofar as it receives two dictionary entries. In the overview above, I have referred to these verbs as “*zatołkat'* 1” and “*zatołkat'* 2”. Another way of interpreting *zatołkat'* is that it is a polysemous verb where the prefix *za-* contributes different semantic content in different contexts: the idea of a spatial path or an excessive action in the meanings that in MAS are connected with “*zatołkat'* 1”, and the ingressive meaning BEGIN in the verb use that MAS ascribes “*zatołkat'* 2”.

Three relevant meanings, one of *zatołknut'* and two of *zatołkat'*, are illustrated below. The ingressive use of *zatołkat'* appears to be rare and is not attested in my corpus data.

(133) *Pevcov pytal'sja zatołknut' Strekalovu obratno v spal'nju, no ne mog s nej sovladat'*. [L. Juzefovič. 2001]

‘Pevcov tried to push Strekalova back into the bedroom, but couldn’t get control over her.’

(134) *Kak tol'ko Nastja vyšla iz restorana, k nej podbežali dvoe mužčin i zatołkali ee v mašinu*. [Stolica. 1997]

‘As soon as Nastja walked out of the restaurant, two men ran up to her and pushed her into a car.’

(135) *Esli by on popytal'sja sozdat' kontoru po importu tropičeskix fruktov, ego by srazu zatołkali v neznakomoj tolpe, tysjaču raz obmanuli by i vybrosili*. [Zvezda. 2002]

‘If he had tried to create a bureau for import of tropical fruits, he would straight away have been shoved into an unfamiliar crowd and would have been deceived a thousand times and thrown out.’

According to MAS, the difference between *zatołknut'*, illustrated in (133), and the first meaning of *zatołkat'*, illustrated in (134), is that the event described by *zatołknut'* involves one push (*tolčkom* ‘with one push’), while the event described by *zatołkat'* arguably implies several pushes (*tolkaja* ‘by pushing’). In other words, the definitions in MAS appear to agree with the predictions of the Pref-dyad Hypothesis. As in the other synonymous Pref-dyads, however, it is not straightforward to determine whether the verb in a given context involves one or several “quanta” of the activity, and I will therefore look at other, more tangible factors. I will focus on the meaning ‘push somewhere’, since this is the lexical meaning relevant for both verbs and furthermore the by far most frequent meaning of *zatołkat'* (92 of 100 ex.).

Semantically, *zatołknut'* – *zatołkat'* ‘push somewhere’ are very close to *zapixnut'* – *zapixat'* ‘cram into’. They involve the same argument structure (subject, direct object and a prepositional phrase), nearly always have a literal meaning (all

examples of *zatołknut'* and 86 of the 92 examples involving *zatołkat'*), and express situations where someone or something is pushed somewhere. A difference between the two Pref-dyads is that the direct objects of *zapixnut' – zapixat'* tend to be things (Table 31), while the direct objects of *zatołknut' – zatołkat'* usually are people (Table 33). Typically, then, both verbs in this Pref-dyad express that the subject pushes someone somewhere.

Type of direct object	<i>Zatołknut'</i>	<i>Zatołkat'</i>
Person	28 (80%)	76 (83%)
Thing	7 (20%)	16 (17%)
Total	35 (100%)	92 (100%)

**Table 33** Type of direct objects in the corpus examples of *zatołknut'* and *zatołkat'*.

In this Pref-dyad, there is a clear tendency for *zatołkat'* to be preferred in contexts where the direct object is a count noun in the plural (22 of 23 instances, Table 34). Since, as argued above, it generally takes more than one push to get more than one object into a container, this is an indication that *zatołkat'* indeed implies several pushes, as predicted by the Pref-dyad Hypothesis. At the same time, as can be seen below, *zatołkat'* too is most common with count nouns in the singular, and *zatołknut'* can clearly be used in situations that (likely) requires more than one push, cf. (133).

Direct object	<i>Zatołknut'</i>	<i>Zatołkat'</i>
Count noun singular	28 (80%)	63 (63%)
Count noun plural	1 (3%)	22 (24%)
Other (e.g. <i>vsě</i> 'everything')	6 (17%)	12 (13%)
Total	35 (100%)	92 (100%)

**Table 34** Type and grammatical number of direct objects in the examples of *zapixnut'* and *zapixat'*.

As mentioned above, my corpus examples hardly contain metaphorical uses of the verbs, but six of the seven attested metaphorical examples involve *zatołkat'*. Arguably, these six examples with *zatołkat'* describe a complex event involving repeated metaphorical pushes that takes the object to a new place, e.g. the economy into a depression in (136), but this is only an interpretation. The single example with *zatołknut'*, however, is focused on the fact that the push can move the object back into a container (137), and here repetition does not seem relevant. The uses of *zatołknut'* and *zatołkat'* in metaphorical contexts appear in this way to be in line with the predictions of the Pref-dyad Hypothesis, but the examples are too few and diverse to permit firm conclusions.

(136) *Bojus', čto my zatolkaem èkonomiku v depressiju, sami zatolkaem, nezavisimo ot togo, skol'ko budet stoit' neft' – 97 dollarov ili 197». [Russkij reporter. 2012]*

'I'm afraid that we will push the economy into depression: we ourselves will push it, regardless of how much the oil will cost – 97 or 197 dollars.'

(137) *Mne zaxotelos' uslyšat' sobstvennyj golos, i vot rezul'tat – roman, kotoryj s Bož'ej pomošč'ju ja sejčas dopisyvaju. Ja znaju, čto on pojavitsja vo vsex otnošenijax preždevremenno, no obratno zatolknut' ego v černil'nicu ja uže ne sumeju, uvy... [V. Solov'ev. 1975-1998]*

'I wanted to hear my own voice, and here is the result – a novel that, with God's help, I am now finishing up. I am aware that it appears too soon in all ways, but to push it back into the ink pot is more than I am able to do at this point, alas...'

Summarizing, my case study of *zatolknut' – zatolkat'* yields a result that is very similar to that of *zapixnut' – zapixat*. The two verbs are extremely close in lexical meaning insofar as both mean to 'physically push someone (less often, something) somewhere'. There is a tendency for *zatolkat'* to be preferred when the direct object is a count noun in the plural and in metaphorical contexts implying the result of a process. Both contexts are likely to involve more than one push, and the given observations are therefore in line with the Pref-dyad Hypothesis. In all other contexts, however, it remains unclear what determines the choice between the two verbs in a given context.

#### 4.6 Summary and conclusions

The present chapter has investigated so-called Pref-dyads in the RNC – Pref-Nu verbs and Pref-Only verbs with the same prefix from the same aspectual clusters. Pref-dyads have been found to be a widespread phenomenon that is relevant for half the Pref-Nu verbs in the database. The Pref-dyad Hypothesis, which claims that Pref-Nu expresses a single “quantum” of an activity and that Pref-Only describes an event involving multiple “quanta”, has been tested on 20 Pref-dyads by means of corpus data. It is now time to look back and summarize what this chapter has revealed about the use and meaning of these verbs.

First, I have shown that Pref-dyads can consist of verbs with clearly different lexical meanings (“non-synonymous Pref-dyads”). The prefix contributes different semantic content in Pref-Nu and Pref-Only and the choice between verbs in a given context is therefore obvious. In the non-synonymous Pref-dyads investigated in this chapter, one verb usually expresses Aktionsart. The semantic distinction between Pref-Nu and Pref-Only is as predicted by the Pref-dyad Hypothesis insofar as the investigated Pref-Nu verbs describe an action that is completed with one repetition of the activity, while all the Pref-Only verbs presume more than one “quantum” of the activity.

Second, my study sheds light on Pref-dyads that consist of verbs with very similar lexical meanings (“synonymous Pref-dyads”). Here, the prefix contributes the same meaning in both verbs, and semantic differences between them must therefore be attributed to *-nu-*. This type of Pref-dyads has been mentioned briefly by other scholars, but has not been examined in depth.

The case studies of synonymous Pref-dyads show that many of the given verbs are closer in lexical meaning than what it seems in dictionaries. Clear support for the Pref-dyad Hypothesis is found only in one - *utknut* ‘stick into’ – *utykat* ‘stick all over’. In two Pref-dyads – *perelistnut* – *perelistat* ‘flip’ and *sliznut* – *slizat* ‘lick off’ – the corpus data yield partial support. In the remaining six Pref-dyads, a semantic difference between the verbs was harder to determine based on corpus data alone and the subtle differences that were found were not predicted by the hypothesis.

Following up on the remarks made by the scholars reviewed in Section 1.4.3, my study yields support to Dickey’s claim that what I have called “synonymous Pref-dyads” are a marginal phenomenon in contemporary Russian. However, in line with Feldstein’s claim, it is not extinct, and some synonymous Pref-dyads are used widely. Contrary to Plungjan’s conclusion, I have found that *-nu-* in all the investigated cases appears to be more than a superfluous marker of semelfactivity, since, in each of them, I have found *something* that makes the two verbs different. This may, in turn, connect with another remark made by Dickey that Pref-Nu and Pref-Only, rather than displaying a single “quantum” vs. multiple “quanta” distinction, develop different lexical meanings. However, none of the Pref-dyads investigated in this chapter clearly illustrate this situation.

To conclude, the present chapter shows that in many Pref-dyads Pref-Nu and Pref-Only have clearly different meanings, and one of them tends to express Aktionsart. They are non-synonymous. In synonymous Pref-dyads, it is often difficult to determine clear semantic differences between the verbs, and the choice of verb in a given context appears neither fully obvious, nor arbitrary.



## 5 Interim discussion: Pref-Nu verbs and rivalry in corpus-based and experimental studies

The two previous chapters compared the use of Pref-Nu verbs with perfectives that either have only the suffix *-nu-* (Only-Nu) or only a prefix (Pref-Only). In several cases, Pref-Nu verbs were found to be near-synonymous with one of these related verbs, a situation sometimes referred to as “variation” (e.g. Gorbačević 1978) or “rivalry” (e.g. Baayen et al. 2013) because two or more lexemes “express a similar meaning in similar environments, giving the speaker a choice of options” (ibid: 254). In this chapter, I summarize what my corpus-based studies have revealed about rivalry involving Pref-Nu verbs and compare three specific cases with other more well-known situations of rivalry between Russian verbs. I also discuss how rival forms have been, and can be, studied.

Although rivalry involving Pref-Nu verbs, to the best of my knowledge, has not been extensively studied, in general, rival forms have received much attention, an issue I comment on in Section 5.1. Situations of rivalry involving Pref-Nu verbs are discussed in Section 5.2. In Section 5.3, I mention how rival forms have been studied in the past and discuss how corpus studies may be combined with other sources of data, such as psycholinguistic experiments. This point brings me, in turn, to Chapters 6 and 7 that present the findings of an experiment exploring the acceptability of Pref-Nu vs. other types of perfectives in contexts taken from the Russian National Corpus (RNC). Section 5.4 summarizes the main points of the chapter.

### 5.1 Linguistic rivalry in Russian

Near-synonymy and linguistic rivalry are cross-linguistic phenomena that are attested in many languages. In Russian, rivalry has been investigated in all areas of its lexicon and grammar, including near-synonymous lexemes (Divjak and Gries 2006), prefix meanings (Janda et al. 2013), verb suffixes (Apresjan 1988 [1995], Gor and Chernigovskaya 2003, 2004, 2005, Nessel 2010, Zaliznjak and Mikaèljan 2010, Nessel and Makarova 2012), variation in case (Nessel and Kuznetsova 2015, Nessel and Nordrum 2019), comparative forms (Kosheleva 2016), constructions (Sokolova 2012, Nessel and Makarova 2018), orthography (Bukčina 1981, Bešenkova 2008), and even stress (Piperski and Kukhto 2016, Kukhto and Piperski 2019) (see also Krysina 1974, Comrie et al. 1996, Graudina et al. 2011).

For Russian verbs, in particular, rivalry can occur between the perfective and imperfective aspect. The term “aspectual rivalry” (*konkurencija vidov*) refers to cases where both aspects can be used with only subtle differences in meaning. A well-known case of aspectual rivalry is the so-called general-factual meaning (*obščefaktičeskoe značenie*) of the imperfective. Here, the imperfective can be used instead of the perfective to confirm that something has taken place rather than to

focus on the result of the action. By way of illustration, consider the following examples from Zaliznjak and Šmelëv (2000: 38):<sup>96</sup>

(138) *Ètot fil'm pokazyvali po televizoru?* 'Has this movie been broadcast on TV?'

(139) *Ètot fil'm pokazali po televizoru?* 'Has this movie been broadcast on TV?'

In English, the two sentences are translated identically, but in Russian they communicate slightly different nuances of meaning. In the first example, which includes an imperfective verb in the general-factual meaning, the speaker simply wants to know whether the movie has been broadcast. In the second example, which contains a perfective, there is a sense that something could have prevented this from happening, and the speaker wants to know whether the movie in fact was broadcast or not. Ongoing research shows that aspectual rivalry furthermore is prevalent in the future tense (Kosheleva Forth.) and, in general, that it is much more widespread than what has been previously assumed and insufficiently understood (Endresen et al. Forth.).

In addition to aspectual rivalry, rivalry can occur between verbs of the same aspect within a given aspectual cluster. This is the type of rivalry I will discuss in regard to Pref-Nu verbs, and I will therefore briefly outline three other cases that have already been explored in the scholarly literature and that are useful to keep in mind when we go on to consider rivalry involving Pref-Nu verbs in Section 5.2.

The first of these rivalry situations takes place when a given imperfective has more than one Natural Perfective (Isačenko 1982: 167-172). Janda et al. (2013: 139-162) refer to this situation as “prefix variation” and Sokolova (2012) and Nordrum (2014) have explored how such rivalry functions in individual clusters. Both case studies show that, although the rival verbs are near-synonymous and often translated identically to English, each of them has its own constructional profile, making the choice of verb non-arbitrary. Sokolova’s study of the so-called locative alternation shows that the three Natural Perfectives of *gruzit'* ‘load’ – *nagruzit'*, *pogruzit'* and *zagruzit'* – are preferred in different constructions and vary as to whether they primarily express the meaning ‘load’ in a literal or metaphorical sense. Nordrum shows that the four Natural Perfectives of the polysemous *putat'* ‘mix up, confuse, tangle’ – *pereputat'*, *sputat'*, *vputat'* and *zapatat'* – share different submeanings with the base imperfective.

A second case of such verb rivalry occurs in so-called aspectual triplets where a prefixed perfective has two corresponding imperfectives. By way of example, the perfective *umnožit'sja* ‘multiply’ has the two imperfectives *množit'sja* ‘multiply’ and *umnožat'sja* ‘multiply’. Aspectual triplets have been described and investigated by a number of scholars (e.g. Veyrenc 1980, Apresjan 1988 [1995], Petrušina 2000, Jasai 2001, Xrakovskij 2005, Guiraud-Weber and Mikaëljan 2006, Zaliznjak and Mikaëljan 2010, Janda et al. 2013, Sokolova and Kuznetsova 2016). Relatively few

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<sup>96</sup> Zaliznjak and Šmelëv’s illustration originally comes from Padučeva (1996: 53-65).

triplets resemble *množit'sja/umnožit'sja/umnožat'sja* 'multiply' in the sense that all three verbs have the exact same lexical meaning, and scholars tend to distinguish between several subgroups, for example, triplets where one of the imperfectives is marginal (e.g. *tajat'/rastajat'/rastaivat'* 'melt' where *tajat'* is intransitive and transitive and *rastaivat'* is only transitive) and triplets where the perfective verb is polysemous and corresponds with the two imperfective verbs in different meanings (e.g. *šit'/sšit' čto* 'sew something' and *sšit'/sšivat' čto* 'sew something together'). However, despite this diversity in the behavior of triplets, a systematic difference between the base imperfective and secondary imperfective is that the former tends to describe a process, while the latter tends to denote an iterative event or "a process regarded with a consideration of its result" (Veyrenc 1980: 176, see also Sokolova and Kuznetsova 2016).<sup>97</sup>

The third case of rivalry in Russian that will be mentioned here concerns verbs of the same aspect that differ in their suffix. For imperfectives, we find rival forms like *podgotavlivat'* 'prepare' vs. *podgotovljat'* 'prepare' and *zavoračivat'* 'wrap' vs. *zavěrtyvat'* 'wrap'. For perfectives, this rivalry takes place between verbs in *-stič'* and *-stignut'*, e.g. *dostič'* 'reach, achieve' and *dostignut'* 'reach, achieve'. Both types are mentioned by Apresjan (1988 [1995]: 103-105) who concludes about the imperfectives that the leftmost form is the main form (*osnovnaja forma*) and that the rightmost verb is a superfluous (*lišnij*) variant. As for the perfectives, Apresjan argues that they fill different functions in the same paradigm: verbs in *-stič'* are used in the past tense, but not in future tense, verbs in *-stignut'* are used in the future tense, but not in past tense, etc. Semantic differences between the verbs are not suggested.

## 5.2 Rivalry involving Pref-Nu verbs

Let us now consider cases of rivalry involving Pref-Nu verbs. Based on the corpus studies in Chapters 3 and 4, I suggest that we can speak of rivalry on three levels: rivalry between Pref-Nu verbs (5.2.1), rivalry in Nu-dyads (5.2.2) and rivalry in Pref-dyads (5.2.3). All of these have been mentioned in the previous chapters, but they are briefly restated here and then compared with the rivalry situations involving other types of Russian verbs just mentioned above.

### 5.2.1 Rivalry between Pref-Nu verbs

This first type of rivalry takes place when two or more Pref-Nu verbs from a given cluster can be used in the same context to express a similar lexical meaning. As in the cases of rivalry discussed in the previous section, the rival verbs might express different nuances of meaning, but, at least judging from the English glosses, it is not immediately obvious how. To illustrate the situation, consider the following pairs of examples from the cluster of *prygnut'* 'jump once'. The numbers in brackets indicate how many examples that involved these combinations of verb and preposition on a word distance of "1" in the RNC (years 1950-August 2019):

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<sup>97</sup> Veyrenc's original formulation in French: "s'applique au procès comme croissant en considération de son terme" – Translation to English by Sokolova and Kuznetsova (2016: 229).

(140) **vpřygnut'** v mašinu 'jump into the car' (5 ex.)  
**zapřygnut'** v mašinu 'jump into the car' (9 ex.)

(141) **vsprygnut'** na stol 'jump onto the table' (3 ex.)  
**zapřygnut'** na stol 'jump onto the table' (5 ex.)

Other illustrations in the database include for instance:

(142) **spřysnut'** čto 'spray something; metaph: celebrate something' (89 ex.)  
**vsprysnut'** čto 'spray something; metaph: celebrate something' (71 ex.)

(143) **izrygnut'** čto 'throw up something' (22 ex.)  
**otrygnut'** čto 'throw up something' (14 ex.)

At first glance, this first type of rivalry involving Pref-Nu verbs resembles so-called prefix variation, i.e. when a given aspectual cluster contains two or more Natural Perfectives. In both cases, the speaker chooses between a number of possible prefixes to express nuances of a certain meaning. However, the following differences deserve remark:

First, prefix variation is a widespread phenomenon that, according to Janda et al. (2013: 141), involves 27% of aspectual clusters containing at least one Natural Perfective. Examples of the given type of rivalry involving Pref-Nu verbs is, by comparison, scarce in the database and appears from this to be a limited phenomenon.

Second, prefix variation is not limited to certain prefixes: Janda et al. (2013: 143) show that all the prefixes are relevant. By comparison, the instances of rivalry between Pref-Nu verbs in my database occur primarily in verbs of movement where the prefix expresses a spatial path. In these cases, one of the rival verbs involves *za-*, which in these verbs is compatible with a number of paths due to the "spatial-directional universality" of this prefix (*prostranstvenno-napravitel'naja universal'nost'*, Valeeva 2001: 315). In my data, the direction is expressed with a prepositional phrase, usually *vo čto* 'into something', and the rival form is usually prefixed in *v-*, as illustrated in (144) and (145). Rivalry between Pref-Nu verbs that are not concerned with movement and a physical path are more difficult to find in my data, although two examples were given in (142) and (143) above.

(144) **vpixnut'** kogo-l. vo čto 'push someone somewhere' (3 ex.)  
**zapixnut'** kogo-l. vo čto 'push someone into something' (9 ex.)

(145) **vtolknut'** kogo/čto-l. vo čto 'push someone/sth. into something' (69 ex.)  
**zatolknut'** kogo/čto -l. vo čto 'push someone/sth. into something' (11 ex.)

Third, prefix variation occurs when more than one perfective functions as a Natural Perfective of a base imperfective. The Natural Perfectives themselves may express completely different situations; what is important is that they express at least one of the same lexical meanings as the base imperfective. By way of example, consider the Natural Perfectives of *bit'* 'hit' in (146). They are clearly different in meaning. What makes them Natural Perfectives and therefore causes prefix variation is that they function as the aspectual partner of *bit'* 'hit' in at least one context (shown after the arrows):

- (146) ***pobit'*** 'hit' → ***bit'/pobit'*** *kogo* 'hit someone'  
***probit'*** 'hit through' → *časy* ***b'jut/prob'jut*** 'the clock strikes/struck'  
***razbit'*** 'break' → ***bit'/razbit'*** *tarelki* 'break plates'

By comparison, the rivalry between Pref-Nu verbs explored in the present study involve two near-synonyms. If they have different lexical meanings, such as *pobit'* 'hit', *probit'* 'hit through' and *razbit'* 'break', they do not qualify as rivals. At the same time, near-synonyms are synonymous to different degrees, and there is no obvious criterion for how to determine which verbs should count as rivals and which should not. *Izrygnut'* 'throw up' and *otrygnut'* 'throw up', for instance, differ in the sense that the former is used metaphorically (e.g. *izrygnut' prokljatija* 'lit. throw up curses') while the latter is used literally (*otrygnut' sljunu* 'lit. throw up out saliva'). Thus, although their lexical meanings are close, native speakers of Russian will consistently use the verbs for different situations and, in this sense, they do not rival. In the other illustrations above, the semantic distinctions are harder to discern from corpus data, but the question remains as to where to draw the line between what we would call "rivalry" and what is not. Put simply, the criterion for prefix variation is that the verbs function as Natural Perfectives of the base imperfective. For rivalry between Pref-Nu verbs there is no such criterion.

### 5.2.2 Rivalry in Nu-dyads

Chapter 3 showed that rivalry can take place in Nu-dyads. This was especially observed in the cluster of *prygnut'* 'jump once' where the unprefix verb was found in almost all the same contexts as the prefixed verbs, for example:

- (147) ***zaprygnut'*** *v mašinu* 'jump into the car' (9 ex.)  
***prygnut'*** *v mašinu* 'jump into the car' (24 ex.)
- (148) ***vyprygnut'*** *iz okna* 'jump out of the window' (32 ex.)  
***prygnut'*** *iz okna* 'jump out of the window' (15 ex.)

Other examples of such rivalry were mentioned in Section 2.5 where it was observed that some Pref-Nu verbs involve prefixes that hardly influence their semantics, in particular: certain verbs in *za-* (such as the above-mentioned *zaprygnut'* 'jump somewhere') and *s-* (e.g. *sboltnut'* 'blurt out', cf. *boltnut'* 'blurt out

once'), as well as *perelisnut'* 'flip' (cf. *listnut'* 'flip once'), *uščipnut'* 'pluck' (cf. *ščipnut'* 'pluck once'), and some others.

This second type of rivalry involving Pref-Nu verbs arguably resembles aspectual triplets insofar as both occur between a prefixed and an unprefixed verb of the same aspect. From this follow two further similarities. First, the rival verbs are "unequal" in the sense that the prefixed verb has a more specific (narrower) lexical meaning than the unprefixed verb. The unprefixed verb tends to appear in a number of contexts that are impossible for the prefixed verb. The case studies in Chapter 3 illustrate this situation for Nu-dyads, while in aspectual triplets, the secondary imperfectives are known to "emphasize the meaning specific to the Natural Perfective" (Janda et al. 2013: 165), i.e. they focus the meaning of the prefix. Second, the prefixed verb typically focuses on the result of an action, while the unprefixed verb is less concerned with a result. This distinction between the verbs was largely observed for the Nu-dyads in Chapter 3. For aspectual triplets, it has been claimed to be systematic (Sokolova and Kuznetsova 2016).

However, there is an important difference between the two phenomena, namely that the rival forms in aspectual triplets have different suffixes: secondary imperfectives are often derived by means of the suffix *-ivaj-*. Historically, verbs with *-ivaj-* refer to iterative or habitual actions (Kuznecov 1953: 261-264), and Sokolova and Kuznetsova (2016) have shown that the suffix continues to contribute this meaning. Thus, the imperfective verbs in aspectual triplets differ not only in terms of the prefixed verb being narrower and resultative in meaning; the prefixed verb furthermore tends to describe a recurring event. By comparison, the verbs in Nu-dyads have the same suffix *-nu-* reflecting that they both describe a single "quantum" of an action. In addition, aspectual triplets are "a non-peripheral and to a great extent regular phenomenon" (*ne periferijnoe, a v vysšej stepeni reguljarnoe javlenie*, Zaliznjak and Mikaèljan 2010: 130-131) that has been investigated in detail by numerous scholars. Rivalry in Nu-dyads have been much less explored and my study is not sufficient to establish its extent in the contemporary language.

### 5.2.3 Rivalry in Pref-dyads

The third type of rivalry was discussed in detail in Chapter 4 and occurs in synonymous Pref-dyads, for example *vytrjaxnut'* 'shake out' – *vytrjasti* 'shake out' where the prefix contributes the same semantic content in both verbs, here, EMPTY A CONTAINER. Many of these verbs appear strikingly similar semantically and, on the basis of corpus data, it was not always possible to detect strong differences between them. The situation can be illustrated by *vytrjaxnut'* 'shake out' and *vytrjasti* 'shake out' that tend to occur with the prepositional phrase *iz čego* 'out of something':

(149) *vytrjaxnut'* *iz čego* 'shake out of something' (134 ex.)  
*vytrjasti* *iz čego* 'shake out of something' (77 ex.)

This last case of rivalry involving Pref-Nu verbs is arguably comparable to the rivalry between imperfective verbs like *podgotavlivat'* 'prepare' – *podgotovljat'* 'prepare' and perfective verbs like *dostič'* 'reach, achieve' – *dostignut'* 'reach, achieve': the rival forms have the same prefix and different suffixes. At the same time, between the cases mentioned by Apresjan and synonymous Pref-dyads, the following differences are remarkable:

In cases of imperfective rival forms like *podgotavlivat'* – *podgotovljat'*, Apresjan (1988 [1995]: 103-105) argues that one verb tends to be the “main” choice, while the other is a “variant” that is either archaic or “artificial” (*iskusstvennyj*). In the nine synonymous Pref-dyads explored in Chapter 4, the verbs have different token frequencies in the corpus, but none of them appear to be marginal. Thus, in these Pref-dyads, there is no indication that one verb is primary and the other secondary. At the same time, it is worth remembering that these were the only Pref-dyads in my dataset where both verbs were used by at least 30 authors in the corpus, and they could therefore be different than most other Pref-dyads.

Apresjan finds that perfective rival forms, such as *dostič'* – *dostignut'*, fill different roles in the paradigm: verbs in *-stič'* are, for instance, primarily used in the past tense, while verbs in *-stignut'* more often occur in non-past tense forms. A similar distribution is not found in synonymous Pref-dyads where the two verbs behave as separate lexemes that in most cases can be used in all inflected forms of a paradigm.

A third difference concerns semantics. In Apresjan's account, the imperfective and perfective rival forms are presented as complete synonyms. My case studies of synonymous Pref-dyads in Chapter 4 reveal that most of the corresponding Pref-Nu and Pref-Only verbs differ in some way: different levels of “intensity” (*struxnut'* 'become fainthearted' – *strusit'* 'act like a coward'), different proportion of literal vs. metaphorical use (*vytrjaxnut'*– *vytrjasti* 'shake out'), different frequency distributions of types of direct objects (*zatolknut'* – *zatolkat'* 'push into'), etc. Thus, unlike the cases of rivalry mentioned by Apresjan, synonymous Pref-dyads are only near-synonymous or not synonymous in most, or all, contexts.

### **5.3 Studies of rivalry and choice of methodology: Corpus vs. experiment**

Among the studies of rival forms mentioned in Section 5.1, many were carried out by means of corpus data. On the one hand, this is not surprising, since the majority of the works present analyses from the new millennium when corpus data have become increasingly important (Janda 2013). On the other hand, corpora are not the only way rival forms can be studied empirically. Gor and Chernigovskaya (2003, 2004, 2005), for instance, use experimental research to investigate the acquisition of Russian verb suffixes among L1 and L2 learners of Russian. In the present section, I discuss the possible benefits of combining corpus data and experiments when studying rival forms.

Let us first consider the pros and cons of using corpora to study rival forms. The pros are clear. First, corpora provide easy access to large amounts of data. Second, corpus data are usage-based: they display real usage-events that can be observed, recorded and analyzed empirically (Glynn 2010: 5-6). This is especially valuable from the perspective of Cognitive Linguistics, which represents a usage-based model of language structure (Langacker 1987: 46, 2008: 220). Third, by means of corpus data it is usually possible to establish main tendencies for how rival forms behave. The two previous chapters have illustrated this advantage of corpus data insofar as they were usually able to reveal *something* that set the Pref-Nu verbs apart from their rival verbs.

However, one thing that we cannot find out by means of corpus data is whether or to what extent the rival form could have been used instead. In other words, we can observe which word one author selected to express a certain idea, but we cannot conclude that other authors would have used the same one. To find out, we need to record the word choice of many native speakers in the same context. That is, we need an experiment.

In the scholarly literature, we find many experimental studies of rival forms. Dąbrowska (2005) for example, has used experiments to study the choice of Genitive inflectional endings in Polish, and, in collaboration with Divjak (2017), the choice of Dative inflectional endings in the same language. Bermel and Knittl (2012) report native speakers' acceptability ratings of a number of morphosyntactic variants in Czech. Klavan and Veismann (2017) use native speakers' acceptability scores to investigate the alternation between the Estonian adessive case and the adposition *peal* 'on'. These are only a few examples.

Coming back to Russian verbs, Janda and Reynolds (2019) have used acceptability judgments to investigate the choice between imperfective and perfective aspect in Russian. Although the choice of aspect in some contexts is fixed (e.g. only imperfective is possible in the present tense), others are open for both, and here the choice of aspect is a choice of construal, that is "our ability to conceive and portray the same situation in alternate ways" (Langacker 2015: 120): for example, perfective verbs express events as bounded and completed, while imperfective verbs describe them as unbounded and do not profile their completion (Section 1.1). Janda and Reynold's goal was to shed light on the proportion of contexts where the choice of aspect is open to construal. By allowing 500 native speakers of Russian to rate the acceptability of corresponding imperfective and perfective verbs in a large number of authentic contexts, the researchers found out that the choice of aspect is fixed in approximately 80% of contexts, while 20% of them are open for construal. By way of example, the participants gave varied acceptability scores for the verbs in (150) since the sentence can be understood in two ways: either as referring to a specific one-time event requiring the perfective or as a general statement expressed by an imperfective. The participants were allowed to give the same score to both verbs.

(150) *Vyživšuju iz uma staruxu nikto vser'ez ne [prinjal/prinimal].*

'No one took the senile old woman seriously.'

(Janda and Reynolds 2019: 487)

Janda and Reynold's experiment illustrates the advantage of using an experimental approach. As pointed out above, corpus data show us which form one author uses in a particular context, but not whether a rival form is possible. An acceptability judgment experiment like the one just mentioned makes it possible to find this out, and this approach is therefore well-suited for studies of rival forms.

What neither corpus data nor acceptability judgments show is what motivates the choice/acceptability of a given form in a given context. This is a question of interpretation (Dąbrowska 2016: 486-488). With regard to the sentence in (150), the variation in scores can be understood from what is known about perfective and imperfective verb meaning: the interpretation provided above that the perfective is used if the sentence is understood as referring to a one-time event and that the imperfective is used if the participant sees it as a general statement comes from Janda and Reynolds and is not controversial. The benefit of the experiment is that the acceptability scores potentially enable us to determine which types of contexts are open for construal, i.e. rivalry of form, and to what extent they occur.

In the following two chapters, I will investigate the relationship between Pref-Nu and Only-Nu/Pref-Only verbs by means of an experiment that in some ways resembles the one carried out by Janda and Reynolds. The acceptability scores of these verbs allow us to see to what extent two forms are possible in the same context, but, since the relationship between these verb types is much less studied than the relationship between the imperfective and perfective aspects, interpretations of how the verbs construe a given situation in different ways becomes more speculative.

#### **5.4 Summary and conclusions**

This chapter has provided a discussion of cases of rivalry involving Pref-Nu verbs. I have called it an "interim discussion" because it summarizes the insights that have been gained in the foregoing chapters and at the same time paves the way for the two chapters that follow. Based on the case studies in Chapters 3 and 4, I have suggested that Pref-Nu verbs participate in three types of rivalry: rivalry between the Pref-Nu verbs themselves, rivalry in Nu-dyads and rivalry in Pref-dyads. Each of these situations are in some ways comparable to other cases of rivalry in the Russian aspectual system, but are at the same time different from them. Towards the end of the chapter, I have turned to the question of how rival forms can be studied. A common approach over the last decades has been to use corpus data, a method I myself have employed in the previous chapters. However, another possibility is to use experimental research. I have discussed pros and cons of corpus-based and experimental studies and how they can be used

complementarily. In the next two chapters, I will follow up on this and investigate the relationship between Pref-Nu verbs, Only-Nu verbs and Pref-Only verbs by means of a psycholinguistic experiment.

## 6 Pref-dyads and synonymy: An experiment with native speakers

In the present chapter, I focus on synonymy in Pref-dyads and seek to find out to what extent native speakers of Russian consider these verbs, for example *sliznut* 'lick off' – *slizat* 'lick off', acceptable in the same contexts. The study is based on an experiment where 203 native speakers were asked to give acceptability judgments of the Pref-dyads in Chapter 4 in authentic contexts from the Russian National Corpus (RNC). If Pref-Nu and Pref-Only really are synonymous, they could be expected to receive similar acceptability ratings. If they involve clearly different nuances of meaning, one verb will probably be felt as more suitable in a given context than the other. The results of my study show that the verbs usually receive different acceptability scores in the selected contexts. This, in turn, may be taken as support to the Principle of No Synonymy (Goldberg 1995: 67) and similar claims that languages avoid full synonymy (see e.g. Cruse 1986, Croft 2000, Szymanek 2005).

The corpus-based case studies in Chapter 4 and the experiment in this chapter are complementary. The corpus data provide a number of examples for each individual verb: every example reflects the verb choice of a particular author in a particular context, but does not show whether another verb (i.e. the other verb in the Pref-dyad) in fact is possible, or even an equally good choice. The results of the experiment, on the other hand, show how a number of native speakers evaluate the acceptability of a given form in a given context. The weakness of the experiment is that even if the acceptability scores of two verbs in a context are exactly the same, this does not mean that they necessarily are synonymous. By way of illustration, consider the English sentences *I wrote a book* and *I read a book*. Both make perfect sense, but at the same time they express two very different situations. The given point could be relevant for Pref-dyads too (see also Dąbrowska 2016: 488-487).

I open up this chapter with a brief summary of what has already been claimed about synonymy in Pref-dyads and furthermore state my expectations from the experiment (Section 6.1). The design of this experiment and the way it was implemented is described in Section 6.2. Section 6.3 presents the results for non-synonymous Pref-dyads, which helped to ensure that the participants understood the task and performed it attentively (control items). The results for synonymous Pref-dyads are discussed in Sections 6.4 and 6.5. In Section 6.6, I wrap up the chapter with a summary of my findings and conclusions.

### 6.1 Synonymy in Pref-dyads

Since synonymy, or near-synonymy, in Pref-dyads have been discussed at several points in the previous chapters, in the present section, I limit myself to a brief summary of the main points. For a discussion with references, see Section 1.4.3.

According to Plungjan (2000), “completives”, which largely appear to represent Pref-Nu verbs, are completely synonymous to prefixed perfectives without *-nu-*: in *vytrjaxnut* ‘shake out’, *-nu-* is only a marker of semelfactivity, and, in Plungjan’s view, this verb expresses the same lexical meaning as *vytrjasti* ‘shake out’. Dickey (2001), Feldstein (2007) and several other scholars mentioned in footnotes in Section 1.4.3 understand Pref-Nu and Pref-Only verbs to differ in the sense that the former describes one instance of a multiphasal activity and the latter to denote multiple instances. However, Dickey finds this situation to hardly occur in modern Russian, while Feldstein claims that it is widespread. None of the studies in question involve corpus data. It is assumed that the given scholars speak of the same verbs, although their examples are too few to conclude.

My corpus-based study in Chapter 4 shows that Pref-Nu verbs often participate in Pref-dyads, i.e. have a corresponding Pref-Only verb. However, as predicted by Dickey, few Pref-dyads are attested widely in the corpus and even fewer involve verbs with near-synonymous meanings. The case studies of individual Pref-dyads indicate that some involve the semelfactive/distributive distinction, mentioned by Dickey and Feldstein, but furthermore show that other, often very vague, differences may be relevant. Native speakers that were consulted about the data confirmed that the verbs are not fully synonymous, but did not always agree as to how they are different.

The goal of the present experiment is to find out to what extent Pref-Nu and Pref-Only verbs in the relevant Pref-dyads potentially are understood as synonyms to native speakers who are not primed by being informed of my research goal and project.<sup>98</sup> I write “potentially” to emphasize that the experiment is not able to prove that two verbs are synonymous (cf. *I wrote a book* and *I read a book* above). What it can do is rather to reveal cases where the two verbs in question get different acceptability scores and therefore clearly do *not* act like synonyms.

The null hypothesis is that there is no semantic difference between the verbs. The alternative hypothesis, which is based on the well-known idea mentioned above that complete synonymy does not exist, is that each verb in fact has its own semantic nuance, making one verb more or less suitable in a given context. The results of the experiment give strongest support to the alternative hypothesis, but show at the same time that the situation is complex and that there is considerable variation in the system.

Notice that the experiment included not only synonymous Pref-dyads, but also the non-synonymous ones. Because the acceptability scores of non-synonymous Pref-dyads are predictable (they should only be possible in their own contexts), the results for these verbs are indicative of whether or not the participants understood the task and answered attentively. I will therefore briefly discuss the results for

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<sup>98</sup> This distinguishes them from the native speakers I discussed my corpus data with in Chapters 3 and 4 who furthermore largely were linguists.

non-synonymous Pref-dyads in Sections 6.3 and 6.4 before I turn to the more important synonymous Pref-dyads in Section 6.5. First, however, it is necessary to explain the design of the experiment.

## 6.2 The experiment

The experiment was conducted in February 2019. At that time, 17 Pref-dyads were considered in the corpus-based case studies in Chapter 4, and all of these were all included in the experiment.<sup>99</sup> To discuss the experiment, I first look at its general design and present data about the participants (6.2.1). Then I explain how I selected contexts from the corpus (6.2.2).

### 6.2.1 Experiment design and participants

The experiment was carried out as an online survey with SurveyGizmo.<sup>100</sup> The experiment had three parts: general information about the experiment, personal information about the participants, and the experiment itself.

The general information about the experiment was displayed on the first page of the survey. The participants were informed that the experiment is part of a linguistic study at UiT The Arctic University of Norway, that participation is anonymous, and that three random participants would be awarded a pair of hand-knitted Norwegian mittens of their own choice or a gift card at [ozon.ru](http://ozon.ru) worth 3000 rubles. They were also told that there are no right or wrong answers and that they should not spend too much time thinking before they respond.

The participants were then asked to fill out some personal data: country of residence, gender, age group, and whether or not they are receiving, or have received, a linguistic or philological education. The participants were furthermore asked to confirm that their native language is Russian. Participants who answered “No” to this question were excluded from the study and are also excluded from Table 35 that gives an overview of the participants:

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<sup>99</sup> The remaining three Pref-dyads in Chapter 4 were added to the corpus-based study after the experiment had been carried out and are therefore not considered in this chapter: *peretrjaxnut* ‘turn around, rummage through’ – *peretrjasti* ‘turn around, rummage through’, *struxnut* ‘become fainthearted’ – *strusit* ‘act like a coward’ and *zatołknut* ‘push somewhere’ – *zatołkat* ‘push somewhere’.

<sup>100</sup> SurveyGizmo: [www.surveygizmo.com](http://www.surveygizmo.com)

Country of residence	Russia	169	83%
	Other countries: Azerbaijan, Belarus, China, Germany, Italy, Kazakhstan, Latvia, Norway, Serbia, Ukraine and the United States	34	17%
Gender	Female	151	74%
	Male	52	26%
Age	18-24	26	13%
	25-34	75	37%
	35-44	47	23%
	45-54	34	16%
	55-64	20	10%
	65 +	1	1%
Education	+ linguistic/philological education	53	26%
	- linguistic/philological education	150	74%

**Table 35 Basic information about the participants in the experiment.**

The fact that the majority of the participants live in Russia is an advantage, since living in another country can influence native speaker intuition (Schmid 2013). The fact that the majority of the participants did not have philological or linguistic training is also a plus, since linguists' and non-linguists' intuitions about linguistic phenomena may differ, as shown by Dąbrowska (2010). Table 35 shows that there was an overweight of women in the experiment, but gender does not seem to have influenced the acceptability scores of the participants. The tables below show the distribution of "Excellent", "Acceptable" and "Impossible" between men and women. In both tables, the differences are statistically significant, but the effect sizes are not reportable (see table captions).<sup>101</sup> In view of this, I will assume that the 203 relevant responses can be analyzed together.

Gender	Excellent	Acceptable	Impossible	Total
Masculine	262 (39%)	104 (15%)	310 (46%)	676 (100%)
Feminine	1177 (42%)	383 (14%)	1214 (44%)	2774 (100%)

**Table 36 Acceptability scores for Pref-Nu across gender groups (p-value: 0.2, Cramer's V: 0.03).**

Gender	Excellent	Acceptable	Impossible	Total
Masculine	203 (31%)	103 (15%)	354 (54%)	660 (100%)
Feminine	805 (29%)	466 (17%)	1518 (55%)	2789 (100%)

**Table 37 Acceptability scores for Pref-Only across gender groups (p-value: 0.6, Cramer's V: 0.02).**

Having answered these questions, the participants were presented with their task, namely to rate the acceptability of the two verbs in the relevant Pref-dyads in contexts from the RNC originally involving one of the two perfectives. Since the

<sup>101</sup> The p-values were obtained with Pearson's chi-squared test of the raw numbers in Table 36 (262, 104, 310, 1177, 383, 1214) and Table 37 (203, 103, 354, 805, 466, 1518).

experiment was created to furthermore explore Nu-dyads, the participants also had to evaluate the acceptability of Only-Nu, a point I come back to in Chapter 7. For the sake of simplicity, I will refer to such constellations of three verbs as “triads”. The task was stated as follows:<sup>102</sup>

You will now be presented with seventeen sentences. In each sentence, three verbs are shown in square brackets, for example:

— *Počemu vy molčíte, Dima? — [kriknula/vskriknula/vskričala] Julija Mixajlovna i stuknula ladoškoj po stolu.* “‘Why do you keep silent, Dima?’ Julia Mixajlovna [shouted] and threw her palm down into the table.’

For each verb, choose how acceptable it is in the given context (“Excellent”, “Acceptable”, “Impossible”). The three verbs in square brackets may be given the same score. To choose scores, use your own personal feeling.

Figure 20 illustrates what the assignment looked like for the participants. For each context, they had to choose an acceptability score for the relevant Only-Nu, Pref-Nu and Pref-Only verbs: *Otlično* ‘Perfect’, *Dopustimo* ‘Acceptable’ or *Nevozmožno* ‘Impossible’. The participants were not informed which verb was used in the original context (here, *vytrjaxnut* ‘shake out’), nor were they told that these are “real” contexts. The participants could use as much time as they wanted. On average they spent 16 minutes.<sup>103</sup>

Генерал Сиверс сел на песок, снял тапки, [тряхнул/вытряхнул/вытряс] их и, не торопясь, надел снова.			
	Отлично!	Допустимо!	Невозможно!
тряхнул	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
вытряхнул	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
вытряс	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 20 Illustration of the task (original context of *vytrjaxnut* ‘shake out’): ‘General Sivers sat down in the sand, pulled off his slippers, shook them, and slowly put them on again.’

<sup>102</sup> The text as originally formulated in Russian: *Sejčas Vam pokažut semnadcat' predloženíj. V každom predloženíi predlagaetsja po tri glagola na vybor (v kvadratnyx skobkax), naprimer:*

— *Počemu vy molčíte, Dima? — [kriknula/vskriknula/vskričala] Julija Mixajlovna i stuknula ladoškoj po stolu.*

*Dlja každogo glagola vyberite uroven' priemlemosti («Otlično», «Dopustimo» ili «Nevozmožno») v dannom kontekste. Vse tri glagola v kvadratnyx skobkax mogu polučít' odinakovuju ocenku. Vybor urovnja priemlemosti zavisit ot Vašego ličnogo vosprijatija.*

<sup>103</sup> When creating this experiment, I used the experiment design of Janda and Reynolds (2019), mentioned in Section 5.3, as a template. In Janda and Reynolds' experiment, native speakers of Russian were asked to judge the acceptability of corresponding imperfective and perfective verbs in authentic contexts using the scores *Otlično* ‘Excellent’, *Dopustimo* ‘Acceptable’ or *Nevozmožno* ‘Impossible’. A notable difference between the two experiments is that the participants in my experiment were presented with contexts involving one or a few sentences, while Janda and Reynolds gave their participants whole texts with between 1100-1600 words, since the choice of aspect often depends on how one construes the situation as part of the larger context.

The experiment involved one context from the corpus for every verb. Thus, in total there were 51 contexts (17 triads x 3 verb types). These contexts were in turn divided into three groups. When the participants entered the experiment, they were assigned randomly to one of them. As Table 38 shows, each group contained 17 contexts, but only one context per triad. In other words, the participants in Group 1 rated the acceptability of *xlopnut'* 'slam, bang, pop once', *zaxlopnut'* 'slam shut' and *zaxlopat'* 'begin to slam' in the context originally containing *xlopnut'*, the participants in Group 2 rated the acceptability of these verbs in the context originally containing *zaxlopnut'*, and Group 3 rated them in the context originally containing *zaxlopat'*. In this way, the response of the participants in one context did not prime their response in another, and the results of the three contexts pertaining to a triad are independent. Verbs from synonymous Pref-dyads were evenly spread among the three groups and are boldfaced in Table 38. The 17 contexts in a group were displayed in a random order to each participant.

Context originally containing...	Group 1	Group 2	Group 3
Only-Nu	<i>kinut'</i> (na-) <i>listnut'</i> <i>maxnut'</i> <i>ščělknut'</i> <i>tolknut'</i> <i>xlopnut'</i>	<i>gljanut'</i> <i>kinut'</i> (po-) <i>liznut'</i> <i>tknut'</i> <i>topnut'</i>	<i>děrnut'</i> <i>kinut'</i> (za-) <i>kriknut'</i> <i>pixnut'</i> <i>prygnut'</i> <i>trjaxnut'</i>
Pref-Nu	<b><i>vscriknut'</i></b> <b><i>vytrjaxnut'</i></b> <i>zaděrnut'</i> <i>zakinut'</i> <b><i>zapixnut'</i></b> <i>zaprygnut'</i>	<i>nakinut'</i> <i>natolknut'</i> <i>otmaxnut'</i> <b><i>perelistnut'</i></b> <i>zaščělknut'</i> <i>zaxlopnut'</i>	<i>pokinut'</i> <i>pritopnut'</i> <i>progljanut'</i> <b><i>sliznut'</i></b> <b><i>utknut'</i></b>
Pref-Only	<i>pokidat'</i> <i>pritopat'</i> <i>progljadet'</i> <b><i>slizat'</i></b> <b><i>utýkat'</i></b>	<b><i>vscričat'</i></b> <b><i>vytrjasti</i></b> <i>zaděrgat'</i> <i>zakidat'</i> <b><i>zapixat'</i></b> <i>zaprygat'</i>	<i>nakidat'</i> <i>natolkat'</i> <i>otmaxat'</i> <b><i>perelistat'</i></b> <i>zaščělkat'</i> <i>zaxlopat'</i>
#Participants	68	71	64

**Table 38** Distribution of verb contexts and participants between the three survey groups. Verbs from synonymous Pref-dyads are shown in boldface. *Kinut'* 'throw once' is related to three triads. In each group, the participants were presented with one context originally containing *kinut'* and one of the related Pref-Nu and Pref-Only verbs, as indicated by the prefix, e.g. *nakinut'* 'throw onto' and *nakidat'* 'throw a lot of' in Group 1.

### 6.2.2 Selection of contexts

Contexts for the experiment were taken from the RNC. In this section, I describe how contexts were selected for the Pref-Nu and Pref-Only verbs. The selection of

contexts involving Only-Nu verbs is described in Chapter 7 where I consider the results for the Nu-dyads. The contexts themselves are available in Appendix 3.<sup>104</sup>

For the six synonymous Pref-dyads, I tried to choose contexts of potential rivalry. Since the experiment was designed before the case studies in Chapter 4 were fully completed, I selected contexts that seemed possible for both verbs based on what I could learn about the verbs' behavior from smaller samples of 30 sentences from the RNC (years 1950-2019). In the case of *sliznut'* 'lick off' – *slizat'* 'lick off', for example, I did not use the extended metaphorical meaning 'copy' that seems connected only with *slizat'* and selected instead the literal meaning 'lick off' that is common for both:

Context originally containing *sliznut'*:

(151) *Na ščėku Ljuby neožidanno vykatilas' sleza, zažglas', zakrovenela, zasvetilas' na isxodjaščem solnce. Ljuba sliznula slezu.*

'Suddenly a tear fell down on Ljuba's cheek, got warm, mixed with the blood, and shone in the sunrise. Ljuba licked away the tear.'

Context originally containing *slizat'*:

(152) *V dikoj jarosti Makkaviti vcepilsja v stol, prokorjabal na nem desjat' borozd i slizal s pal'cev krov'.*

'In wild anger Makkaviti seized the table, made ten scratches into it, and licked the blood off his fingers.'

As mentioned above, the fact that contexts were selected before a larger amount of corpus data had been explored thoroughly means that another choice of context in some cases could have been better suited to shed light on situations of rivalry. By way of illustration, the corpus study in Chapter 4 showed that *sliznut'* is typical with count nouns in the singular and that *slizat'* is not. The context selected for *sliznut'* in (151) involves the singular form *slezu* 'tear', meaning that this context does not really open up for rivalry. If the experiment was to be conducted again, the given context of *sliznut'* could have been replaced by a context involving a mass noun, such as *krov'* 'blood', since mass nouns were found to be common in the corpus data for both.

For the non-synonymous Pref-dyads, it was expected that the participants always would rate the verb originally appearing in a given context ("the original verb") as "Excellent" and the other verb ("the non-original verb") as Impossible. My main concern was therefore to choose examples that would sound natural without a larger context. In my discussion, I use the terms "original context" and "non-original context" to refer to the context that contained a given verb when it was extracted from the corpus vs. the context that contained the rival verb.

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<sup>104</sup> Long contexts were, if possible, slightly modified. I would like to express my gratitude to my colleague Uliana Petrunina for taking time to look through the selected contexts with a critical eye and helping me to modify them in a way that would sound natural to native speakers.

In addition to this, it was decided to avoid past passive participles. The amount of past passive participles in the data varies across the verbs in the study, but while all of them are attested in active forms, some, including most of the unprefixing verbs, are rarely, or not at all, attested as past passive participles (cf. Section 3.3).

Although selection of contexts for synonymous Pref-dyads for this experiment is not ideal, by discussing the acceptability scores of the participants in light of the specific contexts the verbs appear in we can still gain some insight into the verbs' semantic relationships. In addition, just like the samples of 30 sentences turned out to give an insufficient understanding of the verbs' uses, the corpus studies presented in Chapter 4 are limited. They are furthermore based on a selection of written texts and not the minds of native speakers. The participants were asked to consider the acceptability of the verbs in the context of one sentence, rather than a larger fragment of text. All of this is important to keep in mind when we consider the participants' acceptability scores.

To find out what motivated the participants in their choice of acceptability scores, I could arguably have asked them to leave an explanation for each verb in every context. The drawback of this is that the participants would have been forced to think through their choice, rather than give their intuitive responses, which is the goal of this experiment. The given opportunity was therefore considered, but rejected in order to get as naïve acceptability scores as possible. When analyzing the results, however, I consulted with a number of native speakers who did not participate in the experiment.<sup>105</sup>

### **6.3 Acceptability ratings of non-synonymous Pref-dyads in original contexts**

By and large, the acceptability scores for the non-synonymous Pref-dyads confirm that the participants understood and paid attention to the task: the original verbs are generally considered "Excellent" and the non-original verbs are usually regarded as "Impossible". To make the discussion easier to follow, the results are divided between two sections. In the present section, I show the acceptability scores of Pref-Nu and Pref-Only verbs in their original contexts; in Section 6.4, I discuss the scores of the verbs in their non-original contexts. A verb is judged as an outlier to the expected result if it is considered "Impossible" in its original context or "Excellent" in its non-original context by at least 10% of the participants. Outliers are highlighted in grey in the tables and discussed individually.

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<sup>105</sup> In particular, I would like to thank Anton Soldatov, Daria Kosheleva, Daria Pašnina, Elena Bjørgve, Sergey Say, Svetlana Sokolova and Uliana Petrunina for their willingness to share ideas. All of them were consulted individually at various times in the process.

### 6.3.1 Acceptability ratings of Pref-Nu in original contexts

Table 39 shows the acceptability ratings of the Pref-Nu verbs in their original contexts. As expected, few or none of the participants give the acceptability score “Impossible”. However, there is one extreme outlier – *otmaxnut* ‘wave away’.<sup>106</sup>

Pref-Nu	Excellent	Acceptable	Impossible	Total
<i>Nakinut</i> ‘throw onto’	71 (100%)	0 (0%)	0 (0%)	71 (100%)
<i>Natolknut</i> ‘lead to’	69 (97%)	2 (3%)	0 (0%)	71 (100%)
<i>Otmaxnut</i> ‘wave away’	1 (2%)	13 (18%)	57 (80%)	71 (100%)
<i>Pokinut</i> ‘leave’	57 (89%)	7 (11%)	0 (0%)	64 (100%)
<i>Pritopnut</i> ‘make a little stamp’	47 (73%)	16 (25%)	1 (2%)	64 (100%)
<i>Progljanut</i> ‘appear’	47 (74%)	13 (20%)	4 (6%)	64 (100%)
<i>Zaděrnut</i> ‘close (curtains)’	68 (100%)	0 (0%)	0 (0%)	68 (100%)
<i>Zakinut</i> ‘throw somewhere’	68 (100%)	0 (0%)	0 (0%)	68 (100%)
<i>Zaprygnut</i> ‘jump on(to)’	60 (88%)	8 (12%)	0 (0%)	68 (100%)
<i>Zaščelknut</i> ‘latch’	69 (97%)	2 (3%)	0 (0%)	71 (100%)
<i>Zaxlopnut</i> ‘slam shut’	71 (100%)	0 (0%)	0 (0%)	71 (100%)

Table 39 Acceptability ratings of Pref-Nu in original contexts.

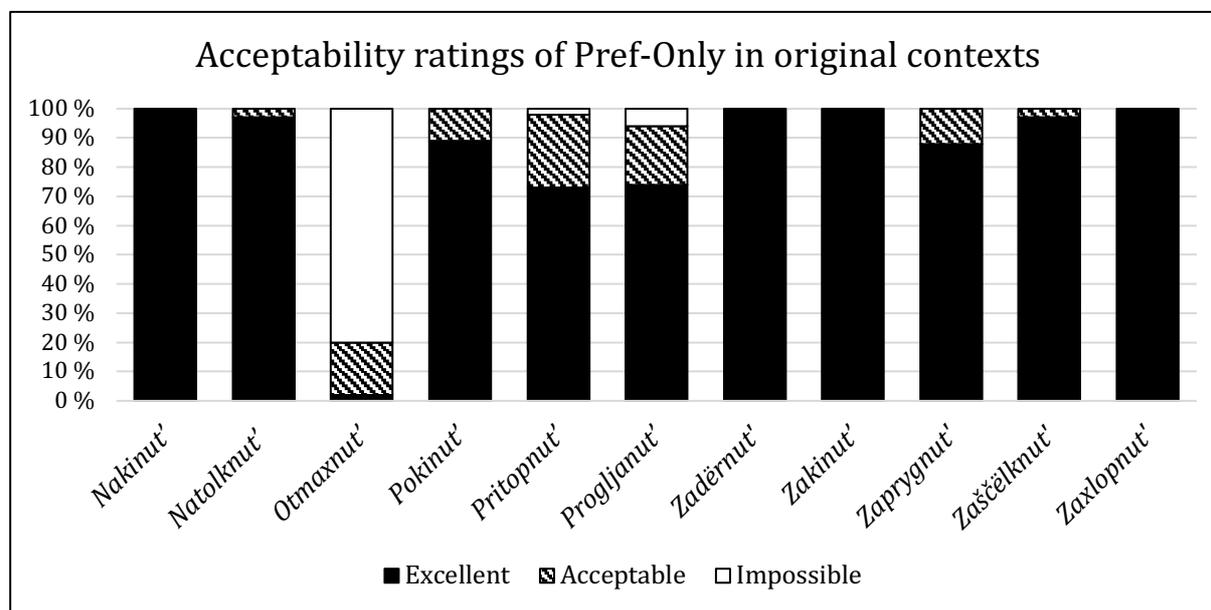


Figure 21 Acceptability ratings of Pref-Nu in original contexts.

<sup>106</sup> *Pritopnut* ‘make a little stamp’ and *progljanut* ‘appear’ are not outliers, but are by some participants seen as “Impossible” in their original contexts. The reason why is not obvious, but for *progljanut* some young native speakers I have asked claim to hardly be familiar with the verb and say that they therefore would have felt unsure how to judge its acceptability in a context. Both of the given verbs have lower token frequencies in the corpus than most of the other verbs in the experiment (86 ex. and 179 ex.).

The context of *otmaxnut* ‘wave away’ selected for the experiment is shown below. As elsewhere in this chapter, I show contexts from the experiment as they were presented to the participants, i.e. with all three verbs. The two verbs considered in the present discussion are shown in boldface.

- (153) – *Možet, mne vyjti? – sprosíl Xvatov. Kapitan blagorodno [maxnul/otmaxal/otmaxnul] rukoj.*  
“Perhaps, I should leave?” Xvatov asked. The captain waved [him away] with his hand in a noble fashion.”

It is not obvious why most of the participants considered *otmaxnut* “Impossible”. However, it is worth noticing that the unprefixated verb *maxnut* ‘wave once’ in the same context was considered “Excellent” by 97% (see Table 51 in Section 7.2). In other words, without a larger context, here, *maxnut* was largely felt to be a more natural option than *otmaxnut*.

To explain this, one possibility is to look at the token frequencies of the verbs in the corpus, which show that *maxnut* is many times more frequent than *otmaxnut* (6,294 vs. 65 ex.). Moreover, *rukoj* ‘with the hand’ appears to be a prototypical context of *maxnut* (4,044 ex., 64%) and a less typical context of *otmaxnut* (7 ex., 11%). In addition, we can notice that the context is not explicit with regard to the exact type of wave that the captain makes, and in the English gloss ‘him away’ is therefore placed in square brackets: he could be simply making a wave (*maxnut*), or he could specifically be waving in a certain way to signal that Xvatov should leave (*otmaxnut*). Thus, although it is impossible to conclude what exactly motivated the response of the participants, it seems reasonable that seeing one very familiar verb and one less familiar verb in a context that in principle is open for both, many participants would feel inclined to consider the former as a much more acceptable option or even the only one possible, especially since the context in question, *rukoj*, is most typical of the former.<sup>107</sup>

### 6.3.2 Acceptability ratings of Pref-Only in original contexts

The Pref-Only verbs are also largely rated as “Excellent” in their original context. There is one outlier – *zaxlopat* ‘begin to slam’.<sup>108</sup>

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<sup>107</sup> Indirect support to the influence of *maxnut* ‘wave once’ furthermore comes from the results of a pilot version of this experiment that included only Pref-Nu and Pref-Only verbs. Not having the alternative of *maxnut*, 40% of 375 participants rated *otmaxnut* ‘wave away’ as “Excellent” in the given context, 42% considered the verb “Acceptable” and 18% saw it as “Impossible”. These scores are still much lower than for the remaining verbs in Table 39, but show that the inclusion of *maxnut* probably had effect.

<sup>108</sup> Two other verbs, *otmaxat* ‘cover a large distance in certain time’ and *pokidat* ‘throw (delim., distrib.)’ also receive more varied scores than we would expect. Possibly, the reason for this is connected with their distribution: *otmaxat* has a much lower token frequency in the corpus than most of the other verbs in this study (81 examples, see Table 19 in Section 4.3), and, as pointed out in a footnote in Section 4.4.3, the perfective verb *pokidat* is extremely rare compared to the imperfective verb *pokidat* ‘leave, abandon’.

Pref-Only	Excellent	Acceptable	Impossible	Total
<i>Nakidat'</i> 'throw, accum.'	54 (84%)	10 (16%)	0 (0%)	64 (100%)
<i>Natolkat'</i> 'push, accum.'	59 (92%)	5 (8%)	0 (0%)	64 (100%)
<i>Otmaxat'</i> 'cover a large distance in X time, etc.'	51 (80%)	10 (16%)	3 (4%)	64 (100%)
<i>Pokidat'</i> 'throw (delim., distrib.)'	44 (65%)	22 (32%)	2 (3%)	68 (100%)
<i>Pritopat'</i> 'arrive by foot'	63 (93%)	4 (6%)	1 (1%)	68 (100%)
<i>Progljadet'</i> 'overlook, etc.'	68 (100%)	0 (0%)	0 (0%)	68 (100%)
<i>Zadërgat'</i> 'pull, ingress.'	68 (96%)	3 (4%)	0 (0%)	71 (100%)
<i>Zakidat'</i> 'cover/fill by throwing'	69 (97%)	2 (3%)	0 (0%)	71 (100%)
<i>Zaprygat'</i> 'jump, ingress.'	70 (99%)	1 (1%)	0 (0%)	71 (100%)
<i>Zaščëlkat'</i> 'click, ingress.'	56 (88%)	6 (9%)	2 (3%)	64 (100%)
<i>Zaxlopat'</i> 'slam, ingress'	32 (50%)	21 (33%)	11 (17%)	64 (100%)

Table 40 Acceptability ratings of Pref-Only in original contexts.

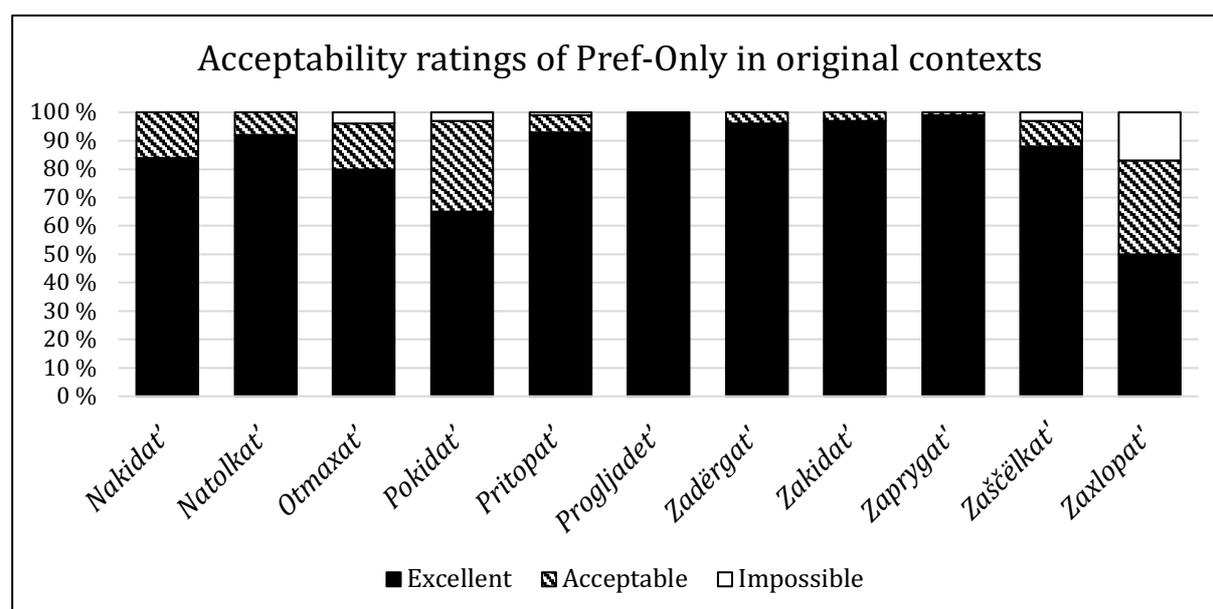


Figure 22 Acceptability ratings of Pref-Only in original contexts.

The context selected for *zaxlopat'* in the experiment describes a situation where the front doors of a house begin to slam because of an explosion:

(154) *Artemij švyrnul granatu v dvernoj proem, ot vzryvnoj volny [xlopnuli/zaxlopnuli/zaxlopali] dveri sosednix kvartir.*

'Artemij threw the grenade into the doorway, and from the explosion the doors in the neighbor apartments began to slam.'

There are no syntactic or lexical reasons to explain why 50% of the participants rated *zaxlopat'* as "Impossible" or only "Acceptable" in this context: *zaxlopali dveri*

‘the doors began to slam’ occurs as a collocation in 34 examples in the RNC (1950-2019). However, according to a native speaker consultant, there may be a natural explanation. As a verb with ingressive meaning (cf. 4.4.4), *zaxlopat’* specifically entails that the doors went back and forth several times. This is easy to imagine for a swing door, for example in a restaurant, but not so easy to imagine for a regular apartment door that in the case of an explosion probably is more likely to burst open or slam shut. To explain the low scores for *zaxlopat’*, I therefore suggest that some participants have felt that the meaning ‘begin to slam’ sounds unnatural in this specific context. In favor of the original verb *zaxlopat’*, another native speaker consultant points out that the contexts involve several doors and that the explosion in this way may have caused a succession of slamming doors motivating the ingressive meaning ‘begin to slam’.

#### 6.4 Acceptability ratings of non-synonymous Pref-dyads in non-original contexts

We now turn to the acceptability scores of the verbs in their non-original contexts. Since the verbs in these Pref-dyads have different lexical meanings, they are expected to be considered “Impossible” in their non-original contexts. This is largely found to be the case. The section follows the same structure as the previous one above.

##### 6.4.1 Acceptability ratings of Pref-Nu in contexts originally containing Pref-Only

Table 41 confirms that the two verbs in these Pref-dyads do not occur in the same contexts: the Pref-Nu verbs in question are considered “Impossible” in the contexts originally containing their related Pref-Only-verbs. No outliers are attested. The fact that 14% of the participants rate *otmaxnut’* as “Acceptable” in the context of *otmaxat’* might have to do with some participants not being very familiar with this verb in general (cf. discussion of *otmaxnut’* in 6.3.1).

Pref-Nu	Excellent	Acceptable	Impossible	Total
<i>Nakinut’</i> ‘throw onto’	0 (0%)	1 (2%)	63 (98%)	64 (100%)
<i>Natolknut’</i> ‘lead to’	0 (0%)	1 (2%)	63 (98%)	64 (100%)
<i>Otmaxnut’</i> ‘wave away’	0 (0%)	9 (14%)	55 (86%)	64 (100%)
<i>Pokinut’</i> ‘leave’	0 (0%)	1 (1%)	67 (99%)	68 (100%)
<i>Pritopnut’</i> ‘make a little stamp’	0 (0%)	1 (1%)	67 (99%)	68 (100%)
<i>Progljanut’</i> ‘appear’	0 (0%)	4 (6%)	64 (94%)	68 (100%)
<i>Zaděrnut’</i> ‘close (curtains)’	0 (0%)	0 (0%)	71 (100%)	71 (100%)
<i>Zakinut’</i> ‘throw somewhere’	0 (0%)	8 (11%)	63 (89%)	71 (100%)
<i>Zaprygnut’</i> ‘jump on(to)’	0 (0%)	0 (0%)	71 (100%)	71 (100%)
<i>Zaščělknut’</i> ‘latch’	0 (0%)	2 (4%)	62 (96%)	64 (100%)
<i>Zaxlopnut’</i> ‘slam shut’	1 (1%)	3 (5%)	60 (94%)	64 (100%)

Table 41 Acceptability ratings of Pref-Nu in contexts originally containing Pref-Only.

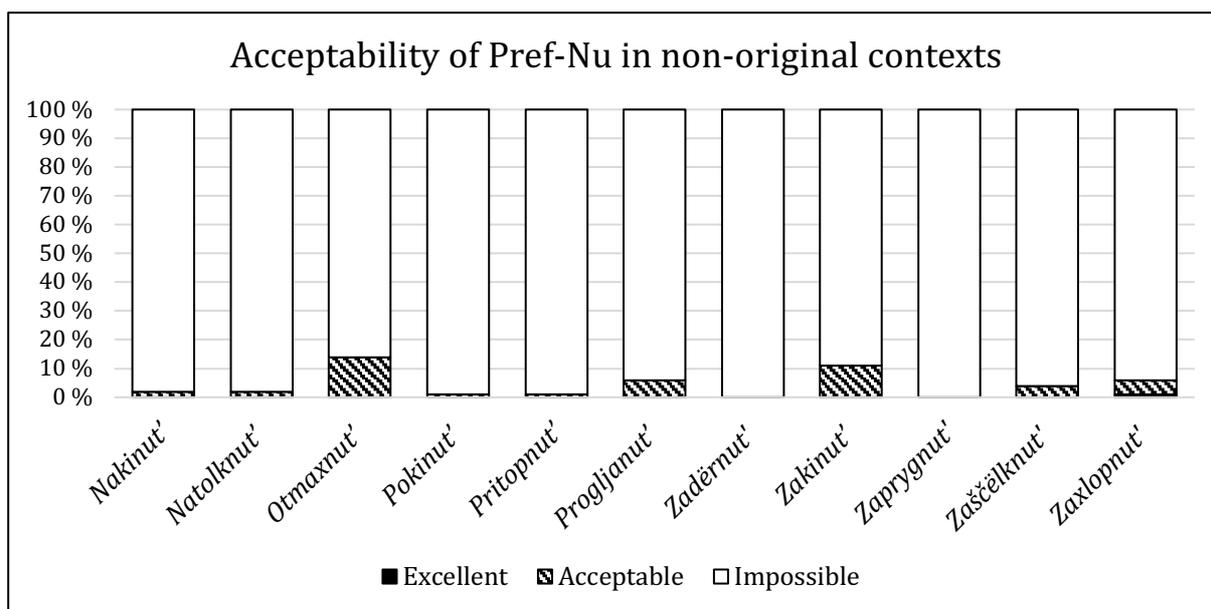


Figure 23 Acceptability ratings of Pref-Nu in contexts originally containing Pref-Only.

#### 6.4.2 Acceptability ratings of Pref-Only in contexts originally containing Pref-Nu

Table 42 confirms that the relevant Pref-Only verbs are not possible in the same contexts as the corresponding Pref-Nu verbs, which have other lexical meanings. The table has no outliers according to the 10% criterion above.

Pref-Only	Excellent	Acceptable	Impossible	Total
<i>Nakidat'</i> 'throw, accum.'	0 (0%)	0 (0%)	71 (100%)	71 (100%)
<i>Natolkat'</i> 'push, accum.'	0 (0%)	0 (0%)	71 (100%)	71 (100%)
<i>Otmxat'</i> 'cover a large distance in X time, etc.'	0 (0%)	1 (1%)	70 (99%)	71 (100%)
<i>Pokidat'</i> 'throw (delim., distrib.)'	3 (5%)	10 (15%)	51 (80%)	64 (100%)
<i>Pritopat'</i> 'arrive by foot'	0 (0%)	1 (6%)	63 (94%)	64 (100%)
<i>Progljadet'</i> 'overlook, etc.'	0 (0%)	0 (0%)	64 (100%)	64 (100%)
<i>Zadërgat'</i> 'pull, ingress.'	2 (3%)	13 (19%)	53 (78%)	68 (100%)
<i>Zakidat'</i> 'cover/fill by throwing'	0 (0%)	0 (0%)	68 (100%)	68 (100%)
<i>Zaprygat'</i> 'jump, ingress.'	0 (0%)	0 (0%)	68 (100%)	68 (100%)
<i>Zaščëlkat'</i> 'click, ingress.'	0 (0%)	0 (0%)	71 (100%)	71 (100%)
<i>Zaxlopat'</i> 'slam, ingress'	0 (0%)	0 (0%)	71 (100%)	71 (100%)

Table 42 Acceptability ratings of Pref-Only in contexts originally containing Pref-Nu.

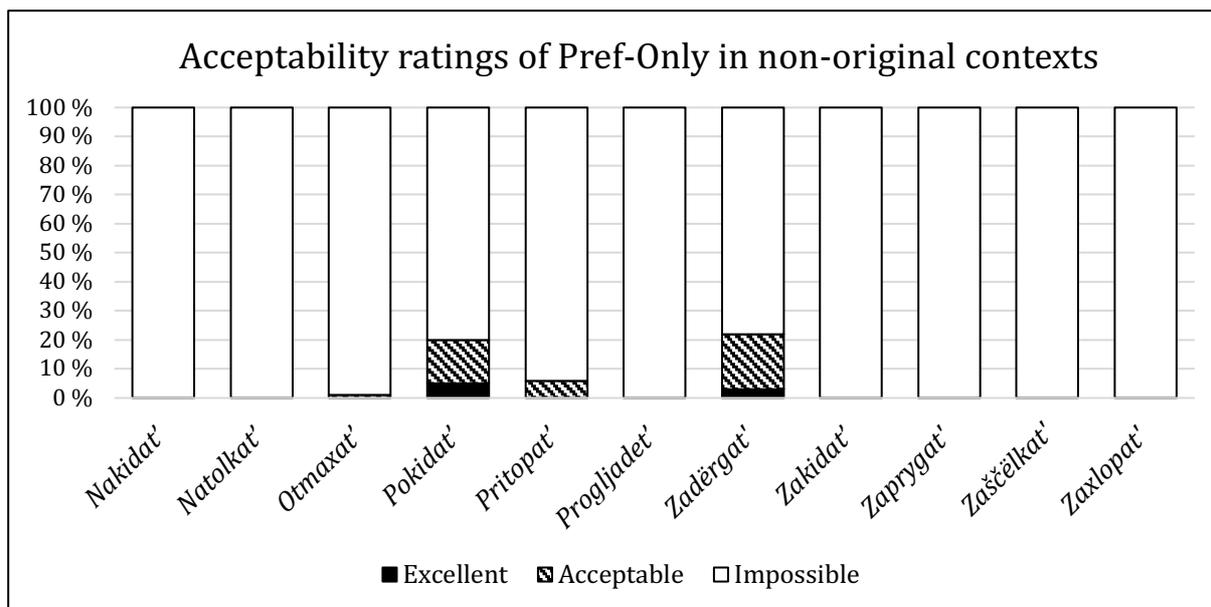


Figure 24 Acceptability ratings of Pref-Only in contexts originally containing Pref-Nu.

Although none of the verbs in Table 42 are strong outliers, a comment is still in order about *pokidat'* and *zadërgat'*, which are rated as “Excellent” or “Acceptable” by 20% and 22% of the participants, respectively.

*Pokidat'* is an “aspectual homonym” that means ‘leave’ as an imperfective and ‘throw for some time’ or ‘throw in a random fashion’ as a perfective. The imperfective *pokidat'* ‘leave, abandon’ is the aspectual partner of *pokinut'* ‘leave, abandon’ and is much more widely attested in the corpus than the perfective verb *pokidat'* (see footnote in Section 4.4.3). The context selected for the experiment has to do with leaving (155), and it is therefore likely that the participants interpreted *pokidala* as a past tense form of the imperfective verb ‘leave’ and that what the scores in Table 42 really tell us is to what extent the participants felt that the given context allows for the imperfective aspect, not whether the context allows for the perfective verb *pokidat'*.

(155) *S groxotom naletela èlektrička i, zabrav vsej passažirov,*  
*[kinula/pokidala/pokinula] stanciju.*

‘With a thunder the train flew in, and, when all the passengers had got on board, it left the station.’

As for *zadërgat'*, the relevant context is arguably possible for both verbs in the Pref-dyad: *zadërnut'* means that the editor closed the curtains and *zadërgat'* expresses that he started to pull them. However, while both verbs make sense, this is clearly an uncommon way to use *zadërgat'* and only 2 (3%) of the participants consider it to be “Excellent” in the context. The verb *zadërnut'* is, on the other hand, rated as “Excellent” by 100% (cf. Table 39).

(156) *Redaktor vstal iz-za stola, podošel k oknu, postojal okolo nego i [dërnul/zadërgal/zadërnul] štorku.*

'The editor raised from the table, walked up to the window, stood there for a while and closed the curtains.'

#### **6.4.3 Summary of the results for non-synonymous Pref-dyads**

The vast majority of the participants consider the non-synonymous Pref-Nu and Pref-Only verbs as "Excellent" in their original context and "Impossible" in their non-original context. This confirms that the verbs have different lexical meanings and also that the participants understood and attentively performed the task. In the cases where the scores are not in line with the expected pattern, I have suggested some possible explanations.

#### **6.5 Acceptability ratings of synonymous Pref-dyads**

Let us now move on to the acceptability scores of the six synonymous Pref-dyads. Their acceptability scores are much more varied and do not display any consistent pattern. The results for each verb and context are shown in the tables and figures on the next pages. Rows containing the original verb are highlighted in grey

	<b>Verb</b>	<b>Excellent</b>	<b>Acceptable</b>	<b>Impossible</b>	<b>Total</b>
Context of	<i>Perelistnut'</i>	56 (79%)	14 (20%)	1 (1%)	71 (100%)
Pref-Nu	<i>Perelistat'</i>	30 (42%)	30 (42%)	11 (16%)	71 (100%)
Context of	<i>Perelistnut'</i>	52 (81%)	11 (17%)	1 (1%)	64 (100%)
Pref-Only	<i>Perelistat'</i>	21 (33%)	32 (50%)	11 (17%)	64 (100%)

Table 43 Acceptability ratings of *perelistnut'* 'flip' and *perelistat'* 'flip'.

	<b>Verb</b>	<b>Excellent</b>	<b>Acceptable</b>	<b>Impossible</b>	<b>Total</b>
Context of	<i>Sliznut'</i>	46 (72%)	12 (19%)	6 (9%)	64 (100%)
Pref-Nu	<i>Slizat'</i>	6 (9%)	25 (39%)	33 (52%)	64 (100%)
Context of	<i>Sliznut'</i>	38 (56%)	22 (32%)	8 (12%)	68 (100%)
Pref-Only	<i>Slizat'</i>	39 (57%)	24 (35%)	5 (8%)	68 (100%)

Table 44 Acceptability ratings of *sliznut'* 'lick off' and *slizat'* 'lick off'.

	<b>Verb</b>	<b>Excellent</b>	<b>Acceptable</b>	<b>Impossible</b>	<b>Total</b>
Context of	<i>Utknut'</i>	58 (91%)	5 (8%)	1 (1%)	64 (100%)
Pref-Nu	<i>Utýkat'</i>	1 (6%)	0 (0%)	63 (94%)	64 (100%)
Context of	<i>Utknut'</i>	0 (0%)	4 (6%)	64 (94%)	68 (100%)
Pref-Only	<i>Utýkat'</i>	59 (87%)	8 (12%)	1 (1%)	68 (100%)

Table 45 Acceptability ratings of *utknut'* 'stick into' and *utýkat'* 'stick all over'.

	<b>Verb</b>	<b>Excellent</b>	<b>Acceptable</b>	<b>Impossible</b>	<b>Total</b>
Context of	<i>Vskriknut'</i>	51 (75%)	15 (22%)	2 (3%)	68 (100%)
Pref-Nu	<i>Vskričat'</i>	12 (18%)	28 (41%)	28 (41%)	68 (100%)
Context of	<i>Vskriknut'</i>	25 (35%)	27 (38%)	19 (27%)	71 (100%)
Pref-Only	<i>Vskričat'</i>	27 (38%)	27 (38%)	17 (24%)	71 (100%)

Table 46 Acceptability ratings of *vskriknut'* 'give sudden shout' and *vskričat'* 'exclaim'.

	<b>Verb</b>	<b>Excellent</b>	<b>Acceptable</b>	<b>Impossible</b>	<b>Total</b>
Context of	<i>Vytrjaxnut'</i>	44 (65%)	18 (26%)	6 (9%)	68 (100%)
Pref-Nu	<i>Vytrjasti</i>	22 (32%)	28 (41%)	18 (27%)	68 (100%)
Context of	<i>Vytrjaxnut'</i>	61 (86%)	10 (14%)	0 (0%)	71 (100%)
Pref-Only	<i>Vytrjasti</i>	34 (48%)	31 (44%)	6 (8%)	71 (100%)

Table 47 Acceptability ratings of *vytrjaxnut'* 'shake out' and *vytrjasti* 'shake out'.

	<b>Verb</b>	<b>Excellent</b>	<b>Acceptable</b>	<b>Impossible</b>	<b>Total</b>
Context of	<i>Zapixnut'</i>	43 (63%)	24 (35%)	1 (2%)	68 (100%)
Pref-Nu	<i>Zapixat'</i>	37 (55%)	24 (35%)	7 (10%)	68 (100%)
Context of	<i>Zapixnut'</i>	40 (56%)	27 (38%)	4 (6%)	71 (100%)
Pref-Only	<i>Zapixat'</i>	30 (42%)	30 (42%)	11 (16%)	71 (100%)

Table 48 Acceptability ratings of *zapixnut'* 'shove into' and *zapixat'* 'shove into'.

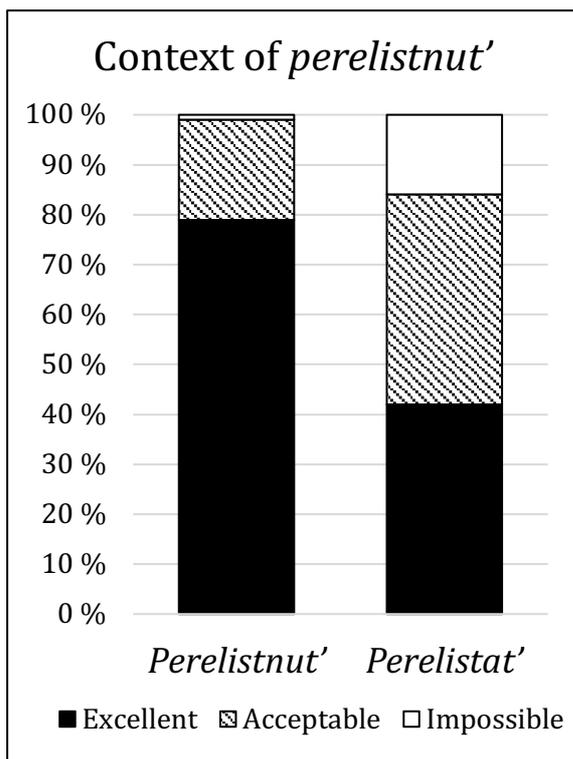


Figure 25 Acceptability ratings in the context originally containing *perelistnut'* (Pref-Nu).

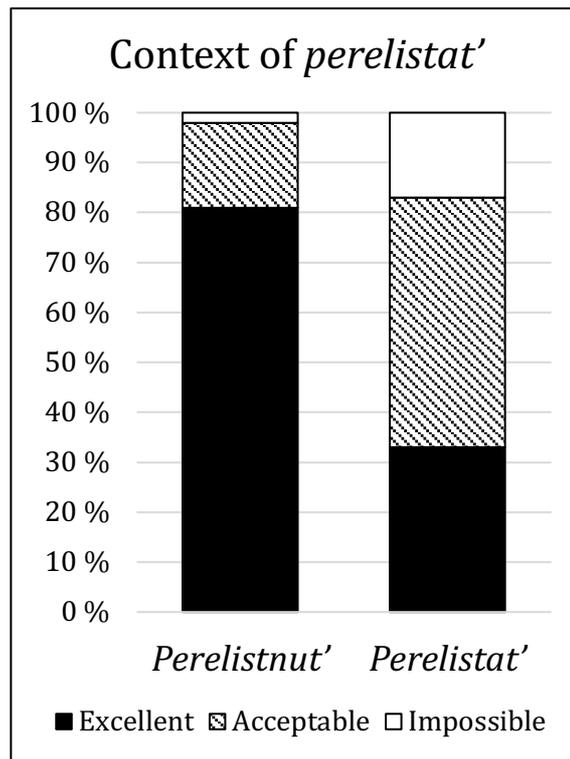


Figure 26 Acceptability ratings in the context originally containing *perelistat'* (Pref-Only).

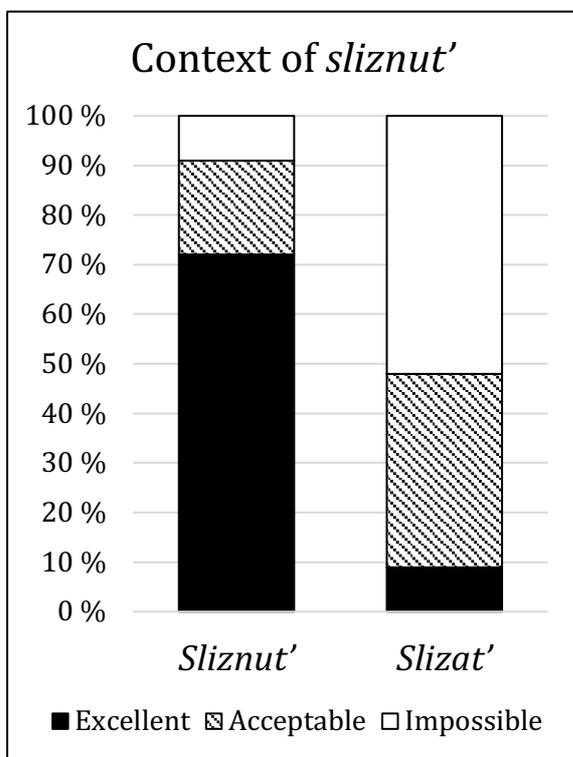


Figure 27 Acceptability ratings in the context originally containing *sliznut'* (Pref-Nu).

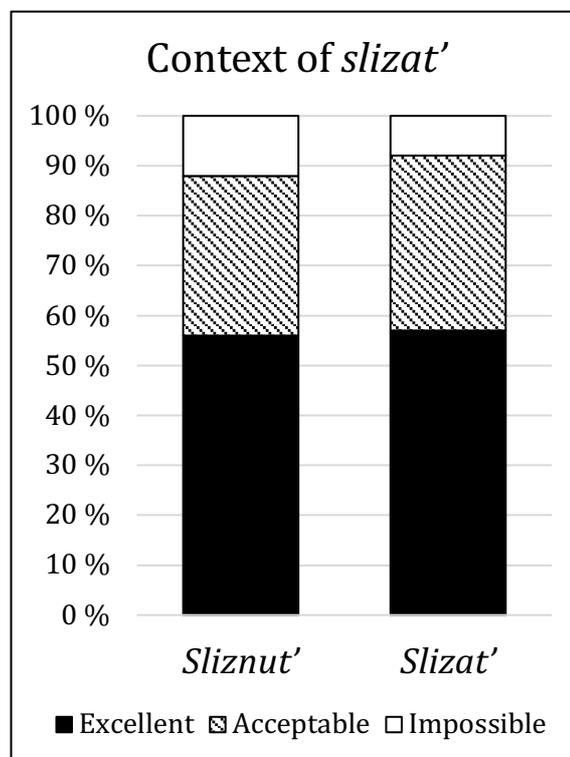


Figure 28 Acceptability ratings in the context originally containing *slizat'* (Pref-Only).

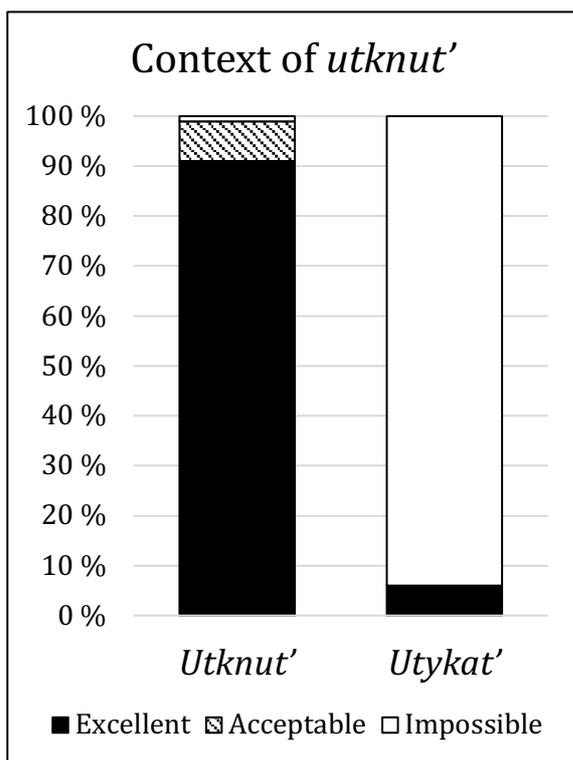


Figure 29 Acceptability ratings in the context originally containing *utknut'* (Pref-Nu).

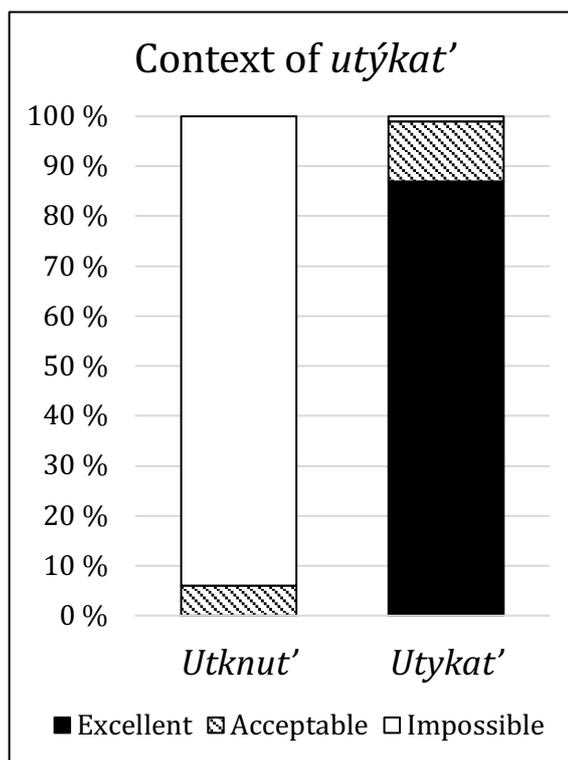


Figure 30 Acceptability ratings in the context originally containing *utýkat'* (Pref-Only).

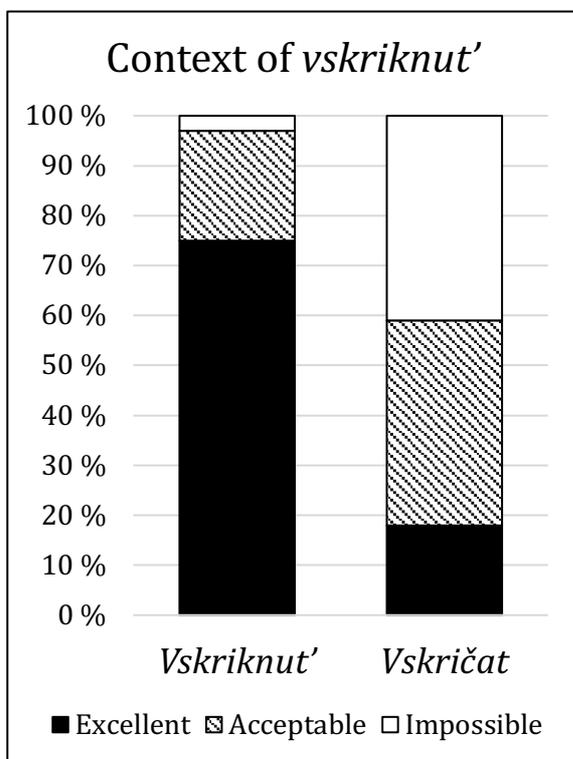


Figure 31 Acceptability ratings in the context originally containing *vskriknut'* (Pref-Nu).

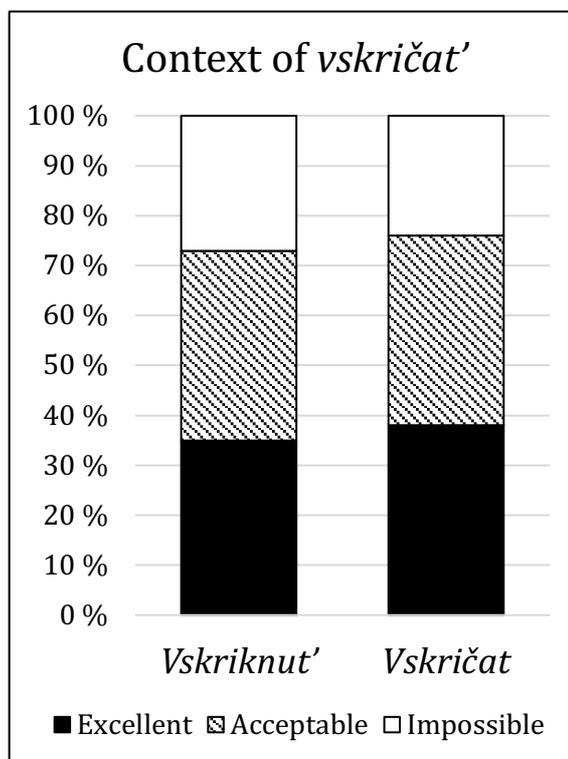


Figure 32 Acceptability ratings in the context originally containing *vskričat'* (Pref-Only).

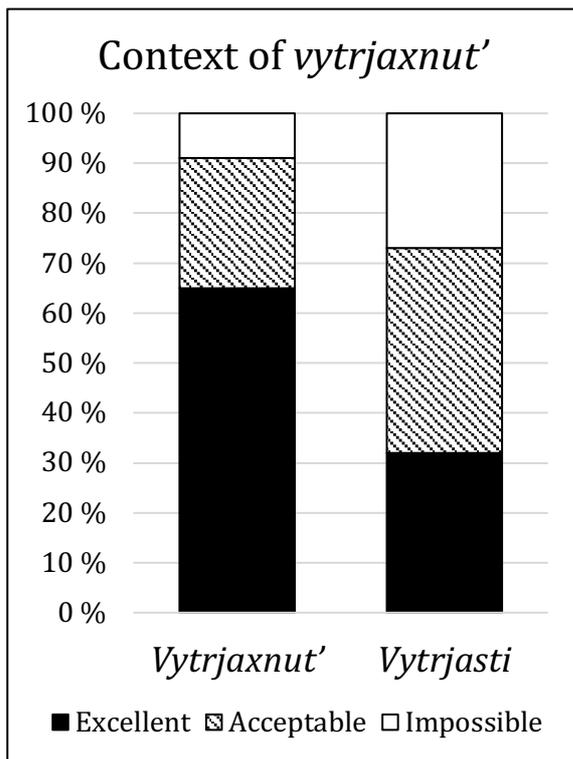


Figure 33 Acceptability ratings in the context originally containing *vytrjaxnut'* (Pref-Nu).

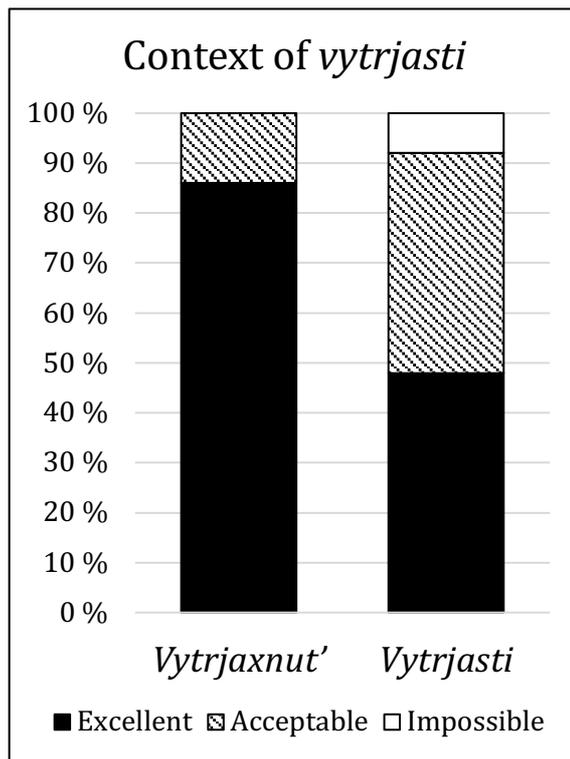


Figure 34 Acceptability ratings in the context originally containing *vytrjasti* (Pref-Only).

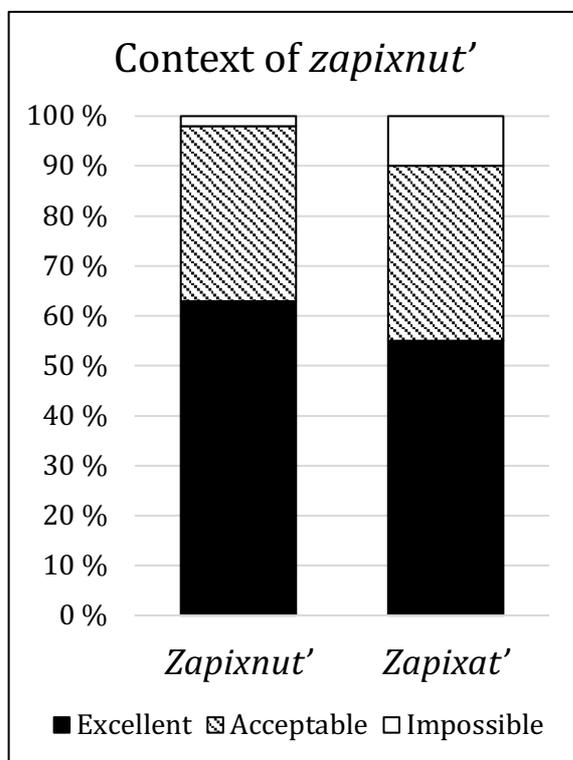


Figure 35 Acceptability ratings in the context originally containing *zapixnut'* (Pref-Nu).

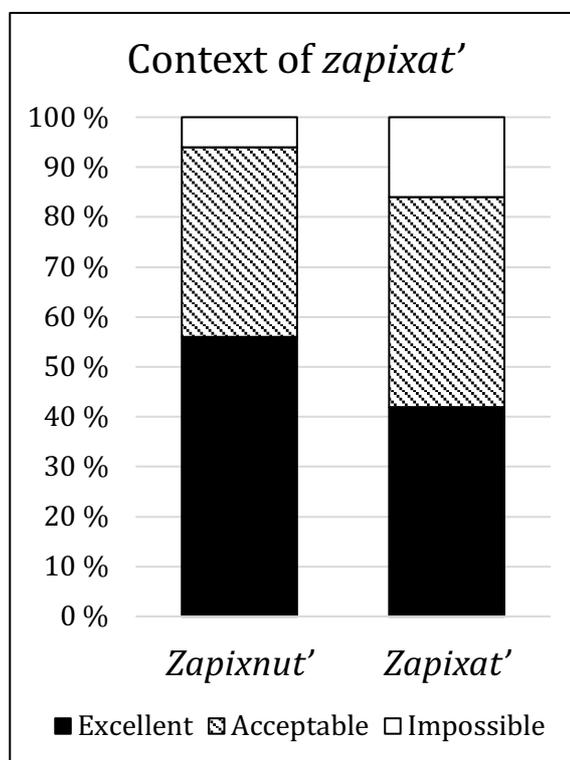


Figure 36 Acceptability ratings in the context originally containing *zapixat'* (Pref-Only).

As the tables and figures show, we are not dealing with one clear tendency in the results: in some contexts and Pref-dyads, the verbs receive a similar distribution of acceptability scores, in others they do not. Recall that the participants were able to give the same acceptability score for Pref-Nu and Pref-Only in every context. The large proportion of “Acceptable” may indicate that they for some reason were reluctant to consider both verbs as “Excellent”. In fact, in these Pref-dyads, the total sum of “Excellent” for the two rival forms never gets higher than 134% (*vytrjaxnut’* – *vytrjasti* in the context originally containing *vytrjasti*). On the one hand, this could be taken as support for the idea that the two verbs in Pref-dyads always have slightly different (nuances of) meaning. A second possibility is that the near-synonymous meaning of the verbs made the participants less sure of their intuition in many contexts and less willing to give the highest score. In order to discuss the verbs, I find it useful to divide them into four subgroups of contexts that display a similar distribution of scores.

The first group contains the contexts of *utknut’* ‘stick into’ and *utýkat* ‘stick into (all over)’, see Table 45, Figures 29 and 30. This Pref-dyad stands out from the others insofar as the two verbs clearly express different situations. The reason why they are nevertheless considered synonymous is because the prefix *u-* yields the same idea of PLACING or FITTING in both verbs (see Section 4.5.6). In this way, *utknut’* and *utýkat* clearly show the effect of *-nu-* (one “quantum”) and absence of *-nu-* (many “quanta”). Both of these verbs are predominantly considered “Excellent” in their original context and “Impossible” in their non-original context.

Context originally containing *utknut’*:

(157) *Artur s Petrovičem pritvorilis’ spjaščimi, [tknuli/utknuli/utýkali] golovy v složennye na kolenjax ruki, i ix ne stali trevožit’.*

‘Artur and Petrovič pretended to be asleep, stuck their heads into their hands that were folded on their knees, and no one tried to disturb them.’

Context originally containing *utýkat*:

(158) *Pered Borisom postavili neprostuju zadaču: sdelat’ «superavtomobil’ 2000 goda». Prežde vsego, mašinu [tknuli/utknuli/utýkali] monitorami, kotorye prinimali telekanaly so vsego mira.*

‘Boris was put to a challenging task: to create “the best car of the year 2000”. [They] started by sticking the car full of monitors that received TV-channels from all over the world.’

The second group contains the original contexts of *sliznut’* ‘lick off’ and *vskriknut’* ‘give a sudden shout’. These contexts are characterized by high acceptability scores for the original verb and low acceptability scores for the non-original verb (*slizat’* ‘lick off’ and *vskričat’* ‘exclaim’). Both of these contexts, shown in (159) and (160) below, involve elements that in Chapter 4 were found to be typical for the original verb and marginal for the non-original verb, namely a countable direct object in the singular for *sliznut’* (*slezu* ‘tear’) and the prepositional phrase *ot čego* ‘from

something' (here, *ot neožidannosti* 'in surprise') for *vskriknut'*. The low scores of *slizat'* and *vskričat'* in these contexts confirm the conclusion from the corpus-based study in Chapter 4 that the two Pref-dyads in question are not completely synonymous. Contexts with elements that support the semantics of only one verb, here the ideas of one lick and a sudden shout, impose limitations on the verb choice.

Context originally containing *sliznut'*:

(159) *Na ščěku Ljuby neožidanno vykatilas' sleza, zažglas', zakrovenela, zasvetilas' na isxodjaščem solnce. Ljuba [liznula/slizala/sliznula] slezu.*

'Suddenly a tear fell down on Ljuba's cheek, got warm, mixed with the blood, and shone in the sunrise. Ljuba licked away the tear.'

Context originally containing *vskriknut'*:

(160) *Ja ne ljublju kolbasu, — proiznės Xolmogorov. Mladšen'kij počti [kriknul/vskriknul/vskričal] ot neožidannosti: "Razve možno prožit' bez kolbasy?!"*

"I don't like sausage," Xolmogorov said. Mladšen'kij almost cried out in surprise, "Is it really possible to live without sausage?"

The third subgroup involves the contexts originally containing *slizat'* 'lick off', *vskričat'* 'exclaim', *zapixnut'* 'shove into' and *zapixat'* 'shove into'. In these four contexts, Pref-Nu and Pref-Only receive very similar scores. Unlike the contexts in the second subgroup, we do not find elements that are specifically connected with one verb in the Pref-dyad: both *sliznut'* and *slizat'* are typical with mass nouns like *krov'* 'blood' (Section 4.5.4), *vskriknut'* occurs like *vskričat'* with speech clauses (Section 4.5.7) and *zapixnut'* and *zapixat'* both imply the prepositional phrase *vo čto* (Section 4.5.8). In these contexts, the given verbs appear to function as very close synonyms, and in this way the experiment seems to reinforce the conclusions from the corpus-based study in Chapter 4.

Context originally containing *slizat'*:

(161) *V dikoj jarosti Makkaviti vcepilsja v stol, prokorjabal na nem desjat' borozd i [liznul/slizal/sliznul] s pal'cev krov'.*

'In wild anger Makkaviti seized the table, made ten scratches into it, and licked the blood off his fingers.'

Context originally containing *vskričat'*:

(162) — *Ostav'te menja, Oleg, požalujsta, — poprosila ona. Lopnulo togda ego naprjažěnnoe spokojstvie. — Da pojmi že ty, nakonec, čto ja v tebja vljublěn! — [kriknul/vskriknul/vskričal] on.*

"Leave me alone, Oleg, please," she begged. At this point he could no longer keep calm [...]. "Will you finally understand that I am in love with you!" he cried.'

Context originally containing *zapixnut'*:

(163) — *Odnaždy nam popalsja pokojnik s očën' nastyrnymi rodstvennikami, oni prjamo-taki nasil'no [pixnuli/zapixali/zapixnuli] otcu Aleksiju kupjuru v karman, — rasskazyvaet otec Nikon.*

‘‘One time we buried a deceased person with very pushy relatives; they literally stuffed money into father Aleksej’s pockets by force,’’ tells father Nikon.’

Context originally containing *zapixat'*:

(164) *Ja rešila svarit' mužu bul'on. Čto mozet byt' prošče, kazalos' mne. Kupila kuricu, [pixnula/zapixala/zapixnula] v kastrjulju, zalila vodoj.*

‘I decided to make soup for my husband. What could be easier, I thought. I bought chicken, stuffed it into the pot, and poured water over it.’

Although the acceptability scores of the verbs in these contexts indicate a high degree of similarity in lexical meaning, they do not in themselves prove that the verbs are identical. An alternative way of understanding the results is that the contexts allow for two interpretations of the verb activity. By way of example, Makkaviti in (161) might have removed the blood from his fingers with one lick of the tongue, but he might also have licked a few times; *vskriknut'* might emphasize the intensity of the shout more than *vskričat'*; *zapixat'* might express an action that requires more effort (and more pushes) than *zapixnut'*. Native speakers I have consulted confirm that they feel a difference between the verbs, but do not always agree on what it is, especially in the case of *zapixnut'* and *zapixat'*, that appear to be the most synonymous Pref-dyad in this study.

The fourth subgroup includes the contexts of *perelistnut'* ‘flip’ and *perelistat'* ‘flip’ as well as *vytrjaxnut'* ‘shake out’ – *vytrjasti* ‘shake out’. Here, Pref-Nu is strongly preferred in both contexts although, according to the corpus data in Chapter 4, Pref-Only should be a natural alternative too:

Context originally containing *perelistnut'*:

(165) *Prjaničkov stojal u stola. On vzjal tetrad' i [listnul/perelistal/perelistnul] neskol'ko stranic.*

‘Prjaničkov stood by the table. He grabbed the notebook and flicked through a few pages.’

Context originally containing *perelistat'*:

(166) *Nelli Sergeevna zašla k Larise v komnatu i uvidela u neë knigu s zakladkoj. Ona vzjala v ruki, pročitala nazvanie, [listnula/perelistala/perelistnula] neskol'ko stranic.*

‘Nelli Sergeevna stopped by Larisa in her room and noticed a book with a bookmark. She grabbed it into her hands, read the title and flicked through a few pages.’

Context originally containing *vytrjaxnut'*:

(167) *General Sivers sel na pesok, snjal tapki, [trjaxnul/vytrjaxnul/vytrjas] ix i, ne toropjas, nadel snova.*

'General Sivers sat down in the sand, pulled off his slippers, shook them thoroughly, and slowly put them on again.'

Context originally containing *vytrjasti*:

(168) *My koe-kak [trjaxnuli/vytrjaxnuli/vytrjasli] pesok iz obuvi, nadeli ee i otpravilis' v gorod.*

'Somehow we managed to shake the sand out of the shoes, and we put them on again and set off towards the city.'

The contexts of *perelistnut'* and *perelistat'* are maximally similar in the sense that both involve the direct object *neskol'ko stranic* 'a few pages'. It is not clear why *perelistnut'* is so strongly preferred, but what the results clearly show is that the verbs are not completely synonymous to native speakers. Had they been, the scores would have been more similar. As for *vytrjaxnut'* and *vytrjasti*, it is worth noticing that both contexts involve a literal meaning and in 4.5.3 literal use was found to be most common for *vytrjaxnut'* (though possible for *vytrjasti*). This might explain why *vytrjaxnut'* receives higher scores than *vytrjasti* in both contexts. Another explanation might be stylistic: some native speakers argue that *vytrjasti* sounds more colloquial. However, if this is the case, it is not mentioned in dictionaries and it is also hard to test on corpus data.<sup>109</sup> A third possibility, which goes for both of these Pref-dyads, is that the Pref-Nu verbs somehow represent a more "neutral" choice that sounds natural in more contexts than the corresponding Pref-Only verbs, but this is only a speculation.

To summarize, the majority of the contexts for synonymous Pref-dyads display different acceptability scores for the two verbs. The fact that one is considered a much better alternative than the other confirms that *-nu-* in these Pref-dyads expresses more than perfectivity, making Pref-Nu either more suitable or less suitable in a given context. The verbs are therefore near-synonymous rather than complete synonyms. Pref-Only receives low scores if the context involves elements that, as it seems based on corpus data, require or emphasize the meaning expressed by the Pref-Nu verb. In the four contexts where the rival forms receive similar results, complete synonymy (in the given contexts) is a possibility. However, considering that the verbs in the other contexts do not display full synonymy and that native speakers who did not participate in the experiment argue that the verbs are different (although they do not always know or agree as to how) suggests that each verb has its own semantic nuance, although the particular contexts used in the experiment can accommodate both nuances.

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<sup>109</sup> Notice that verbs receive lower acceptability scores in the context of *vytrjaxnut'* than in the context of *vytrjasti*. To speculate, this might be because the context of *vytrjasti* expresses the most common meaning of the verbs, 'shake out', while the context of *vytrjaxnut'* expresses the less common meaning 'empty' (cf. Section 4.5.3).

## 6.6 Summary and conclusions

In the present chapter, I have reported the findings of an experiment involving 203 participants. The goal of the experiment was to find out whether the verbs in “synonymous Pref-dyads” in fact are synonymous in the minds of native speakers of Russian. To this end, the participants were asked to rate the acceptability of Pref-Nu and Pref-Only verbs in authentic contexts from the corpus. The question of synonymy in Pref-dyads is related to the larger theoretical question of whether full synonymy exists. The experiment furthermore gives the opportunity to compare experimental and corpus data as sources of linguistic analysis.

The experiment included six synonymous Pref-dyads as well as the eleven non-synonymous Pref-dyads that were used as control items. The acceptability scores of the non-synonymous Pref-dyads were as expected: non-synonymous verbs were largely considered “Excellent” in their own contexts and “Impossible” in the contexts of the other verb form.

As for the synonymous Pref-dyads, I have argued that the acceptability scores indicate that the given Pref-Nu and Pref-Only verbs are near-synonymous rather than completely synonymous. In most of the contexts, the verbs receive different scores, clearly showing that they do not express exactly the same meaning. In a few contexts, the verbs have the same distribution of scores, but non-participant native speakers argue that they yield different interpretations. The experiment results do not tell us exactly what the semantic difference between the verbs is, but only show us that they are not identical.

In this way, the present experiment indirectly yields support to the general linguistic idea that languages tend to avoid full synonymy. At the same time, the experiment does not show what the semantic distinctions between the verbs are. To draw firmer conclusions in this regard, we need more data, from both corpora and experiments, combined with the intuition of native speakers.

In this chapter, I have used experimental research to complement my corpus-based investigations of rival forms in Pref-dyads, and the results of the experiment have, indeed, enabled me to explore Pref-dyads from a different perspective. At the same time, although my study illustrates that both of these methods yield insight into the behavior and use of Pref-dyads in contemporary Russian, it furthermore illustrates their limitations: in both of them, the data must be interpreted; neither type grants us direct access to the native speakers’ minds.

## 7 Nu-dyad situations: Insights from an experiment

In this last empirical chapter of the dissertation, I return to Nu-dyads and compare the acceptability scores of the Only-Nu and Pref-Nu verbs in the experiment introduced in Chapter 6. Unlike Pref-dyads, Nu-dyads cannot be divided into two distinct groups – non-synonymous and synonymous. Based on the experiment results, I argue that the relationship between Only-Nu and Pref-Nu verbs play out in different ways depending on the verbs and context in question, and, based on the acceptability scores of the participants, I single out five “situations” that I discuss with illustrations from the experiment. In four of these situations, the verbs are (very or slightly) distinct lexically, and the choice of verb should therefore be straightforward in most contexts. In the fifth situation, which involves contexts where the two verbs express the same lexical meaning, there seems to be a strong tendency to prefer the prefixed, most informative verb and avoid the unprefixed alternative. Throughout the chapter, I use “original verb” and “non-original verb” as labels of the verbs originally used by the author of a given text vs. the verbs that did not appear in a given corpus example.

The design of the experiment and the information about the participants that took part was discussed in detail in Section 6.2 and to avoid repetition, this chapter only includes the details that are relevant for Nu-dyads in particular (Section 7.1). In Section 7.2, I provide a brief overview of the obtained acceptability scores. In Section 7.3, I discuss the five situations that together illustrate the complexity of the interaction between Only-Nu and Pref-Nu. Findings and conclusions are summarized in Section 7.4.

### 7.1 Methodology

In this section, I discuss how I selected contexts from the corpus for the Only-Nu verbs in the experiment. The selection of contexts for the Pref-Nu verbs was described in Section 6.2.2. All the contexts used in the experiment are available in Appendix 3.

In order to select contexts for the Only-Nu verbs, I first investigated their uses in corpus examples. For every verb, I aggregated up to 100 random examples from the modern subcorpus of the RNC (years 1950-2019). Every example was annotated with the verb’s lexical meaning in the given context according to the procedure outlined for Pref-Nu and Pref-Only verbs in Section 4.3. Primarily, I considered the verb descriptions given in *Malyj akademičeskij slovar’* (MAS, Evgen’eva 1999), but in a few cases new lexical meanings were added. *Maxnut’* ‘wave once’, for instance, appears in contexts of drinking, such as (169). *Listnut’* is not included in MAS, but it was clear that all the 11 corpus examples available described the meaning ‘flip’.

(169) – *Professor! – ja ne poveril svojim ušam. Da i glazam, nabljudaja, kak maxnul professor vtoroj stakan nerazbavlennoho. [Družba narodov. 1998]*  
“‘Professor!’ – I couldn’t believe my ears. And nor my eyes as I watched the professor down a second glass of pure alcohol.’

This annotation confirmed the observation made in Chapter 3 that Only-Nu verbs tend to be more polysemous than the related Pref-Nu verbs, which, by comparison, tend to occur in a narrow set of contexts. It also showed that most of the given Nu-dyads involve verbs that always express different lexical meanings (at least in my corpus examples). By way of example, *liznut’* has the literal meaning ‘lick once’, while *sliznut’* due to the AWAY (DOWN) meaning of *s-* specifically means ‘lick off’. In the experiment we could expect verbs of this kind to be possible only in their own context and not in the context originally containing the other verb. To select a context for these Only-Nu verbs, I simply tried to find a context that expresses the verb meaning clearly. For *liznut’*, I selected the following example:

Context originally containing *liznut’*:

(170) *Kot privstal na zadnie lapy ot radosti, čto ego ne gonjat, i liznul palec xozjaina.*  
‘The cat stood halfway up on his back feet from joy that they would not chase him away and licked his owner’s finger.’

In a few Nu-dyads, Only-Nu and Pref-Nu appeared to express a very similar or even identical lexical meaning. By way of example, *tolknut’* in many contexts simply means ‘push once’ (e.g. *tolknut’ dver’* ‘push door’), but in combination with the prepositional phrase *na čto* ‘onto something’, both *tolknut’* and *natolknut’* express that some situation stimulates someone in a certain way (lit. pushes someone onto something). The difference between them appears to be that the direct object of *tolknut’* is inspired to perform a certain action, as in (171), while the direct object of *natolknut’* conceives a new idea, as illustrated in (172):

(171) *Odnovremenno specslužby vyjasniali «kadrovij sostav» brigady Radueva i pričiny, tolknuvšie ego na terakt. [Kommersant"-Daily. 1996]*  
‘At the same time, the intelligence service identified the “staff members” of Raduev’s team and the reasons that inspired him to terrorism.’

(172) *Nevernoe rassuždenie natolknulo Bekkerelja na otkrytie radioaktivnosti.*  
[Texnika – molodeži. 1976]  
‘Faulty reasoning led Becquerel to the discovery of radioactivity.’

On the one hand, then, in the context of *na čto* ‘onto something’, *tolknut’* and *natolknut’* are used in slightly different ways and, in this sense, they are not fully synonymous. At the same time, the semantic distinction between them is very slight and it is possible to imagine scenarios that fall in-between the two, that is, where an idea is also an action, as in the following example with *natolknut’*:

(173) *Priznajus', inogda trudno srazu uxvatit' ètot obraz, osobenno esli učastok tipovoj i bezlikij: skažem, obnesennyj vysokim zaborom pustyr', gde poseredine vysitsja dom. Ni interesnogo rel'efa, ni krasivyx vzroslyx derev'ev, slovom, ničego, čto moglo by dat' pišču dlja voobraženija i natolknut' na te ili inye original'nye rešenija landšafta.* [Landšaftnyj dizajn. 2003]

'I admit, a vision does not always come immediately, especially if the area is standardized and without any special features: let's say, a waste land enclosed by a high fence and a house towering in the middle. Here, neither an exciting topology, nor beautiful old trees or anything else can feed one's imagination and stimulate toward one or another creative landscape solution.'

In addition, the corpus data show that some Only-Nu verbs can occur in what seems to be more or less the same context as a related Pref-Nu verb. Consider, for instance, the example of *kinut'* 'throw once' in (174) where the verb is used with the prepositional phrase *na čto* 'onto something' to express the meaning 'throw onto', just like *nakinut'* 'throw onto'. The semantic difference between the prefixed and unprefixed verbs in such contexts is not clear.

(174) *Poka ja v užase pytalas' čto-to skazat', Iljuša lovko snjal s gost'i botinki, kinul na neë odejalo, vytolknul menja v koridor i, vyjdja sam, zaper dver'.* [Stolica. 1997]

'While I in horror was trying to say something, Iljuša aptly pulled the shoes off his guest, threw a blanket over her, pushed me out in the hallway, and, when he had walked out, locked the door.'

A second case is *listnut'* 'flip once' – *perelistnut'* 'flip' where the two verbs seem to be fully synonymous. For *kinut'* in the meaning 'throw onto' and *listnut'*, I selected the contexts in (174) and (175).

(175) *Na sosednem stule on obnaručil zabytyj kem-to utrennij nomer «Èl'-Pajs», listnul paru stranic... Skučnyj bezdarnyj mir kopošilsja, kak obyčno ... čto tam u nix?*

'On the chair next to him he found a morning edition of «Èl'-Pais» that someone had forgotten and flipped a couple of pages... A boring mundane world was bustling about as usual... what was new there?'

Focusing on contexts where both forms in principle may be possible gives the opportunity to explore rivalry of form. In other words, we can find out whether the participants prefer the original verb and/or whether they accept both. For most of the Nu-dyads in the experiment, however, such contexts of rivalry could not be found.

## 7.2 Overview of results

The acceptability scores in Chapter 6 were presented according to the distinction between non-synonymous and synonymous Pref-dyads discussed in Chapter 4. As for the Nu-dyads, the results are harder to interpret insofar as they do not naturally fall into two or a few groups. On the one hand, we find Nu-dyads that appear never to express the same situation (e.g. *liznut'* 'lick once' – *sliznut'* 'lick off'). On the other hand, if near-synonymy exists, it is usually connected with one context (e.g. *tolknut' na čto* 'stir to do something' – *natolknut' na čto* 'give idea'), and not all (cf. *tolknut' dver'/\*natolknut'* 'push the door'). As far as this study is concerned, many Nu-dyads can therefore not be called “non-synonymous” or “near-synonymous” in general, but rather “non-synonymous” or “near-synonymous” in a certain context.

Considering that the semantic relationship between Only-Nu and Pref-Nu verbs often depends on the context in question, one could analyze the acceptability scores of the verbs one by one. This meticulous approach, however, involving a separate discussion for each of the 34 contexts, would easily become repetitive and hard to follow. Choosing an alternative approach, I will focus on five “situations” that stand out as relevant. In Section 7.3, these situations and examples that do not match these situations are discussed in the light of findings from previous chapters as well as insights from the scholarly literature.

The five situations in question are based on my interpretation of the acceptability scores of the verbs, shown on the next pages. Their acceptability scores in original contexts are shown in Tables 49-50 and Figures 37-38. In the tables, the verbs are listed alphabetically. In the figures, they are shown in ascending order according to the proportion of “Excellent” in the responses. In the tables and figures containing Only-Nu verbs, the prefix of the related relevant Pref-Nu verb is shown in brackets. For *kinut'* 'throw once', the prefix indicates whether the verb in the row or diagram bar was presented together with *nakinut'* 'thrown onto', *pokinut'* 'leave, abandon' or *zakinut'* 'throw somewhere'.

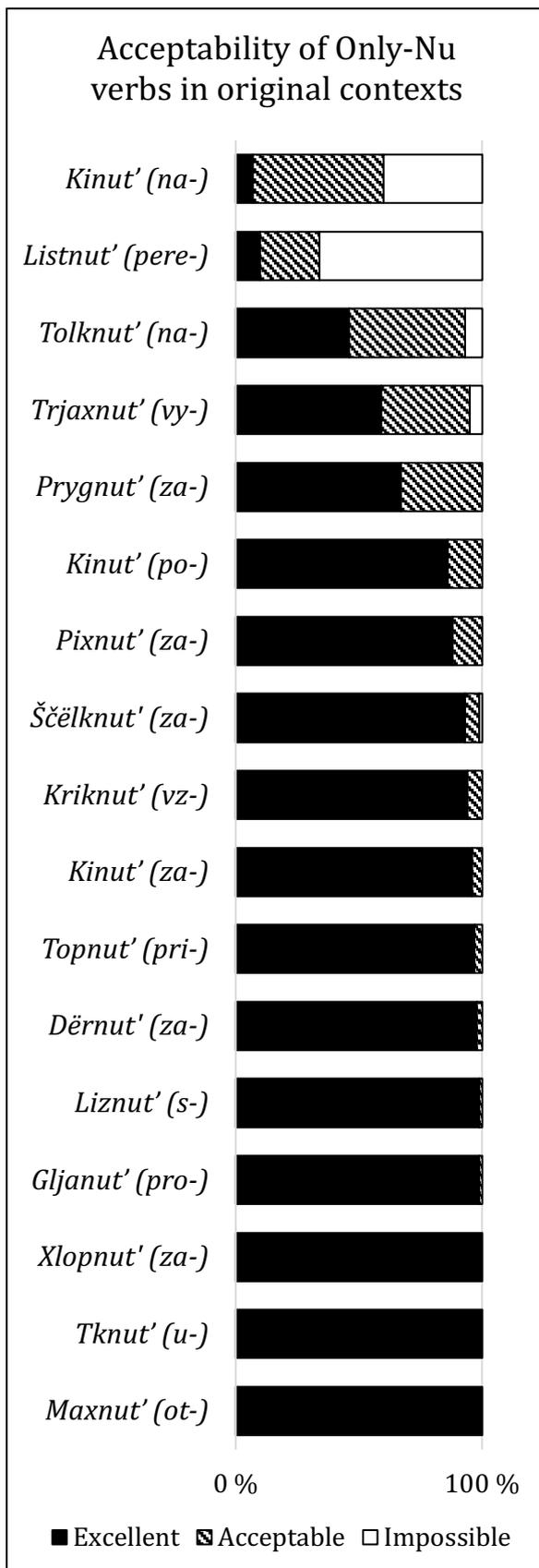
As we can see, most of the verbs are considered “Excellent” by the majority of the participants when presented in the contexts they appeared in originally. Some involve a proportion of “Acceptable”, and a few stand out with a small proportion of “Excellent” and up to a large proportion of “Impossible”. We will get back to these outliers in Section 7.3.

Only-Nu	Excellent	Acceptable	Impossible	Total
<i>Děrnut'</i> (za-) 'pull once'	63 (98%)	1 (2%)	0 (0%)	64 (100%)
<i>Gljanut'</i> (pro-) 'glance once'	70 (99%)	1 (1%)	0 (0%)	71 (100%)
<i>Kinut'</i> (na-) 'throw onto'	5 (7%)	36 (53%)	27 (40%)	68 (100%)
<i>Kinut'</i> (po-) 'leave'	61 (86%)	10 (14%)	0 (0%)	71 (100%)
<i>Kinut'</i> (za-) 'throw once'	60 (94%)	4 (6%)	0 (0%)	64 (100%)
<i>Kriknut'</i> (vz-) 'shout once'	60 (94%)	4 (6%)	0 (0%)	64 (100%)
<i>Listnut'</i> (pere-) 'flip once'	7 (10%)	16 (24%)	45 (66%)	68 (100%)
<i>Liznut'</i> (s-) 'lick once'	70 (99%)	1 (1%)	0 (0%)	71 (100%)
<i>Maxnut'</i> (ot-) 'wave once'	68 (100%)	0 (0%)	0 (0%)	68 (100%)
<i>Pixnut'</i> (za-) 'stuff once'	56 (88%)	8 (12%)	0 (0%)	64 (100%)
<i>Prygnut'</i> (za-) 'jump once'	42 (67%)	22 (33%)	0 (0%)	64 (100%)
<i>Ščělknut'</i> (za-) 'click once'	63 (93%)	4 (6%)	1 (1%)	68 (100%)
<i>Tknut'</i> (u-) 'poke once'	71 (100%)	0 (0%)	0 (0%)	71 (100%)
<i>Tolknut'</i> (na-) 'lead to once'	31 (46%)	32 (47%)	5 (7%)	68 (100%)
<i>Topnut'</i> (pri-) 'stamp once'	69 (97%)	2 (3%)	0 (0%)	71 (100%)
<i>Trjaxnut'</i> (vy-) 'shake once'	38 (59%)	23 (36%)	3 (5%)	64 (100%)
<i>Xlopnut'</i> (za-) 'slam once'	67 (100%)	0 (0%)	1 (0%)	68 (100%)

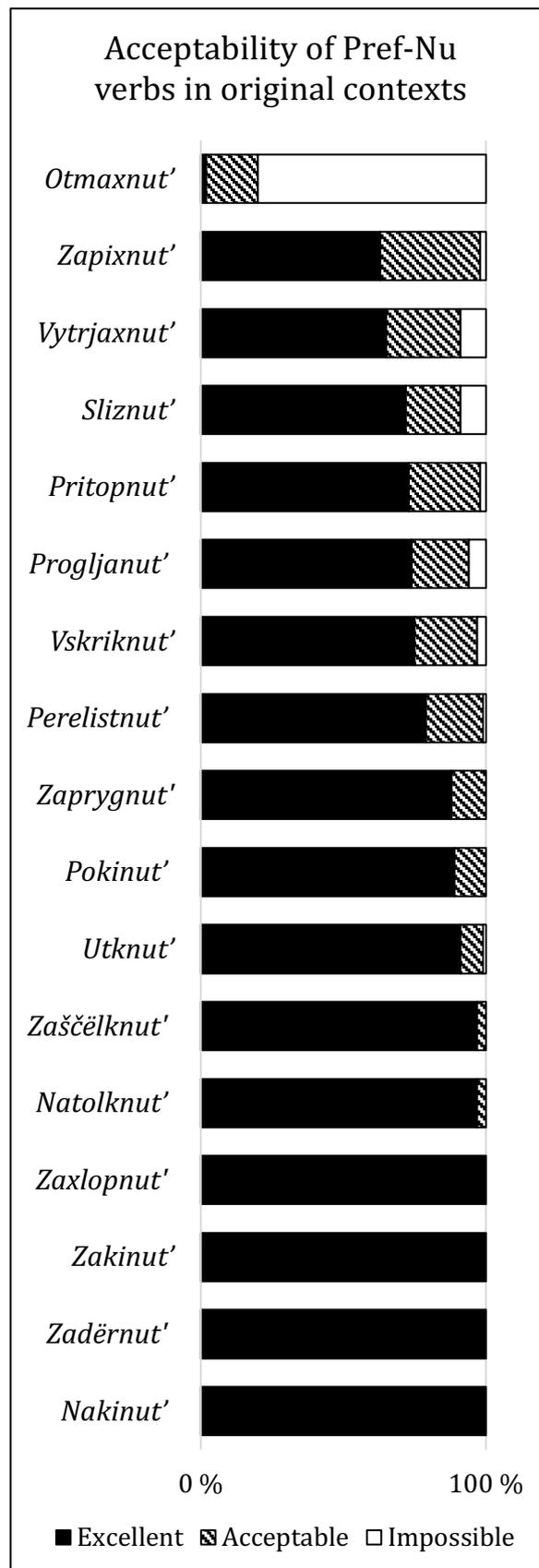
Table 49 Acceptability ratings for Only-Nu verbs in original context.

Pref-Nu	Excellent	Acceptable	Impossible	Total
<i>Nakinut'</i> 'throw onto'	71 (100%)	0 (0%)	0 (0%)	71 (100%)
<i>Natolknut'</i> 'lead to'	69 (97%)	2 (3%)	0 (0%)	71 (100%)
<i>Otmaxnut'</i> 'wave away'	1 (2%)	13 (18%)	57 (80%)	71 (100%)
<i>Perelistnut'</i> 'flip'	56 (79%)	14 (20%)	1 (1%)	71 (100%)
<i>Pokinut'</i> 'leave'	57 (89%)	7 (11%)	0 (0%)	64 (100%)
<i>Pritopnut'</i> 'stamp'	47 (73%)	16 (25%)	1 (2%)	64 (100%)
<i>Progljanut'</i> 'appear'	47 (74%)	13 (20%)	4 (6%)	64 (100%)
<i>Sliznut'</i> 'lick off'	46 (72%)	12 (19%)	6 (9%)	64 (100%)
<i>Utknut'</i> 'stick into'	58 (91%)	5 (8%)	1 (1%)	64 (100%)
<i>Vskriknut'</i> 'exclaim'	51 (75%)	15 (22%)	2 (3%)	68 (100%)
<i>Vytrjaxnut'</i> 'shake out'	44 (65%)	18 (26%)	6 (9%)	68 (100%)
<i>Zaděrnut'</i> 'close (curtains)'	68 (100%)	0 (0%)	0 (0%)	68 (100%)
<i>Zakinut'</i> 'throw, position'	68 (100%)	0 (0%)	0 (0%)	68 (100%)
<i>Zapixnut'</i> 'cram into'	43 (63%)	24 (35%)	1 (2%)	68 (100%)
<i>Zaprygnut'</i> 'jump on(to)'	60 (88%)	8 (12%)	0 (0%)	68 (100%)
<i>Zaščělknut'</i> 'latch'	69 (97%)	2 (3%)	0 (0%)	71 (100%)
<i>Zaxlopnut'</i> 'slam shut'	71 (100%)	0 (0%)	0 (0%)	71 (100%)

Table 50 Acceptability ratings for Pref-Nu verbs in original context.



**Figure 37** Acceptability ratings of Only-Nu verbs in original contexts.



**Figure 38** Acceptability ratings of Pref-Nu verbs in original contexts.

The acceptability scores of the verbs in their non-original contexts are shown in Tables 51-52 and Figures 39-40:

Only-Nu	Excellent	Acceptable	Impossible	Total
<i>Děrnut'</i> (za-) 'pull once'	5 (8%)	45 (66%)	18 (26%)	68 (100%)
<i>Gljanut'</i> (pro-) 'glance once'	15 (24%)	22 (34%)	27 (42%)	64 (100%)
<i>Kinut'</i> (na-) 'throw onto'	0 (0%)	20 (28%)	51 (72%)	71 (100%)
<i>Kinut'</i> (po-) 'abandon'	0 (0%)	0 (0%)	64 (100%)	64 (100%)
<i>Kinut'</i> (za-) 'throw on(to)'	3 (5%)	13 (19%)	52 (76%)	68 (100%)
<i>Kriknut'</i> (vz-) 'shout once'	19 (30%)	41 (60%)	8 (10%)	68 (100%)
<i>Listnut'</i> (pere-) 'flip once'	0 (0%)	19 (27%)	52 (73%)	71 (100%)
<i>Liznut'</i> (s-) 'lick once'	9 (14%)	19 (30%)	36 (56%)	64 (100%)
<i>Maxnut'</i> (ot-) 'wave once'	69 (97%)	2 (3%)	0 (0%)	71 (100%)
<i>Pixnut'</i> (za-) 'stuff once'	9 (13%)	36 (53%)	23 (34%)	68 (100%)
<i>Prygnut'</i> (za-) 'jump once'	25 (37%)	37 (54%)	6 (9%)	68 (100%)
<i>Ščělknut'</i> (za-) 'click once'	1 (1%)	26 (37%)	44 (62%)	71 (100%)
<i>Tknut'</i> (u-) 'poke once'	4 (6%)	26 (41%)	34 (53%)	64 (100%)
<i>Tolknut'</i> (na-) 'lead to once'	3 (4%)	29 (41%)	39 (55%)	71 (100%)
<i>Topnut'</i> (pri-) 'stamp once'	34 (53%)	30 (47%)	0 (0%)	64 (100%)
<i>Trjaxnut'</i> (vy-) 'shake once'	6 (9%)	28 (41%)	34 (50%)	68 (100%)
<i>Xlopnut'</i> (za-) 'slam once'	2 (3%)	23 (32%)	46 (65%)	71 (100%)

Table 51 Acceptability ratings of Only-Nu in contexts originally containing Pref-Nu.

Pref-Nu	Excellent	Acceptable	Impossible	Total
<i>Nakinut'</i> 'throw onto'	65 (96%)	2 (3%)	1 (1%)	68 (100%)
<i>Natolknut'</i> 'lead to'	51 (75%)	14 (21%)	3 (4%)	68 (100%)
<i>Otmaxnut'</i> 'wave away'	1 (1%)	19 (28%)	48 (71%)	68 (100%)
<i>Perelistnut'</i> 'flip'	48 (71%)	15 (22%)	5 (7%)	68 (100%)
<i>Pokinut'</i> 'leave'	19 (27%)	37 (52%)	15 (21%)	71 (100%)
<i>Pritopnut'</i> 'stamp'	22 (31%)	40 (56%)	9 (13%)	71 (100%)
<i>Progljanut'</i> 'appear'	0 (0%)	1 (1%)	70 (99%)	71 (100%)
<i>Sliznut'</i> 'lick off'	0 (0%)	6 (8%)	65 (92%)	71 (100%)
<i>Utknut'</i> 'stick into'	0 (0%)	3 (4%)	68 (96%)	71 (100%)
<i>Vskriknut'</i> 'exclaim'	8 (17%)	15 (23%)	41 (60%)	64 (100%)
<i>Vytrjaxnut'</i> 'shake out'	3 (5%)	14 (22%)	47 (73%)	64 (100%)
<i>Zaděrnut'</i> 'close (curtains)'	0 (0%)	1 (2%)	63 (98%)	64 (100%)
<i>Zakinut'</i> 'throw, position'	13 (20%)	33 (52%)	18 (28%)	64 (100%)
<i>Zapixnut'</i> 'cram into'	0 (0%)	3 (5%)	61 (95%)	64 (100%)
<i>Zaprygnut'</i> 'jump on(to)'	54 (84%)	10 (16%)	0 (0%)	64 (100%)
<i>Zaščělknut'</i> 'latch'	0 (0%)	3 (4%)	65 (96%)	68 (100%)
<i>Zaxlopnut'</i> 'slam shut'	2 (3%)	2 (3%)	64 (94%)	68 (100%)

Table 52 Acceptability ratings of Pref-Nu in contexts originally containing Only-Nu.

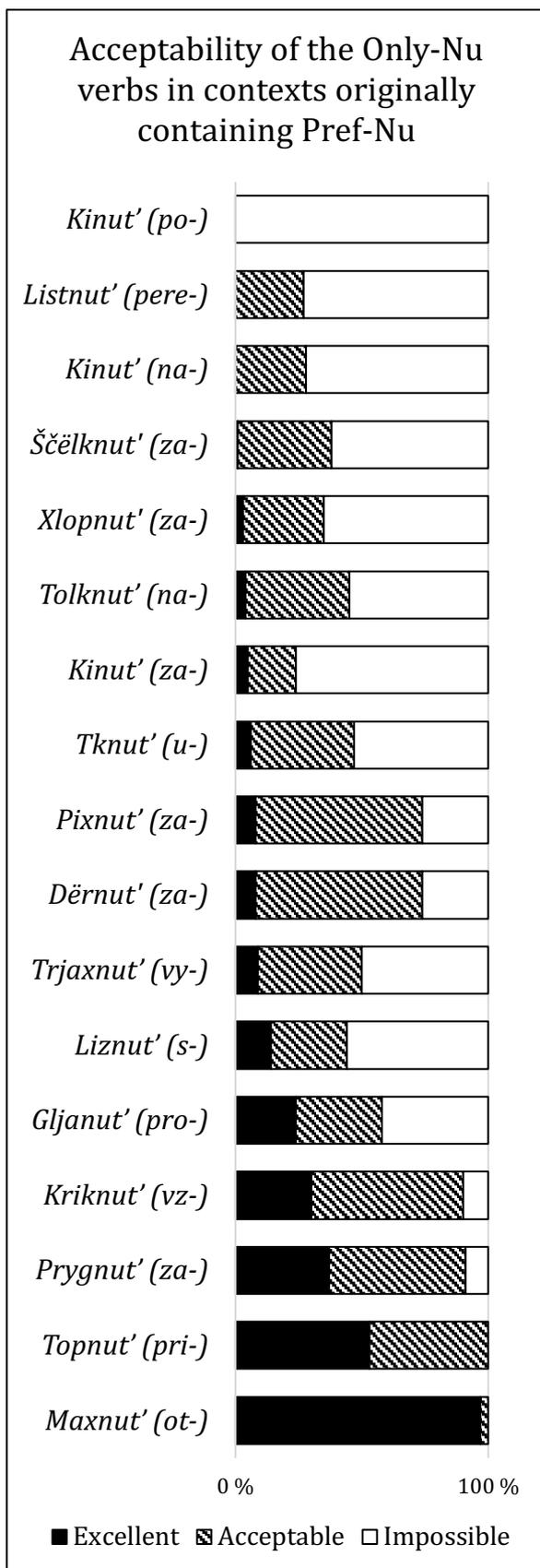


Figure 39 Acceptability ratings of Only-Nu verbs in non-original contexts.

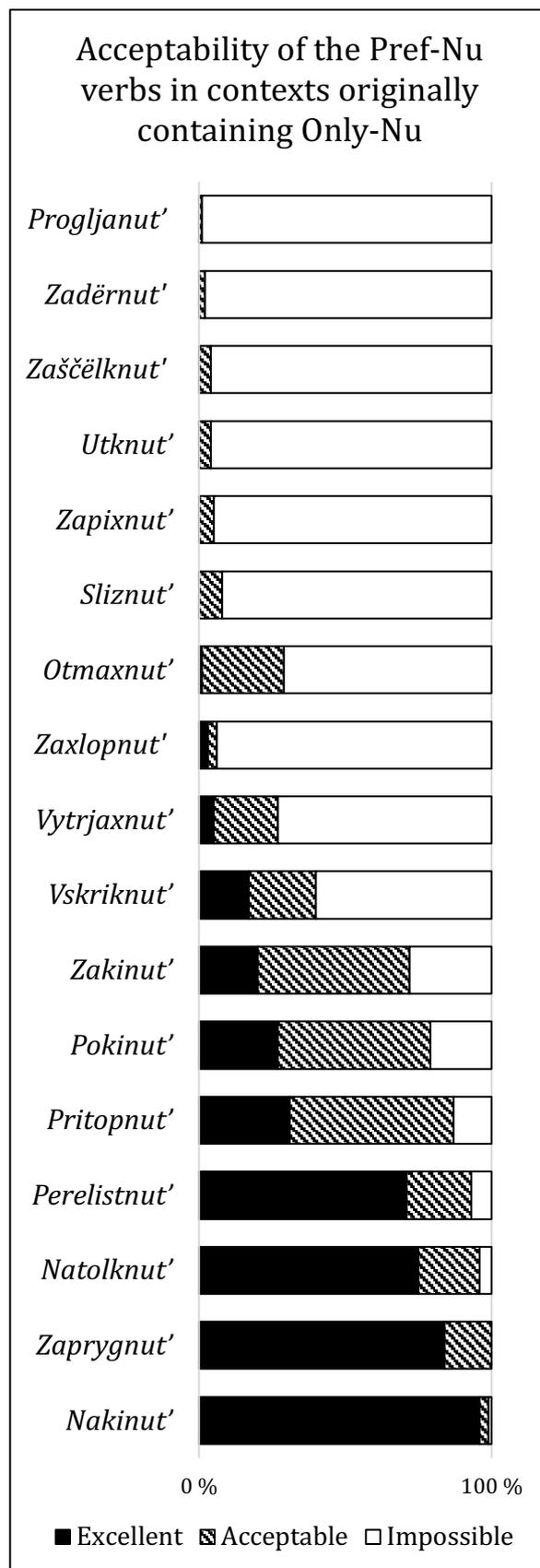


Figure 40 Acceptability ratings of Pref-Nu verbs in non-original contexts.

As illustrated with the English sentences *I wrote a book* and *I read a book* in the introduction to Chapter 6, the fact that two verbs (here, *write* and *read*) make perfect sense in the same context does not necessarily mean that they are synonymous. Similar acceptability scores call for closer inspection to understand whether they are motivated by a similarity between the verbs in lexical meaning or something else. Different acceptability scores, on the other hand, indicate that they are not complete synonyms.

The distribution of acceptability scores for Nu-dyads shows that, in a number of contexts, both verbs are regarded as “Acceptable” or even “Excellent” by the participants. This is especially true of the verbs towards the bottom parts of the figures. The results furthermore show that the Pref-Nu and Only-Nu verbs tend to receive different acceptability scores in their non-original contexts: few of the Pref-Nu verbs are considered a good option in contexts originally containing Only-Nu (Figure 40), but many Only-Nu verbs are seen as “Acceptable” in contexts originally containing Pref-Nu (Figure 39). This makes sense considering that Only-Nu verbs due to their lack of prefix can take on a wider range of lexical meanings, i.e. they are associated with a less restricted set of contexts (cf. the Nu-dyad Hypothesis in Chapter 3). At the same time, the fact that this tendency is observed in my data does not mean that the same tendency would be true in any data set: the choice of verbs and contexts is clearly important. Moreover, the given tendency does not explain all the results. It is, for instance, not clear why 14% of the participants consider *liznut* ‘lick once’ to be “Excellent” in the context of *sliznut* ‘lick off’, shown in (176), and 30% see it as “Acceptable”. The two verbs cannot express the same situation. With *liznut* in this context, the meaning becomes ‘Ljuba licked her tear’.

Context originally containing *sliznut*:

(176) *Na ščėku Ljuby neoŹidanno vykatilas' sleza, zaŹglas', zakrovenela, zasvetilas' na isxodjaščem solnce. Ljuba [liznula/sliznula/slizala] slezu.*  
 ‘Suddenly a tear fell down on Ljuba’s cheek, got warm, mixed with the blood, and shone in the sunrise. Ljuba **licked away** the tear.’

One way to interpret these scores is that they show what is possible syntactically, not only semantically. In other words, there is nothing wrong with the sentence ‘Ljuba licked her tear’ except that the situation it describes is quite unlikely (it is hard to lick a tear without licking it away). Another illustration is the acceptability scores of *xlopnut* ‘slam once’ in the context of *zaxlopnut* ‘slam shut’, which involves the accusative direct object *dvercu* ‘small door’ (177). As pointed out in Section 3.5, *xlopnut* generally does not have accusative direct objects, and in the meaning ‘slam’, which is relevant here, the verb is either used intransitively (*dver’ xlopnula* ‘the door slammed’) or with an instrumental object (*xlopnut’ dver’ju* ‘slam with the door). The fact that 32% of the participants consider *xlopnut* “Acceptable” in (177) and 3% see it as “Excellent” suggest that some participants have felt that other meanings of *xlopnut* are possible in this context as well. A native speaker suggests

that the idea of weakly “hitting” towards something is possible, though very strange in her personal opinion.

Context originally containing *zaxlopnut'*:

(177) *Nastja skol'znula na voditel'skoe siden'e, [xlopnula/zaxlopnula/zaxlopala] dvercu i opustila steklo.*

‘Nastja slipped into the driver’s seat, slammed the door and rolled down the window.’

Another potential explanation is that the participants gave random acceptability scores that in fact should be taken out of the study. Although lack of attentiveness may explain some responses, none of the participants stand out as giving strange answers throughout, and there is no reason why they systematically would select acceptability scores less carefully for Only-Nu verbs than for Pref-Nu verbs in the same context.

After this first overview of the results, we will now move on to consider the five situations alluded to above. The discussion of these situations is based on a limited amount of data (17 Nu-dyads and 34 contexts) and for this reason it cannot possibly reflect every type of relationship that can take place between Only-Nu and Pref-Nu verbs. What it can do show is that their relationship is complex and that no two Nu-dyads are completely parallel.

### 7.3 Five Nu-dyad situations

The five situations discussed in this section show the relevant interaction between Only-Nu and Pref-Nu in particular contexts. In other words, although a situation might describe the relationship between Only-Nu and Pref-Nu in one context, this situation might not be true of all contexts where (one of) the verbs in this Nu-dyad can appear. An exception to this is Nu-dyads where Pref-Nu expresses Aktionsart. Here, only Situation 3 is relevant, regardless of context.

Recall from Chapter 6, that the participants were presented with contexts, such as the following one, originally containing *gljanut'*, which means ‘glance once’. The sentence is shown in the same way as it was presented to the participants, namely with three verbs. The two verb types important in this chapter are shown in boldface:

(178) *Ja [gljanula/progljanula/progljadela] na časy i ne poverila – oni pokazyvali sovsem drugoe vremja, čem tam, okolo bulgakovskogo doma.*

‘I took a look at the clock and couldn’t believe what I saw: it showed a completely different time than over there, by the Bulgakov house.’

The goal of the present study is to find out whether or to what extent the two verbs in a Nu-dyad potentially are acceptable in the same context. Since a whole context, like the one above, tends to contain much irrelevant information for this matter

(such as the subject’s clock showing a different time than the clock by the Bulgakov house), I will focus on the syntactic construction involved, in this case the combination of the verb with the prepositional phrase *na čto* ‘on something’. What the participants really are evaluating is whether or not the given verbs are possible in this construction, or not. Throughout this chapter, I will therefore show the contexts from the experiment in a simplified way, focusing on the basic construction:

- (179) Construction: Verb + *na čto* ‘on something’  
*Ja **gljanula** na časy* ‘I looked at the clock.’  
*Ja \*progljanula na časy* (“Impossible”: 99%)

The first line shows the construction itself. The two next lines show the two verbs under scrutiny. In what I will call “Situation 1”, where we for example find *gljanut’*, only one verb makes sense in the construction. Here, I show the lexical meaning of the original verb and for the non-original verb (here, *progljanut’* ‘appear’), I show the proportion of “Impossible” in the scores. The proportion of “Impossible” (here, 99%) confirms that the non-original verb simply does not make sense. In the remaining four situations, both verbs can be used (though usually with different lexical meanings or semantic nuances). Here, I show what each verb expresses in the given context and then discuss how I understand the results. The original verb is marked in bold.

### 7.3.1 Situation 1: Only one verb is possible

In the first situation we will look at, one verb is possible and the other verb is semantically or syntactically impossible in a given context. The situation is illustrated in Figure 41, which shows that a particular context is possible only for one verb. In some cases, this verb is Only-Nu, in other cases Pref-Nu.

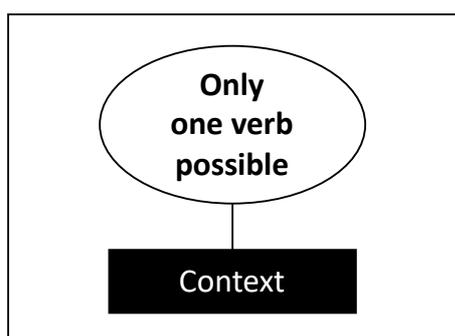


Figure 41 Illustration of Situation 1: Only one of the verbs in the Nu-dyad is possible in the context.

There are several contexts of this kind in the experiment, and, as expected, the participants largely consider the original verb “Excellent” and the non-original one “Impossible”. To illustrate Situation 1, let us look at *progljanut’* ‘appear’ in the context of *gljanut’* ‘glance once’, mentioned above, and two other cases.

As just pointed out, *gljanut'* means to take a look at something and is followed by the prepositional phrase *na čto* 'at something'. The prefixed verb *progljanut'*, on the other hand, means that something comes forth, e.g. *solnce progljanulo skvoz' tuči* 'the sun appeared through the rain clouds', and it cannot be followed by *na čto*. *Progljanut'* is therefore not only semantically, but also grammatically impossible in the context of *gljanut'* selected for the experiment. As was shown in (179), the participants agree: *progljanut'* is considered "Impossible" by more or less all the participants.

Another example of Situation 1 from the experiment is *kinut'* 'throw once' – *pokinut'* 'leave, abandon' in the context originally containing *pokinut'*, shown in (180). Here, the restriction on the non-original verb *kinut'* 'throw once' comes from the semantic class of the direct object, not from the presence or absence of an argument. *Pokinut'* expresses the idea of leaving someone, something or a location, but *\*kinut' stanciju* 'throw station once' does not make sense and is, as we can see, rated as "Impossible" by every participant (100%).

- (180) Verb + [accusative direct object: location]  
*Èlektrička \*kinula stanciju* → "Impossible" (100%)  
*Èlektrička **pokinula** stanciju* 'The train left the station.'

As a third illustration consider *děrnut'* 'pull once' – *zaděrnut'* 'close (curtains)' in the context of *děrnut'*. The prefixed *zaděrnut'* is, due to the COVER meaning of *za-*, possible only if the subject intends to cover some area, usually a window (Janda 1986: 121-125, Braginsky 2008: 158-162). *Děrnut'*, on the other hand, does not express this type of result. Since the idea of covering something is unimaginable in (181), *zaděrnut'* is out of place. Again, the participants agree: *zaděrnut'* is considered "Impossible" by 98% of the participants.

- (181) Verb + [accusative direct object: something that cannot cover]  
*Mal'čonka **děrnul** Volodju za rukav* 'A boy tugged at Volodja's sleeve.'  
*Mal'čonka \*zaděrnul Volodju za rukav* → "Impossible" (98%)

As mentioned in the beginning of this subsection, Situation 1 pertains to both verb types: (179) and (181) involve contexts possible only for Only-Nu – in (180), only Pref-Nu is possible. For a moment going back to the Nu-dyad Hypothesis that was proposed in Chapter 3, it is furthermore worth noticing that the two contexts of Only-Nu (179 and 181) not really describe a result, while the context requiring Pref-Nu (180) does. Although the Nu-dyad Hypothesis is not tested and discussed directly in this chapter, this distribution of verbs between contexts (and lexical meanings) matches the predictions of the hypothesis, which claims that Pref-Nu verbs are resultative (unless they express Aktionsart), while Only-Nu verbs are not concerned with a result.

### 7.3.2 Situation 2: Both verbs are possible, but they yield different lexical meanings

The second situation differs from the first situation in that both verbs arguably are possible with the same type of arguments. However, they yield different interpretations. Stated in another way, the verbs in these Nu-dyads can appear with the same direct object or prepositional phrase, but the activities they describe in this construction are different. In the figure below, I refer to these lexical meanings as “Lexical meaning 1” and “Lexical meaning 2”. The fact that Only-Nu is placed to the left and connected with Lexical meaning 1, while Pref-Nu is placed in the right and connected with Lexical meaning 2 does not have significance. In contexts involving Situation 2, the participants gave quite varied answers, probably depending on how willing they were to imagine and accept two different interpretations of a given sentence. Some examples will be discussed below.

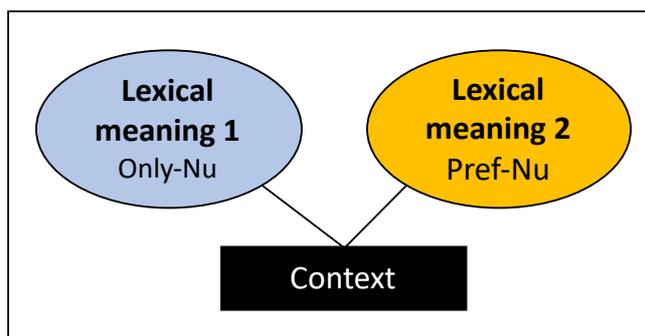


Figure 42 Illustration of Situation 2: Both verbs are possible in a given context, but they express different lexical meanings.

To get a better understanding of Situation 2, we can begin by looking at *děrnut'* ‘pull once’ – *zaděrnut'* ‘close (curtains)’ in the context originally containing *zaděrnut'*. As we saw above, *zaděrnut'* was not possible in the context of *děrnut'*, since the pulling movement could not result in something being covered, cf. (181). *Děrnut'* can, on the other hand, be used in the context of *zaděrnut'*, albeit with a different lexical meaning. In (182), the original verb *zaděrnut'* means that the editor closes the curtains, either to shed out light, get privacy, or something else. *Děrnut'* means that the subject, perhaps aimlessly, tugs at the curtains once. In other words, with the unprefixed verb, the curtains do not change position. In the experiment, *zaděrnut'* is rated as “Excellent” by 100% of the participants. *Děrnut'* is rated as “Excellent” by 8% and as “Acceptable” by 66%.

(182) Verb + [accusative direct object: curtain]

*Redaktor děrnul štoku.* ‘The editor tugged at the curtains.’

*Redaktor **zaděrnul** štoku.* ‘The editor closed the curtains.’

To further illustrate the difference between *děrnut'* and *zaděrnut'*, consider the following example from corpus. In this context, *děrnut'* is used in the context of window blinds. The prepositional phrase *za šnur* ‘by cord’ is crucial: the point is that the subject pulls once in the cord, which happens to be part of the blinds, and not that he moves curtains from one side to the other, as the case is in (182). In

other words, we see that the two verbs in this Nu-dyad always yield different meanings although both may be possible in the context of curtains.

(183) *Kot prosemenil k oknu, **dernul štoru** za šnur – i černye dyry okon zatjanulo belym.* [M. Petrosjan. 2009]

‘The cat tripped over to the window, pulled the blinds by the cord, and the black holes in the window were filled with white.’

The other examples of Situation 2 that I can find in the experiment are less clear in the sense that the non-original verb describes a scenario that, though potentially possible in a certain setting (including fairy tales and other fictional stories), is very unlikely. The proportions of “Acceptable” in the acceptability scores suggest that some participants can think of these unlikely events. The fact that many others cannot, emphasize how unusual these combinations of verb meaning and situation are and furthermore display the gradual relationship between Situation 1, where one verb is impossible, and Situation 2 where both verbs are possible, but describe different types of events.

To illustrate, consider the use of *trjaxnut’* ‘shake once’ in the context of *vytrjaxnut’* ‘shake out’ in (184). Due to the meaning of *vy-*, EMPTY A CONTAINER, *vytrjaxnut’* always implies that something is shaken out of something, and the context of *vytrjaxnut’* suggests that this “something” is sand (cf. Section 4.5.3). *Trjaxnut’*, which does not have the prefix *vy-*, neither implies a container, nor something that is poured out. Using *trjaxnut’* in (184) yields the (rather unlikely) meaning that General Sivers made a shaking movement with his slippers once, perhaps to give someone a sign (and not to empty them of sand), a meaning that, in fact, more likely would be expressed with the instrumental case, i.e. *tapkami* ‘with the slippers’. *Trjaxnut’* is considered “Excellent” or “Acceptable” in this context by half the participants (50%), while the same scores are given by 91% for *vytrjaxnut’*.

(184) Verb + [accusative direct object: shoes]

*General Sivers sel na pesok, trjaxnul tapki* ‘General Sivers sat down on the sand and shook his slippers’

*General Sivers sel na pesok, **vytrjaxnul** tapki* ‘General Sivers sat down on the sand and shook out his slippers’

Other illustrations are *liznut’* ‘lick once’ in the context of *sliznut’* ‘lick off’ (176) and *xlopnut’* ‘slam once’ in the context of *zaxlopnut’* ‘slam shut’ (177). As mentioned in Section 7.3, the fact that 44% and 35% of the participants see *liznut’* and *xlopnut’* as “Excellent” or “Acceptable” in their non-original contexts indicate that the events they describe can be imagined – not by all, but at least by some.

A special instance of Situation 2 is *maxnut’* ‘wave once’ in the context of *otmaxnut’* ‘wave away’ where most of the participants (97%) consider *maxnut’* “Excellent” and the original verb *otmaxnut’* receives the highest score from only one person

(2%). Since this particular distribution of scores was discussed in Section 6.3.1, here I limit myself to show the example and remind the reader that the context in question allows for the lexical meaning of both verbs, that the construction (*rukoj* ‘with the hand’) is common for both verbs, and that *maxnut*’, in general, is a much more common verb than *otmaxnut*’.

(185) Verb + *rukoj* ‘with hand’

*Kapitan blagorodno maxnul rukoj* ‘The captain waved with his hand in a noble fashion’

*Kapitan blagorodno otmaxnul rukoj* ‘The captain waved [him] away with his hand in a noble fashion’

It is remarkable that all the illustrations of Situation 2 involve contexts of Pref-Nu verbs. To what extent this is incidental cannot be determined based on the data at hand, but it is expected that Only-Nu verbs, which tend to be polysemous, can appear in more contexts than Pref-Nu verbs that typically have a more restricted lexical meaning.

We can also notice that, with the original Pref-Nu verb, all the relevant contexts express a result (curtain covers a window, slippers are emptied of sand, a tear is licked away, a door is slammed shut, someone is waved away), as expected for subtype I of Pref-Nu verbs from the Nu-dyad Hypothesis. In the same context, the unprefixes verbs yield different meanings that do not express a result (one pull, one shake, one lick, one slam, one wave).

### 7.3.3 Situation 3: Both verbs are possible, but Pref-Nu expresses Aktionsart

The third situation is attested in Nu-dyads where Pref-Nu expresses Aktionsart. Here, both verbs describe the same type of action, but Only-Nu describes the action “neutrally”, while Pref-Nu makes the event more intense (*v(o)z-semelfactive*) or less intense (attenuative *po-*, *pod-* or *pri-*). In a given context, the two verbs express these slightly different nuances, as shown in Figure 43. The experiment contains two such Nu-dyads – *topnut*’ ‘stamp once’ – *pritopnut*’ ‘make a little stamp’ where the prefix *pri-* attenuates, and *kriknut*’ ‘shout once’ – *vskriknut*’ ‘give a sudden shout’ where the prefixed verb describes a sudden, uncontrollable and more intense action than the unprefixes verb *kriknut*’ (cf. Sections 3.6 and 4.5.7). In the contexts of these verbs, the participants mostly gave high scores to both verbs in the Nu-dyad. The exception is *vskriknut*’ in the context of *kriknut*’, which we will come back to below.

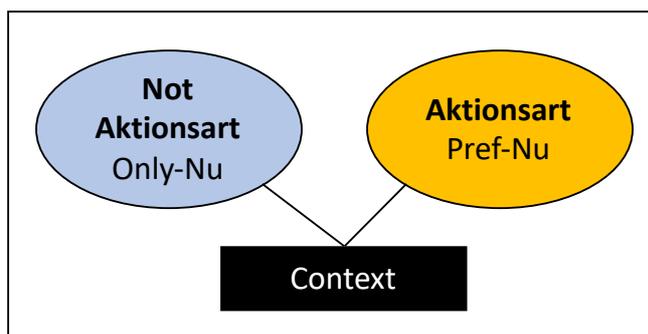


Figure 43 Illustration of Situation 3: The two verbs describe the same action, but Only-Nu expresses it “neutrally”, while Pref-Nu expresses *v(o)z-semelfactive* or attenuative *Aktionsart*.

Let us first consider the acceptability scores of *topnut* ‘stamp once’ – *pritopnut* ‘make a little stamp’. The context originally containing *topnut* involves an object in the instrumental case, *nožkoj* ‘with the foot’ (186), while the context originally containing *pritopnut* only involves a subject (187). Examples of the verbs in the RNC show that both verbs regularly occur with an instrumental object as well as without one, and it is therefore not surprising that they receive very high scores regardless of which context was the original one. The choice between them seems to depend fully on whether or not the speaker wants to attenuate the verb meaning. *Topnut* is considered “Excellent” or “Acceptable” in both contexts by all the participants (100%). *Pritopnut* is seen as “Excellent” or “Acceptable” by 98% in its original context and by 87% in its non-original context.

(186) Verb + *nogoj* (*nožkoj*) ‘with the foot (diminutive)’

*Feja topnula nožkoj ob led* ‘The fairy stamped her foot on the ice’

*Feja pritopnula nožkoj ob led* ‘The fairy made a little stamp on the ice with her foot’

(187) Verb

*Tonja topnula* ‘Tonja made a stamp’

*Tonja pritopnula* ‘Tonja made a little stamp’

The second example of Situation 3 is more complicated, since, as shown in Section 3.6, *kriknut* and *vskriknut* not only differ in terms of intensity, a meaning typically attributed to *v(o)z-semelfactives*. Although *vskriknut* does express a sudden and intense shout, syntactically, the most striking difference between the verbs is, perhaps, that *kriknut* is almost always used with a speech clause and a dative recipient, while *vskriknut* emphasizes the scream itself and is often accompanied by adverbials that stress the idea of a sudden event. Although speech is possible for this verb too, it is not obligatory. As is clear from (188) and (189), the contexts selected for the experiment reflect these typical characteristics of the verbs and we would therefore expect a difference in the acceptability scores of the verbs in original vs. non-original contexts. This expectation is borne out by the facts. *Kriknut* is considered “Excellent” by 94% of the participants in its original context and by 30% in its non-original context. *Vskriknut* is seen as “Excellent” by 75% in

its original context and by 17% in its non-original context. The original context of *kriknut'* does not involve signs of the abruptness meaning typical of *v(o)z-semelfactives*, and probably for this reason most of the participants (60%) regard *vskriknut'* as “Impossible” in this context. *Kriknut'* receives higher scores in its non-original context: only 10% sees it as “Impossible”.

(188) Verb + [speech clause]

«*Nikto iz vas ne budet sčastliv!*» – *kriknula deva* “None of you will be happy!” the maiden shouted’

«*Nikto iz vas ne budet sčastliv!*» – *vskriknula deva* “None of you will be happy!” the maiden shouted (suddenly)’

(189) Verb + *ot čego* ‘from something’

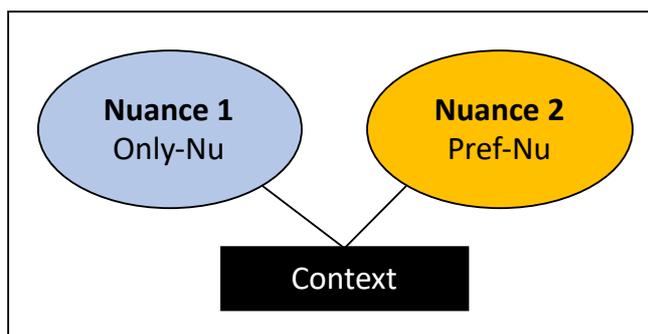
*Mladšen'kij počti kriknul ot neožidannosti* ‘Mladšen'kij almost shouted in surprise’

*Mladšen'kij počti vskriknul ot neožidannosti* ‘Mladšen'kij almost shouted in surprise (suddenly)’

Judging from the relatively small data set obtained in this experiment, Situations 1, 2 and 3 represent the most common scenario in Nu-dyads: Situations 1 and 2 involve subtype I of Pref-Nu verbs, i.e. verbs with a resultative meaning; Situation 3 pertains to subtype II of Pref-Nu verbs that express *Aktionsart*. Situations 4 and 5 are probably rarer, although in order to arrive at more definite conclusions, a much larger dataset must be examined. An interesting observation with regard to Situations 4 and 5 is that they cannot be fully predicted by the Nu-dyad Hypothesis.

#### 7.3.4 Situation 4: Both verbs are possible, but they yield slightly different nuances

The fourth situation occurs when Only-Nu and Pref-Nu describe slightly different nuances of the same action, rather than two completely different actions. Their lexical meaning is therefore closer than in Situation 2, but still distinct, and native speakers select verbs depending on which nuance they want to express. Figure 43 illustrates this situation by showing that a given context allows for two related nuances of meaning. The acceptability scores of the participants seem to reflect that they feel a semantic distinction between the verbs. In some contexts, both verbs fit and both receive high scores. In other contexts, one nuance is more natural than the other, and verbs expressing this nuance receive much higher acceptability scores than the other verb.



**Figure 44 Illustration of Situation 4: Both verbs are possible in a given context, but express different nuances of the action.**

To illustrate Situation 4, consider the Nu-dyad *tolknut'* 'push once' – *natolknut'* 'lead to (lit. push onto)' in the context of *na čto* 'onto something', discussed in Section 7.1 above. Judging from the corpus data, the unprefixed verb describes a situation that gives someone the incentive to perform an action, while the prefixed verb expresses a situation that stimulates the direct object mentally so that they get a thought or idea. Thus, in this context the verbs' meanings are different, but much less so than what was the case in Situations 1 and 2. The contexts of *tolknut'* and *natolknut'* chosen for the experiment are shown in (190) and (191). In English, the two verbs are translated in the same way and they are therefore shown together. The original verbs are shown in boldface.

(190) Verb + *na čto* 'onto something'

*Smert' Ivana **tolknula**/natolknula ego na kakie-to rešenija* 'Ivan's death led him to certain decisions'

(191) Verb + *na čto* 'onto something'

*Stat'ja **tolknula**/natolknula menja na nekotorye razmyšlenija* 'The article led me to certain reflections'

The results of the experiment confirm that the verbs indeed are more natural in their original contexts than in their non-original ones. In other words, the participants were sensitive to their difference. At the same time, they are largely considered possible in the context of the other verb, showing that they do not stand very far apart. *Tolknut'* is considered "Excellent" or "Acceptable" by 93% of the participants in its original context and by 45% in its non-original context. *Natolknut'* is considered "Excellent" or "Acceptable" by all (100%) in its original context and by 96% in its non-original context. The very high acceptability score of *natolknut'* in the context of *tolknut'* could be motivated by the word *rešenija* 'decisions' that can be understood in two ways – either as an action (motivating the use of *tolknut'*) or as getting an idea (motivating the use of *natolknut'*).

As a second illustration of Situation 4, consider *kinut' kogo* and *pokinut' kogo* in the context of *kinut'* (192). From examples in the corpus and native speakers I have consulted with, it appears that *pokinut'* in this context expresses the idea of leaving

someone literally, while *kinut'* expresses some kind of deceit, which possibly could be understood as a metaphorical extension of the meaning 'leave, abandon', since the subject leaves someone in a different situation than they had agreed:<sup>110</sup>

(192) Verb + [animate accusative direct object]

*Neuželi nam pridetsja rabotat' na ètix merzavčikov, kotorye kinuli/pokinuli nas god nazad na ostrove?*

In this context, the participants again favor the original verb, but judge the other verb as to some extent possible: 86% consider *kinut'* "Excellent" in the context and the remaining 14% see it as "Acceptable" – *pokinut'* is rated as "Excellent" by 27% and as "Acceptable" by 52%. A key word in the context is *merzavčiki* 'bastards'. With *kinut'* in the context, the subjects deceived the speaker(s) on the island a year ago. With *pokinut'* in the context, the subjects left the island a year ago (and maybe that is the reason why they are bastards).

A third example is *prygnut'* 'jump once' – *zaprygnut'* 'jump somewhere' in contexts involving *vo čto* 'into something' or *na čto* 'onto something', i.e. a direction. The semantic relationship between *prygnut'* and its prefixations was explored in Section 3.4, and I suggested that the unprefixated verb is used when the speaker focuses on the jump itself, while the prefixed verbs focus on the completion of a given trajectory. Thus, unlike the two other Nu-dyads mentioned for Situation 4, the use of *prygnut'* – *zaprygnut'* can be analyzed in favor of the Nu-dyad Hypothesis. The acceptability scores of the participants show that they largely see *prygnut'* and *zaprygnut'* as possible in the same context: in their non-original contexts, *prygnut'* is rated as "Excellent" or "Acceptable" by 91% and *zaprygnut'* as "Excellent" or "Acceptable" by everyone (100%).

(193) Verb + [direction]

*Ja prygnul/zaprygnul v mašinu* 'I jumped into the car'

(194) Verb + [direction]

*Mixaj prygnul/zaprygnul na lošad'* 'Mixaj jumped up on the horse'

In the present section, we see that this type of semantic relationship between Only-Nu and Pref-Nu appears in contexts related to Nu-dyads from several clusters. Thus, we are dealing with a recurring phenomenon and Situation 4 therefore

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<sup>110</sup> The corpus examples of *kinut' kogo* clearly imply a negative action and do not necessarily imply the idea of literally leaving someone or something, e.g. *Ja neskol'ko let u nego pomidory pokupal. V rassročku, na slovo. Ja ne mogu kinut' čeloveka, kotoryj mne doverjaet.* [Russkij reporter. 2014] 'For a few years I bought tomatoes only from him. Through deposits, by trust. I can't cheat a person who trusts me' and *Ja otdal ej vse den'gi, a ona kinula menja i ušla s drugim!* [Russkij reporter. 2007] 'I have her all the money, and she cheated me and went away with another!'. The contexts with *pokinut' kogo* usually do not have such negative connotations, cf. *On vstal, zatušil sigaretu v pepel'nice. — Ja vas pokinu, gospoda, na neskol'ko minut. Vy už menja izvinite.* [A. Makeev and N. Leonov. 2000-2004] 'He stood up and put out the cigarette in the ashtray. I leave you, gentlemen, for a few minutes. Do forgive me.'

represents an important observation with regard to what Nu-dyads might be like. In addition, the following two points can be made:

First, it seems that Situation 4 occurs when Only-Nu is used in a context typical of a prefixed verb (e.g. *na čto* for *tolknut'* – *natolknut'*), not vice versa (i.e. one of the other contexts possible for *tolknut'*). These contexts express some type of result, and both verbs in the Nu-dyad are therefore resultative (in the given contexts). In other words, (some) Only-Nu verbs can occur in resultative contexts, but Pref-Nu verbs are never non-resultative (except when they express Aktionsart). Arguably, this resembles what we saw in the cluster of *prygnut'* 'jump once' in Chapter 3 where both verb types express that the subject ends up in a new location, but *prygnut'* is used in contexts where the subject jumps up and down, or the result is not in focus.

Second, in the mentioned examples, it is Only-Nu that expresses the additional semantic nuance, while Pref-Nu is the more neutral choice. We see this in *kinut' kogo* 'cheat' – *pokinut' kogo* 'leave, abandon someone' where the meaning of *kinut'* possibly can be seen as a metaphorical extension of the meaning 'leave, abandon', and in *prygnut' vo/na čto* – *zaprygnut' vo/na čto* 'jump somewhere' where *prygnut'* might add an extra nuance of suddenness (see discussion in Section 3.4). Although in one sense this is counter-iconic (usually Pref-Nu is the verb with “extra” content), the given observation actually makes sense insofar as here it is Only-Nu that is “coerced” into the context of Pref-Nu, not the other way around: Only-Nu is needed to express a nuance of meaning that is not expressed by Pref-Nu. The case of *tolknut' na čto* – *natolknut' na čto* 'give someone an idea of (doing) something' is harder to analyze in the same way, but possibly one could say that getting an idea of doing something (*tolknut'*) is more specific than simply getting a thought in general (*natolknut'*).

Notice that these two points only are suggestions. My data are much too scarce to draw firm conclusions.

### **7.3.5 Situation 5: Both verbs are possible, but Pref-Nu is more specific and preferred**

We have now come to the last situation in my data. Situation 5 occurs when Only-Nu is able to express the same lexical meaning (“Lexical meaning 1”) as Pref-Nu in a given context. However, Pref-Nu is preferred very strongly, and, in this way, Situation 5 arguably comes close to Situation 1 where one verb is possible and the other verb is impossible. Although the corpus includes examples of Only-Nu in these contexts, they are few and most of the participants consider the unprefix verb to be “Impossible”. To illustrate the situation, the yellow circle representing Pref-Nu is marked with a thick line showing that it is the primary choice. The line around the blue circle, Only-Nu, is thin and dashed indicating that this verb hardly is used in the relevant context, though strictly speaking it is possible. The experiment does not contain examples of contexts where the two verbs can express the same lexical meaning, but Only-Nu is preferred instead of Pref-Nu.

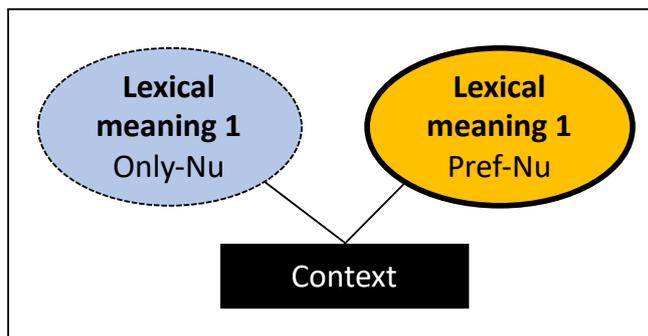


Figure 45 Illustration of Situation 5: The two verbs express the same meaning, but Pref-Nu is more specific in meaning and strongly preferred.

The experiment includes two examples of Situation 5. Let us consider them individually.

The first example involves *listnut'* 'flip once' – *perelistnut'* 'flip'. As mentioned in Section 4.5.1, in *perelistnut'*, *pere-* has the meaning TURN OVER. Since the activity of flipping a page essentially means to turn it, *pere-* does not alter the verb meaning in any way, but rather reinforces what is already there. On the one hand, then, *listnut'* and *perelistnut'* are synonymous and we could expect the two verbs to get similar acceptability scores in any context. On the other hand, one could say that *perelistnut'* even more precisely describes the activity of flipping, since it is expressed by two elements – both stem (*-list-*) and prefix (*pere-*). The results of the experiment show that *perelistnut'* is considered “Excellent” or “Acceptable” by all, or almost all, of the participants in both contexts, while *listnut'* in both contexts is seen as “Impossible” by most (cf. Figures 37 and 39). The frequency of the verbs in the RNC (years 1950-2017) gives further support to the observation that native speakers prefer the prefixed verb: *perelistnut'* occurs in 77 examples, while *listnut'* is found only in 12. In addition, several native speakers I have consulted claim that *listnut'* sounds “weird” and that they would never use it.

(195) Verb + [accusative direct object: pages]

On **listnul/perelistnul** *paru stranic* 'He flipped a couple of pages'

(196) Verb + [accusative direct object: pages]

*Prjaničkov listnul/perelistnul* *neskol'ko stranic* 'Prjaničkov flipped a few pages'

The second example of Situation 5 comes from *kinut'* 'throw once' – *nakinut'* 'throw onto'. Unlike *listnut'*, the unprefix verb *kinut'* can be used in a number of contexts to express different types of throwing events, and Situation 5 occurs in only one of these, namely the context typical of *nakinut'* that involves the prepositional phrase *na čto/kogo* 'onto something/someone'. The direct object is usually some piece of apparel that is thrown on someone, often on a particular body part, such as someone's head. In *nakinut'*, the prefix *na-* contributes the idea of a SURFACE.

However, this idea is also expressed by the preposition *na* ‘onto’, and the information given by the prefix is therefore redundant. As in the previous case, one could, on the one hand, assume that *kinut’* and *nakinut’* in the relevant context are synonymous: both are accompanied by the prepositional phrase *na čto* ‘onto something’. On the other hand, one could argue that the latter is more specific, stressing the SURFACE/onto meaning twice – in the prefix as well as in the preposition. The results of the experiment show that the participants strongly prefer the prefixed verb: *nakinut’* is rated as “Excellent” by all, or almost all, in both contexts, while *kinut’* mostly is seen as “Impossible” or “Acceptable”.

(197) Verb + *na čto/kogo* ‘throw on something/someone’

*Iljuša kinul/nakinul na gost’ju odejalo* ‘Iljuša threw a blanket over his guest’

(198) Verb + *na čto/kogo* ‘throw on something/someone’

*Ljudmila kinula/nakinula na golovu platok* ‘Ljudmila threw a shawl over her head’

As we can see, Situation 5 is not widely attested in my experiment, and the data in the present study are far from sufficient to determine how widespread it is. However, two points can be made:

First, like in Situation 4, it is arguably Only-Nu that is used in a context typical of Pref-Nu and not vice versa. At least this is the case for *kinut’ na čto/kogo - nakinut’ na čto/kogo* where the prepositional phrase is obligatory for the prefixed verb and only one of many possible contexts available for Only-Nu. For *listnut’ – perelistnut’*, the two verbs are possible in the same contexts. Unlike in Situation 4, however, Only-Nu does not express a different nuance of the verb meaning. In other words, while *kinut’ kogo* ‘cheat someone’ has an additional nuance of deceit not found in *pokinut’ kogo* ‘abandon someone’, *listnut’* and *kinut’ na čto/kogo* do not appear to express something that is not also expressed by the prefixed alternatives. The difference between Only-Nu and Pref-Nu is that the latter verb expresses the relevant lexical meaning not only in the verb stem and/or preposition, but also in the prefix.

Second, the prefixed verbs are clearly preferred. One reason for this could be that the verb meanings in questions seem to entail a result: a page is flipped and one thing is thrown onto something else (cf. the Nu-dyad Hypothesis). The data are much too limited to draw strong conclusions, but based on the two cases in question, the rule seems to be: If a prefix is possible, use it.

In a broader theoretical perspective, these observations can arguably be related to the so-called Elsewhere Principle or the Elsewhere Condition. The Elsewhere Principle states that “a more specific form is preferred over a more general one where both are in principle grammatical” (Ackema and Neeleman 2005: 298). The elsewhere form is the more general form that is used in situations where the more

specific form is not possible. The Elsewhere Principle is often connected with Kiparsky's work on phonology (Kiparsky 1973), but the idea has been invoked by others, both before and after his 1972 publication (e.g. Anderson 1969, Aronoff 1976, Koutsoudas 1980, Anderson 1986) and probably goes back all the way to the 4<sup>th</sup> century BC Sanskrit philologist and grammarian Pāṇini. The principle is also alluded to by Lakoff (1987: 147) in his recognition that "[m]ore specific knowledge takes precedence over more general knowledge".<sup>111</sup> For Russian, the Elsewhere Principle has been used to account for Russian stress patterns (Neset 1994: 128). The Elsewhere Principle can also be related to the idea of privative oppositions that in Chapter 3 was discussed as a possible way of analyzing Nu-dyads. On that analysis, Pref-Nu (as the marked member) is selected when the speaker needs to express the result of the action, while Only-Nu is selected in all other contexts, i.e. in contexts where the result is not in focus.

Applied to this study, the Elsewhere Principle predicts Pref-Nu as the more specific form (because of the prefix meaning) to be selected whenever possible, even if Only-Nu, strictly speaking, can be used too. One could, perhaps, object that for a general principle, such as the one in question, to be considered valid, it should explain more cases: in the present study, it appears relevant in only two of 34 contexts. At the same time, this situation arguably yields the principle indirect support: when both verbs semantically and syntactically are possible, Pref-Nu is preferred so strongly that it is difficult to find examples in the corpus where Only-Nu has been employed.

#### **7.4 Summary and conclusions**

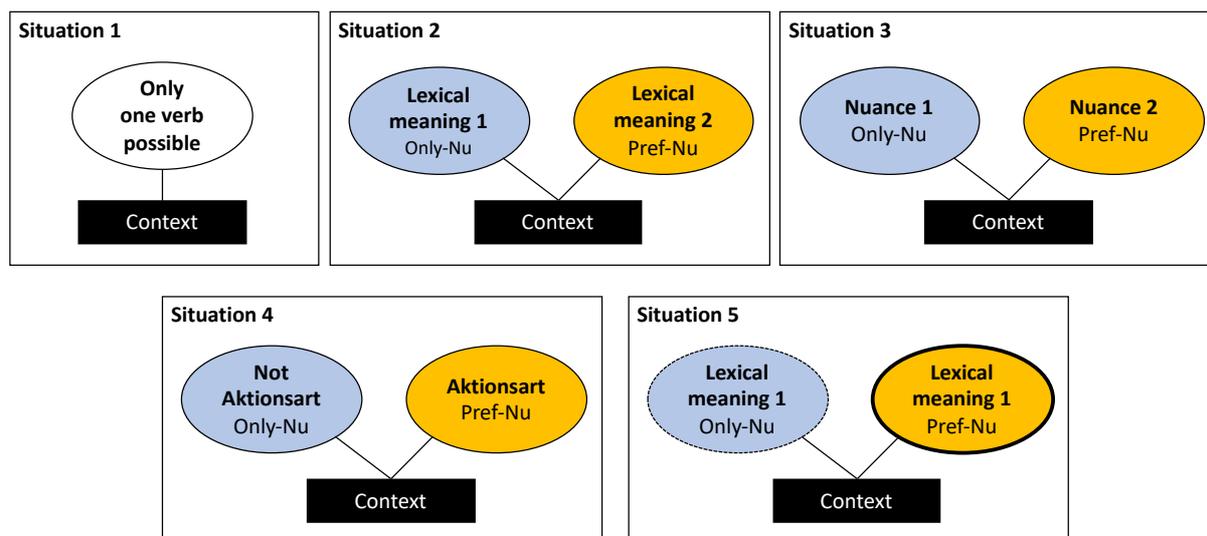
In the present chapter, I have discussed the acceptability scores of the Only-Nu and Pref-Nu verbs in the psycholinguistic experiment introduced in Chapter 6. Based on the results of the experiment, I have suggested that the interaction between Only-Nu and Pref-Nu verbs in Nu-dyads represent at least five situations ranging from contexts where only one verb is syntactically and/or semantically possible to contexts where both can be used with the same lexical meaning and Pref-Nu is strongly preferred. Other types of situations could exist, although they are not attested in this study. The situations I have suggested are:

1. Only one verb is possible;
2. Both verbs are possible, but they describe different actions;
3. Both verbs are possible, but Pref-Nu describes Aktionsart;
4. Both verbs are possible, but they express different nuances;
5. Both verbs are possible, but Pref-Nu is more specific and is preferred.

For the sake of convenience, the illustrations of these situations are reinserted below:

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<sup>111</sup> In this passage, Lakoff refers to Wilensky (1983: 25) who writes: "Always apply the most specific pieces of knowledge available."



**Figure 46** The five types of interaction (situations) between Only-Nu and Pref-Nu verbs discovered in this chapter.

Of the five situations in question, I have argued that Situations 1-3 likely are most common. The verbs' interaction in these situations are furthermore as predicted by the Nu-dyad Hypothesis that was discussed and tested in Chapter 3: the Pref-Nu verbs describe actions that culminate in a result (subtype I) or they express Aktionsart (subtype II), while the Only-Nu verbs are used about actions that are not in themselves resultative. Common for Situations 1-4 is that the two verbs have very or slightly different lexical meanings and the choice of verb therefore depends on what precisely the speaker wants to say.

Situation 4 is probably less widespread, but its extent cannot be determined based on the limited data at hand. An interesting observation about Situation 4 is that two of the three Nu-dyads discussed in this chapter, are not predicted by the Nu-dyad Hypothesis: Pref-Nu and Only-Nu do not differ in terms of resultativity, but something else. Moreover, unlike the general pattern where Pref-Nu, due to its prefix, has semantic content that Only-Nu does not have, in Situation 4 it is Only-Nu that appears to include an additional semantic component.

Situation 5 is least widespread in my data. Here, the two verbs express the same lexical meaning in a given context, but Pref-Nu is strongly preferred by the participants and Only-Nu is largely considered "Impossible. The strong preference of Pref-Nu might have to do with this verb having a more specific meaning (cf. the Elsewhere Principle). The fact that Situation 5 is so rare in my data and that it furthermore comes close to Situation 1 where only one verb is possible confirms the observation in Chapter 3 that, while the relationship between Pref-Nu and Only-Nu is complex, for most practical purposes, the lexical meanings of the two verbs are usually different enough to make the choice between them obvious.

## 8 Findings, implications for Russian aspectology and new questions for future research

In this dissertation, I have explored a group of Russian verbs that previously has received little attention in the scholarly literature, namely perfective verbs like *zapixnut* ‘cram into’ that contain both a prefix and the semelfactive suffix *-nu-* and furthermore have an unprefixated counterpart in Contemporary Standard Russian (here, *pixnut* ‘shove once’). For the purposes of the study, these verbs have been referred to as “Pref-Nu verbs”, a term that makes only two statements – that they have a prefix (Pref) and that they contain the suffix *-nu-* (Nu). The goal of the dissertation has been to understand the function of this heterogeneous group of verbs in Contemporary Standard Russian and compare them with other types of perfectives in the language – Only-Nu (*-nu-*semelfactives) and Pref-Only (prefixed perfectives without the suffix *-nu-*). I have explored two hypotheses. According to the Nu-dyad Hypothesis, Pref-Nu verbs denote one “quantum” of an activity that culminates in a result (subtype I) or they express Aktionsart (subtype II), while Only-Nu verbs expresses one “quantum” of an activity and is not concerned with a result. The Pref-dyad Hypothesis predicts that Pref-Only verbs differ from Pref-Nu verbs in that the result of the activity is achieved by means of several “quanta” (repetitions). The results of my studies have yielded much support to these hypotheses, but we have also seen cases that are more difficult to explain.

To investigate Pref-Nu verbs, I have used corpus data and experimental research; I have analyzed them as a group and on an individual level through a number of case studies, which have also included Only-Nu and Pref-Only verbs. In this last chapter of the dissertation, I briefly summarize my findings in each chapter (Section 8.1) and discuss what this dissertation contributes to the field of Russian aspectology in general (Section 8.2). In the end of the chapter, I suggest possible avenues for further research (Section 8.3).

### 8.1 Findings about Pref-Nu verbs

While it has been no secret that Pref-Nu verbs exist, their characteristics and function have not previously been subjected to large-scale empirical study. Mentions of the verbs are usually tucked away in the descriptions of other verb types and the few statements that have been made seem to have gone unnoticed, or at least “untested”. **Chapter 1** situated Pref-Nu verbs in the landscape of Russian aspectology, offered an overview of existing scholarly literature on their properties and outlined the research questions to be investigated in the subsequent chapters.

Many Russian perfectives contain a prefix and the semelfactive suffix *-nu-*, but to analyze them as one group is not straightforward. This was discussed in **Chapter 2** where I divided prefixed *-nu-*perfectives in the RNC into several subgroups and substantiated why my dissertation focuses on one of them. The database includes the 254 verbs from this group that meet the criteria proposed for Pref-Nu verbs in

Section 1.4.4 and that furthermore are attested in at least 10 corpus examples. In Chapter 2, I explored some general characteristics of this verb group. It was shown that up to 17 Pref-Nu verbs belong to a single aspectual cluster. Most of the clusters describe various types of movement. Pref-Nu verbs are furthermore connected with the semantic categories Impact, Physiol (*physiological sphere*) and Sound. All Russian verb prefixes and prefix meanings are relevant for Pref-Nu verbs and prefix stacking is attested. The prefix meaning can alter the lexical meaning of the verb or express Aktionsart. It can also involve a semantic content that is already expressed by the verb (e.g. *pere-* 'TURN OVER' in *perelistnut'* 'flip'). All of this is parallel to what we find among prefixed perfectives without *-nu-*. Pref-Nu verbs usually have a corresponding secondary imperfective in *-ivaj-* and sometimes in *-aj-* or *-vaj-* that can express a process and/or repeated action.

Based on this first overview of the data, I followed up with case studies of individual verbs. In **Chapter 3**, I tested the Nu-dyad Hypothesis. A finding in support of this hypothesis was that some Pref-Nu verbs regularly occur as past passive participles to express situations involving a change of state, while most Only-Nu verbs do not. The hypothesis received further support from case studies of Nu-dyads in three aspectual clusters. In each Nu-dyad, I showed that the prefix narrows down or changes the verb's lexical meaning or contributes Aktionsart semantics, as predicted by the hypothesis. In regard to resultativity, the hypothesis was found more difficult to test insofar as the notion of a result can be understood differently for every verb. Based on my definitions of resultativity for the verbs in question, I found clear support for the Nu-dyad hypothesis in the cluster of *xlopnut'*. In the cluster of *prygnut'* 'jump once', Only-Nu and Pref-Nu appeared possible in many of the same contexts, but I suggested that Pref-Nu verbs focuses on the result of the action, while Only-Nu focuses on the action itself. In the cluster of *kriknut'*, I argued that it is hard to speak of any result as such, but, since the unprefix and prefixed verbs occur in different types of contexts, from a practical user perspective, the choice between them should always be more or less clear. As ideas for future studies, I suggested that Nu-dyads potentially involve a privative opposition between a marked and an unmarked member where Pref-Nu expresses the result of the action and Only-Nu neither states nor does not state that the result occurred. Another idea I suggest is to analyze the relevant verbs as devices to foreground and background the result. However, these ideas must be tested on more verbs to draw a conclusion.

**Chapter 4** considered Pref-dyads, e.g. *zapixnut'* 'shove into' – *zapixat'* 'shove into'. Pref-dyads are a widespread phenomenon in the database, but not many of them were found to be well-attested in the corpus. For the purposes of the study, I considered the 20 most widely attested Pref-dyads in the RNC and tested the Pref-dyad Hypothesis. The given Pref-dyads were shown to fall into two groups: non-synonymous Pref-dyads and synonymous Pref-dyads. In the non-synonymous Pref-dyads, the prefix contributes one semantic content in one verb and another semantic content in the other verb. Usually one of the verbs expresses Aktionsart.

The meanings of the verbs matched the predictions of the hypothesis. In the synonymous Pref-dyads, the prefix yielded the same semantic content in both verbs. Although the behavior of some of these verbs at least to some extent behaved as predicted by the hypothesis, many were difficult to tease apart and/or appeared to display other semantic distinctions. It was concluded that corpus data cannot reveal all semantic nuances that can exist between two verbs, especially in cases of near-synonymy and, with that, rival forms.

Russian displays several cases of rivalry between verbs. In **Chapter 5**, I zoomed in on the three types of rivalry that are relevant for Pref-Nu verbs: between Pref-Nu verbs, in Nu-dyads, and in synonymous Pref-dyads. I discussed what the corpus studies in Chapters 3 and 4 revealed about rivalry in these cases and compared these situations with three well-known cases of rivalry that involve other types of verbs, namely prefix variation (rivalry between prefixed perfectives), so-called aspectual triplets (rivalry between imperfectives), and rivalry between prefixed verbs of the same aspect that have different suffixes. Although the kinds of rivalry explored in this dissertation most likely are less widespread than the other cases of rivalry mentioned, rivalry involving Pref-Nu verbs clearly exists and therefore deserves empirical study, not only corpus based, but also experimental. I discussed the pros and cons of these two complementary approaches and why I consider them both to be useful for the purposes of my own project.

**Chapter 6** investigated the question of rival forms and synonymy in Pref-dyads by means of an experiment where 203 native speakers were asked to rate the acceptability of Pref-Nu and Pref-Only in a number of contexts from the corpus. Although the experiment could not shed light on what motivated the acceptability scores of the participants, it showed to what extent they considered two related verbs possible in the same contexts. The acceptability scores of the non-synonymous Pref-dyads, which were included as control items, confirmed that these verbs indeed are non-synonymous. The verbs in the synonymous Pref-dyads were mostly rated differently, suggesting that they indeed are semantically distinct. In a few contexts, the verbs received similar scores, but it is unclear whether the given verbs in fact express the exact same meaning (in the given contexts), or whether it is the contexts that are equally compatible with two types of meanings. The most important finding in this chapter was that native speakers confirmed that the synonymous Pref-dyads generally are not fully synonymous.

The participants of the experiment were also asked to give acceptability scores for the Only-Nu verbs related to the relevant Pref-Nu and Pref-Only verbs. In this way, I was able to explore their intuitions about Nu-dyads. **Chapter 7** compared the scores for Only-Nu and Pref-Nu verbs and, on the basis of these results, I proposed that verbs' interaction in Nu-dyads represent at least five types of situations that can occur depending on the verbs and contexts in question. I argued that Only-Nu and Pref-Nu in four of these situations express different lexical meanings or nuances of meaning. Both verbs might be possible syntactically, but they do not

express the exact same content and the choice of verb can therefore be predicted. In the last situation, which is where both verbs express the same lexical meaning, I found that Pref-Nu is strongly preferred to Only-Nu. My data were too limited to draw strong conclusions, but I suggested that native speakers prefer the most informative (prefixed) word to the general (unprefixed) one, consistent with what has been argued for many other linguistic phenomena in a number of languages (“the Elsewhere Principle”).

Far from being exhaustive, the observations above help us understand the use and function of Pref-Nu verbs in Russian. But what are the implications of these findings for the study of Russian aspectology in a broader perspective? In the next section, I would like to reflect on this important question.

## 8.2 Contributions for Russian aspectology

My contribution to Russian aspectology can be summarized in the following points:

Types of perfective verbs in Russian: Traditional grammars of Russian mention two ways in which perfective verbs can be derived: via prefixation and with the semelfactive suffix *-nu-*. Both prefixed perfectives and so-called *-nu-*semelfactives have been studied by scholars in numerous works, and based on these works one could get the impression that Russian perfectives always have either one or the other affix. The fact that perfective verbs can have both has never been a secret, but at the same time has not received much attention. My dissertation has shown that Pref-Nu verbs constitute an important group of verbs that deserves to be included in descriptions of the Russian aspectual system. It has also shed light on the heterogeneous nature of the group and that several subgroups are relevant.

Semantic contribution of the prefix in Pref-Nu verbs: When a prefix is added to an unprefixed base imperfective to create a perfective verb, i.e. a Pref-Only verb, the prefix interacts with the verb meaning in one of three main ways (cf. Section 1.1):

- A. The prefix does not change the lexical meaning of the verb and only makes the verb perfective, cf. *pisat'* ‘write’ vs. *napisat'* ‘write (to completion)’;
- B. The prefix changes the lexical meaning of the verb, cf. *pisat'* ‘write’ vs. *podpisat'* ‘sign’;
- C. The prefix yields Aktionsart meaning to the verb, i.e. sets boundaries on the activity, cf. *pisat'* ‘write’ vs. *popisat'* ‘write for a while’.

The boundary between types A, B and C is not clear-cut: polysemous verbs can be related to two types (e.g. *prospat'* ‘oversleep (B), sleep for a certain time (C)'). Type C involves a number of subtypes (ingressive, delimitative, accumulative, etc.).

In my dissertation, I have shown that a parallel system is found in Pref-Nu verbs, only here the prefix is combined with an unprefixed perfective, rather than an

unprefixed imperfective.<sup>112</sup> On the one hand, this observation shows that there is nothing special about Pref-Nu verbs in terms of prefixation: what is known about prefix modifications in perfectives without *-nu-* is largely applicable to Pref-Nu. However, the two types of perfectives differ in one important way. In Pref-Only verbs, the prefix is obligatory to make the verb perfective: if the speaker needs a perfective meaning, he also needs a prefix, and the unprefixed verb is impossible. For Pref-Nu verbs the situation is different: the corresponding unprefixed verbs (Only-Nu) are perfective too, so in a context requiring the perfective aspect, a speaker chooses between various prefixed verbs and also an unprefixed one. In my dissertation, I have investigated this complex situation in considerable detail.

The semantic relationship between Only-Nu and Pref-Nu: When the meanings of Pref-Nu and Only-Nu have been compared in the scholarly literature, Pref-Nu has often been described as “less semelfactive” than Only-Nu and as concerned with a result. However, there have also been contradictory claims, and, in earlier studies, the relationship between them has not been the object of thorough exploration by means of corpus data.

Looking back at the three case studies in Chapter 3 and the experiment results in Chapter 7, the main observation that can be made in regard to Nu-dyads is, perhaps, that they are very different. The relationship between Pref-Nu and Only-Nu is therefore clearly complex and not necessarily parallel in the various Nu-dyads. What I have found is that the prefix semantics usually makes the prefixed verb slightly different in meaning than the unprefixed verb, and that the two verbs in a Nu-dyad therefore tend to be connected with different lexical meanings and types of constructions. At the same time, we have seen that Only-Nu can be used to express the same lexical meaning as a given Pref-Nu verb. Based on the cases at hand, I have suggested that privative oppositions, foregrounding/backgrounding of meaning, and the Elsewhere Principle contribute to our understanding of the verbs under scrutiny. However, more verbs must be investigated to gain a deep understanding of these intriguing situations.

The semantic relationship between Pref-Nu and Pref-Only: To the extent that Pref-dyads have been mentioned in the scholarly literature, different claims have been made, and none of them have been tested on corpus data. Verbs in Pref-dyads have been described as synonymous, as involving a single instance vs. multiple instance distinction, as involving different lexical meanings, as being widespread in Russian, or as hardly being relevant.

My dissertation has shown that Pref-dyads are widespread, but that in many of the cases one or both members of the dyad is low-frequent. I have furthermore shown that there are two main groups of Pref-dyads, and these display different

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<sup>112</sup> As pointed out in Section 1.4.1, scholars have made different claims as to how Pref-Nu verbs are derived. In my dissertation, I have not investigated the question of derivation, and the statement that the prefix modifies Only-Nu is therefore only a presumption.

tendencies in their behaviors. Non-synonymous Pref-dyads perfectly match the suggested single instance vs. multiple instance distinction, and one of the two verbs usually expresses Aktionsart. Synonymous Pref-dyads are much more varied and do not display one consistent pattern. Although the single instance vs. multiple instance distinction may not be completely irrelevant, it is much less clear, and some of the verbs appear close to full synonyms. Each of these Pref-dyads is clearly a separate story that cannot be fully understood from corpus data.

Pref-Nu verbs and rivalry: From the scholarly literature on Russian aspect, we know of many instances of so-called rival verbs – two or more verbs of the same aspect that have approximately the same lexical meaning, e.g. the perfective verbs *zavjaznut'* 'get stuck' and *uvjaznut'* 'get stuck' that have very similar lexical meanings and both function as the aspectual partner of *vjaznut'* 'get stuck' ("prefix variation"). Rival forms are interesting because it is not obvious how the forms are different and whether they are different at all, and they are furthermore connected with the larger theoretical question of whether complete synonymy exists.

In my dissertation, I have suggested that Pref-Nu verbs participate in rivalry in three ways: 1) rivalry between Pref-Nu verbs, e.g. *vprygnut'* – *zaprygnut'* *v mašinu* 'jump into a car', 2) rivalry in Nu-dyads, e.g. *vprygnut'* – *prygnut'* *v mašinu* 'jump into a car' and *perelistnut'* – *listnut'* 'flip', and 3) rivalry in Pref-dyads, e.g. *sliznut'* – *slizat'* 'lick off'. None of these instances of rivalry have been the subject of serious attention in previous studies. My corpus and experimental studies largely show that the verbs are not completely synonymous in meaning, but based on the data at hand, I have not been able to fully explain all the semantic distinctions between them.

Corpus vs. experimental data to describe verb meaning: In recent years, rival forms have often been investigated by means of corpus data. Corpora give easy access to large amounts of data that in turn can be studied empirically. Corpora are furthermore a source of usage-based data, that is, they report actual usage-events, which is valuable for cognitive linguists (Langacker 1988, 2000). At the same time, corpus data have their limitations and Chapters 3 and 4 illustrated this: although I always found *something* that made two related verbs distinct, some verbs seemed very close to synonymous. In order to find out whether native speakers agree, I carried out an experiment.

I have pointed out that corpus data and the given experiment yield complementary insights: the corpus shows how a given verb is used in a number of examples, each written by one author, but does not show whether the rival form could be possible too. The experiment shows to what extent two rival forms potentially are possible in one particular context in the opinion of many native speakers. The experiment largely gave support to the hypothesis that languages avoid complete synonymy: in the majority of the contexts, the two verb forms received different acceptability scores, showing that native speakers feel a difference.

A general problem is that neither the corpus data, nor the experiment sheds light on what precisely native speakers understand the semantic difference between the verb types to be. The comments about the verbs from native speakers (who did not take part in the experiment) show that their intuitive explanations tend to be different and not always in agreement with each other. We furthermore do not know what exactly motivated the scores of the participants. Despite these limitations, however, my dissertation testifies to the value of combining corpus data and data from experiments in linguistic research.

Every verb has its own story: Seemingly trivial and much to my frustration, this last point has proven essential throughout this dissertation. As linguists we would like to find a tendency or principle that efficiently describes all our data, but the longer we study a given phenomenon, the more we realize how much variation it contains. In particular, it has been difficult to describe the semantic relationship between Pref-Nu and Only-Nu, as well as between Pref-Nu and Pref-Only, in cases of near-synonymy. I have argued that much of my data can be interpreted in support of the Nu-dyad and Pref-dyad hypotheses. At the same time, I have tried to show the diversity of the system and that not all the verbs behave as expected: every verb could have been a separate study, and there is still much more to learn about each case.

### **8.3 Directions for further research**

Although this dissertation answers many questions about Pref-Nu verbs, it leaves others untouched or, at least, unanswered.

One question concerns the various subgroups of prefixed *-nu*-perfectives described in Chapter 2. Many of them appear to be historically connected with an unprefixated *-nu*-perfective that no longer exists; others are traditionally analyzed as derived by means of a circumfix from a base imperfective (e.g. *pri-...-nu-*) rather than with a prefix from Only-Nu. We also find Church Slavonicisms. In my dissertation, I have not investigated questions of derivation and I decided to focus on verbs that definitely have a corresponding Only-Nu verb in Contemporary Standard Russian. My choice of verb arguably creates an artificial category boundary. A future study may shed light on whether these subgroups of verbs in fact should be analyzed as one group (as they sometimes are) and, if so, what they have in common. One can also look into Pref-Nu verbs with the reflexive suffix *-sja*, a group of verbs that was not analyzed in this dissertation.

The observation that the prefix does not necessarily change the lexical meaning of Pref-Nu verbs, or changes it very slightly, is new (e.g. *pere-* in *perelistnut'* 'flip' and *za-* in *zaprygnut'* 'jump somewhere'). In previous accounts, scholars have primarily described cases where the prefix changes the verbs' lexical meaning considerably. The situation resembles what we find in Natural Perfectives, but while the prefix in Natural Perfectives is required in order to make the verb perfective, the prefix

in Pref-Nu verbs does not serve this purpose. More data and studies are needed to find out how widespread this situation is, what motivates the choice of verb in such cases, and whether there are systematic tendencies.

The hypothesis that Pref-Nu and Only-Nu form a privative opposition where Pref-Nu is marked and expresses a result and Only-Nu is unmarked and does not focus on the result, must be tested on a larger number, of verbs. Such a study will shed new light, not only on Nu-dyads as such, but also on the nature of Only-Nu verbs, which have been much studied in Russian aspectology.

As mentioned at several points, the relationship between Pref-Nu and Pref-Only verbs in Pref-dyads remains to some extent a mystery. In the corpus data, some of them appear more or less fully synonymous. At the same time, native speakers often claim to perceive differences, although they cannot always agree as to what it is. Future studies may explore such Pref-dyads in more detail, both experimentally and by means of corpus data.

A larger diachronic question concerns the development of Pref-Nu verbs in Russian. Unprefixed *-nu*-semelfactives have existed since Common Slavic and much has been written about their development over the centuries (e.g. Silina 1982: 178-180, Schuyt 1990, Gorbachov 2007, Nessel 2012). However, when, how and why their prefixed counterparts appeared are questions that, to the best of my knowledge, have not been thoroughly investigated by other scholars, although Silina (1982) makes some brief remarks.

While all these (and many other) questions regarding Pref-Nu verbs, Nu-dyads and Pref-dyads merit further scrutiny, my dissertation has at least unpacked some of the properties of verbs containing both a prefix and the semelfactive *-nu*-suffix. In this way, I hope to have contributed to filling an important knowledge gap on the map of Russian aspectology.

## Appendix 1: Pref-Nu verbs and their corresponding Only-Nu verbs

This appendix gives a glossed overview of the 254 Pref-Nu verbs included in the study shown in alphabetical order according to their corresponding Only-Nu verbs. Many of the verbs are polysemous, and for a more exhaustive overview of the verbs' semantics, the reader should confer with a dictionary and corpus examples. The token frequencies of the verbs are shown in the rightmost column of the table.

VERB	ENGLISH GLOSS	#EX.
<i>blesnut'</i>	'flash, shine'	1,819
<b><i>problesnut'</i></b>	'flash by'	16
<b><i>vzblesnut'</i></b>	'flare up'	13
<i>boltnut'</i>	'blurt out; dangle; stir'	14
<b><i>sboltnut'</i></b>	'blurt out'	129
<i>bryknut'</i>	'kick, fling'	14
<b><i>vzbryknut'</i></b>	'lash out; kick'	98
<i>bryznut'</i>	'spray, splash, sprinkle'	745
<b><i>sbryznut'</i></b>	'sprinkle, spatter'	78
<i>čerknut'</i>	'scrawl, scratch/dash off, scribble, drop a line'	165
<b><i>otčerknut'</i></b>	'mark off'	101
<b><i>perečerknut'</i></b>	'strike out (often metaph.)'	555
<b><i>podčerknut'</i></b>	'underline, emphasize'	7,180
<b><i>pročerknut'</i></b>	'cross out (colloq.)'	10
<b><i>vyčerknut'</i></b>	'cross out (often metaph.)'	992
<b><i>začerknut'</i></b>	'cross out (lit.)'	484
<i>čerpnut'</i>	'scoop, ladle, draw'	37
<b><i>počerpnut'</i></b>	'draw, scoop up, glean'	603
<b><i>začerpnut'</i></b>	'scoop/draw up'	466
<i>čmoknut'</i>	'peck, smack (with/on the lips)'	498
<b><i>pričmoknut'</i></b>	'smack one's lips'	71

<i>cyknut'</i>	'hush, silence; snap at, shut (someone) up'	195
<b><i>pricyknut'</i></b>	'hush, snap at slightly'	31
<i>děrnut'</i>	'pull, yank, jerk'	2,477
<b><i>naděrnut'</i></b>	'pull over'	11
<b><i>obděrnut'</i></b>	'pull down over'	631
<b><i>oděrnut'</i></b>	'pull down; hush, straighten someone up (metaph.)'	30
<b><i>otděrnut'</i></b>	'draw aside, pull back'	492
<b><i>pereděrnut'</i></b>	'pull across; cheat (metaph.); distort (metaph.)'	742
<b><i>podděrnut'</i></b>	'pull up slightly'	340
<b><i>poděrnut'</i></b>	'shroud; cover, coat (impersonal construction)'	340
<b><i>proděrnut'</i></b>	'thread, pull through; criticize'	58
<b><i>razděrnut'</i></b>	'pull/draw apart'	50
<b><i>sděrnut'</i></b>	'pull off, yank/whip off'	563
<b><i>vyděrnut'</i></b>	'pull out, draw (out)'	1,258
<b><i>vzděrnut'</i></b>	'jerk up, string up, hang'	694
<b><i>zaděrnut'</i></b>	'draw/close, i.e. curtains; cover, i.e. clouds (metaph.)'	443
<i>doxnút'</i>	'breathe'	582
<b><i>otdoxnút'</i></b>	'rest, relax, repose'	4,988
<b><i>peredoxnút'</i></b>	'pause for breath, take a (short) break'	894
<b><i>prodoxnút'</i></b>	'sigh; rest (colloq.)'	120
<b><i>vdoxnút'</i></b>	'breathe in, inhale'	1,139
<b><i>výdoxnut'</i></b>	'breathe out, exhale'	1,623
<b><i>vzdoxnút'</i></b>	'sigh'	13,189
<i>drognut'</i>	'waver, falter; tremble, shiver'	2,697
<b><i>vzdrognut'</i></b>	'wince, flinch, shudder'	3,667
<i>dunut'</i>	'blow'	515
<b><i>sdunut'</i></b>	'blow away/off'	29
<b><i>vdunut'</i></b>	'blow into'	25
<i>dvinut'</i>	'move, advance, set in motion'	1,243
<b><i>nadvinut'</i></b>	'move, pull, push; push/pull down over'	543
<b><i>otodvinut'</i></b>	'move aside/away, put off'	2,124
<b><i>peredvinut'</i></b>	'move, shift'	402
<b><i>pododvinut'</i></b>	'move up, push up, move close (to), draw near (to)'	311
<b><i>podvinut'</i></b>	'move, push, advance'	584

<i>pridvinut'</i>	'move up/toward, draw up/near'	792
<i>prodvinut'</i>	'move on, push forward, advance, progress'	1,185
<i>razdvinut'</i>	'move apart, pull apart, spread, expand'	1,074
<i>sdvinut'</i>	'shift, move, budge; move towards each other'	2,489
<i>vdvinut'</i>	'slide in/into, push/move in/into'	51
<i>vydvinut'</i>	'move out, pull out; put forward, nominate, propose'	3,835
<i>zadvinut'</i>	'bolt, bar; close, push/slide shut; put to one side'	509
<i>gljanut'</i>	'glance, look'	5,397
<i>ogljanut'</i>	'survey, examine, look over; look around'	27
<i>progljanut'</i>	'appear, peep/peek out/through, show'	179
<i>vygljanut'</i>	'look out, peer, peek, peep'	2,091
<i>vzgljanut'</i>	'glance'	12,310
<i>zagljanut'</i>	'peep, drop in'	8,231
<i>glotnut'</i>	'swallow, sip'	747
<i>sglotnut'</i>	'swallow, gulp down (often metaph., i.e. feelings)'	448
<i>zaglotnut'</i>	'gulp, swallow'	62
<i>kačnut'</i>	'rock, shake'	696
<i>pokačnut'</i>	'shake, rock'	17
<i>kinut'</i>	'throw, deceive (metaph.)'	2,883
<i>dokinut'</i>	'throw to as far as X'	13
<i>nakinut'</i>	'throw on, fling on, slip on'	1,743
<i>okinut'</i>	'take a look at ( <i>vzgljadom, vzorom, glazom</i> )'	946
<i>oprokinut'</i>	'overturn, topple, throw over, upset'	1,943
<i>otkinut'</i>	'fold back, throw aside, throw back; recline'	1,838
<i>perekinut'</i>	'throw over; reverse; transfer'	1,023
<i>podkinut'</i>	'throw up'	757
<i>pokinut'</i>	'leave, abandon; quit'	8,180
<i>poraskinut'</i>	'think it over ( <i>mozgami</i> )'	92
<i>prikinut'</i>	'throw in, add; weigh, estimate; pretend (to be)'	1,394
<i>prokinut'</i>	'throw between, throw past'	11
<i>raskinut'</i>	'stretch (out), expand; sprawl; pitch'	1,745
<i>skinut'</i>	'throw off/down; knock off, i.e. prices (metaph.)'	1,755
<i>vskinut'</i>	'throw/cast up'	1,803
<i>vykinut'</i>	'throw away/out; discard, reject'	2,282
<i>zakinut'</i>	'throw, cast, hurl; drop off'	1,537
<i>zaprokinut'</i>	'throw back, jerk back'	707

<i>kliknut'</i>	'call, click'	
<b>okliknut'</b>	'hail, call (to)'	1,778
<b>voskliknut'</b>	'exclaim'	7,766
<b>vykliknut'</b>	'call out'	36
<i>ljunut'</i>	'peck (bite)'	701
<i>skljunut'</i>	'peck (eat)'	12
<i>kolupnut'</i>	'scratch'	16
<b>otkolupnut'</b>	'scratch off (intentionally)'	43
<b>skolupnut'</b>	'scratch off (by accident)'	12
<i>kovyrrnut'</i>	'pick'	110
<b>otkovyrrnut'</b>	'pick away, remove'	24
<b>podkovyrrnut'</b>	'pick; move'	36
<i>skovyrrnut'</i>	'pick off, scratch off; knock over'	84
<b>vykovyrrnut'</b>	'hunt out, pick out'	21
<i>kriknut'</i>	'shout, scream'	12,557
<b>okriknut'</b>	'shout/call up'	27
<b>prikriknut'</b>	'shout at, raise one's voice'	836
<b>vskriknut'</b>	'cry out, scream, shriek'	1,954
<b>vykriknut'</b>	'cry out; yell'	1,418
<i>listnut'</i>	'flip'	12
<b>perelistnut'</b>	'flip'	77
<b>prolistnut'</b>	'scroll'	23
<i>liznut'</i>	'lick'	492
<b>obliznut'</b>	'lick, lick clean; moisten (of lips)'	11
<i>sliznut'</i>	'lick, lick off'	188
<b>uliznut'</b>	'sneak out, slip away, escape, steal away/off'	233
<i>maknut'</i>	'dip, dunk'	80
<b>obmaknut'</b>	'dip (so that object is covered in something)'	376
<b>promaknut'</b>	'wipe off (of tears, food around mouth, etc)'	12

<i>maxnut'</i>	'wave'	6,294
<b>obmaxnut'</b>	'brush off; fan'	61
<b>otmaxnut'</b>	'brush aside, wave away/aside'	65
<b>peremaxnut'</b>	'take a stride, jump over, fly over'	262
<b>podmaxnut'</b>	'sign something in a hurry without looking at it'	79
<b>promaxnut'</b>	'miss; (make/commit a) blunder'	32
<b>razmaxnut'</b>	'scatter; swing'	24
<b>smaxnut'</b>	'brush away/off'	627
<b>vymaxnut'</b>	'jump/quickly move out; wave out'	17
<b>vzmaxnut'</b>	'wave, flap'	1,170
<i>mel'knut'</i>	'flicker, flash'	3,631
<b>promel'knut'</b>	'flash past/by'	1,219
<i>metnut'</i>	'hurl'	515
<b>vzmetnut'</b>	'toss up, whirl, flap'	160
<i>mignut'</i>	'blink, wink, twinkle'	336
<b>podmignut'</b>	'wink at ( <i>komu</i> )'	2,097
<i>minut'</i>	'pass (about time)'	28,742
<b>(ne) preminut'</b>	'not miss, i.e. a chance'	477
<b>obminut'</b>	'bypass'	11
<i>morgnut'</i>	'blink, wink'	705
<b>podmorgnut'</b>	'wink at ( <i>komu</i> )'	24
<b>smorgnut'</b>	'blink away'	98
<i>nyrnut'</i>	'dive, plunge'	1,769
<b>donyrnut'</b>	'dive to as far as X'	10
<b>podnyrnut'</b>	'dive under, dive into'	57
<b>pronyrnut'</b>	'get through, dive from one point to another'	28
<b>vynyrynut'</b>	'emerge, surface'	1,310
<b>zanyrynut'</b>	'get into (lit., metaph.), disappear behind, dive to X'	31

<i>pixnut'</i>	'push, shove'	262
<b><i>otpixnut'</i></b>	'push off, shove aside'	252
<b><i>podpixnut'</i></b>	'push slightly'	29
<b><i>propixnut'</i></b>	'push through/into, get into unlawfully (metaph.)'	52
<b><i>spixnut'</i></b>	'push aside, push down'	287
<b><i>vpixnut'</i></b>	'cram in, shove'	191
<b><i>vypixnut'</i></b>	'push out'	104
<b><i>zapixnut'</i></b>	'push in, cram in'	430
<i>plesnut'</i>	'splash, dabble'	813
<b><i>rasplesnut'</i></b>	'spill'	252
<b><i>vsplesnut'</i></b>	'throw up hands ( <i>rukami</i> )'	865
<b><i>vyplesnut'</i></b>	'let out, vent'	540
<i>pljunut'</i>	'spit; not care, not give a damn (colloq.)'	2,449
<b><i>dopljunut'</i></b>	'spit to as far as X'	19
<b><i>perepljunut'</i></b>	'outdo (lit. spit over)'	143
<b><i>spljunut'</i></b>	'spit, spit out'	881
<b><i>vypljunut'</i></b>	'spit out'	396
<i>porxnut'</i>	'flit, flutter'	57
<b><i>pereporxnut'</i></b>	'fly/get over to'	22
<b><i>sporxnut'</i></b>	'fly/get down from'	21
<b><i>uporxnut'</i></b>	'fly/get away'	119
<b><i>vporxnut'</i></b>	'fly/move into'	68
<b><i>vsporxnut'</i></b>	'take wing'	226
<b><i>vyporxnut'</i></b>	'fly/get out'	198
<i>prjanut'</i>	'jump (obsol.)'	83
<b><i>otprjanut'</i></b>	'recoil, shrink back'	757
<b><i>vosprjanut'</i></b>	'cheer up'	275
<i>prygnut'</i>	'jump'	2,684
<b><i>naprygnut'</i></b>	'jump at'	10
<b><i>otprygnut'</i></b>	'jump to the side'	202
<b><i>pereprygnut'</i></b>	'jump over'	428
<b><i>podprygnut'</i></b>	'make a little jump'	1,128
<b><i>sprygnut'</i></b>	'jump off/down'	1,761
<b><i>vprygnut'</i></b>	'jump into'	93

<i>vsprygnut'</i>	'jump up/onto'	173
<i>vyprygnut'</i>	'jump out'	983
<i>zaprýgnut'</i>	'jump somewhere'	239
<i>prýsnut'</i>	'fly/run to all sides; burst into laughter ( <i>so smexu</i> )'	404
<i>oprýsnut'</i>	'sparge'	35
<i>sprýsnut'</i>	'sprinkle, have a drink to celebrate'	37
<i>vsprýsnut'</i>	'inject'	54
<i>vsprýsnut'</i>	'sprinkle, have a drink to celebrate'	20
<i>pugnut'</i>	'frighten, scare'	84
<i>otpugnut'</i>	'scare away (deliberately by creating conditions)'	226
<i>pripugnut'</i>	'intimidate'	212
<i>spugnut'</i>	'scare (causes object to run away, e.g. a thief)'	611
<i>vspugnut'</i>	'scare (causes object to fly up in fear, e.g. a bird)'	275
<i>pyxnut'</i>	'ooze, emit'	126
<i>vspyxnut'</i>	'blaze up, flare up'	3,914
<i>rygnut'</i>	'belch'	58
<i>izrygnut'</i>	'spew (metaph., e.g. fire, curses)'	32
<i>otrygnut'</i>	'belch, spit up (about birds feeding from beak)'	37
<i>srygnut'</i>	'burp (often about babies)'	26
<i>šagnut'</i>	'step, stride'	3,342
<i>otšagnut'</i>	'step back/to the side'	29
<i>perešagnut'</i>	'step over'	950
<i>vyšagnut'</i>	'step out'	45
<i>šatnut'</i>	'shake, sway, reel'	33
<i>pošatnut'</i>	'shake'	93

<i>ščelknut'</i>	'snap, click, crack'	2,346
<b>otščelknut'</b>	'unsnap'	30
<b>priščelknut'</b>	'crack, snap'	70
<b>vyščelknut'</b>	'clatter, click'	33
<b>zaščelknut'</b>	'snap shut, click shut, fasten, latch'	146
<i>ščipnut'</i>	'nip, pinch, pluck, strum'	42
<b>otščipnut'</b>	'nip off, pinch off'	101
<b>priščipnut'</b>	'pinch back (horticultural context)'	11
<b>uščipnut'</b>	'nip, pinch, nibble, bite, sting'	283
<b>zaščipnut'</b>	'pinch together, tweak'	19
<i>ševel'nut'</i>	'move, stir, budge'	568
<b>poševel'nut'</b>	'move, stir, budge slightly'	29
<i>skol'znut'</i>	'glance, slip, slide'	1,658
<b>proskol'znut'</b>	'slip, creep'	574
<b>soskol'znut'</b>	'slide down/off'	491
<b>uskol'znut'</b>	'slip off, steal away, escape'	675
<b>vyskol'znut'</b>	'slip out'	803
<i>šlepnut'</i>	'slap, spank'	586
<b>prišlepnut'</b>	'slap slightly'	38
<i>šmygnut'</i>	'dart, rush'	477
<b>prošmygnut'</b>	'brush (past), slip (past/out), sneak'	216
<i>stegnut'</i>	'stitch; whip, lash, flick'	75
<b>otstegnut'</b>	'unfasten, undo'	358
<b>podstegnut'</b>	'spur, urge'	222
<b>pristegnut'</b>	'fasten to, strap to'	438
<b>rasstegnut'</b>	'unbutton, unhook'	2,051
<b>vstegnut'</b>	'fastening by inserting'	12
<b>vystegnut'</b>	'unfastening by pulling out'	14
<b>zastegnut'</b>	'button up, buckle, fasten, i.e. belt'	1,068
<i>stuknut'</i>	'knock, bang; strike'	2,564
<b>pristuknut'</b>	'knock lightly; whack, kill with one stroke'	159

<i>sunut'</i>	'thrust, shove, slip'	6,428
<b><i>nasunut'</i></b>	'put on'	29
<b><i>peresunut'</i></b>	'replace'	10
<b><i>podsunut'</i></b>	'put, shove'	956
<b><i>prosunut'</i></b>	'push, thrust'	756
<b><i>vsunut'</i></b>	'put in, stick in'	272
<b><i>vysunut'</i></b>	'put out, thrust out'	978
<b><i>zasunut'</i></b>	'thrust in, push in'	1,995
<i>sverknut'</i>	'flash, shine out'	1,394
<b><i>prosverknut'</i></b>	'flash by'	16
<i>svistnut'</i>	'whistle, hiss'	780
<b><i>prisvistnut'</i></b>	'give a little whistle'	416
<i>švyrnut'</i>	'throw, fling, hurl'	1,878
<b><i>otšvyrnut'</i></b>	'chuck, toss/throw away; throw off'	508
<b><i>vyšvyrnut'</i></b>	'chuck in'	406
<b><i>zašvyrnut'</i></b>	'throw somewhere'	122
<i>tisnut'</i>	'squeeze; press (to make a stamp)'	115
<b><i>ottisnut'</i></b>	'print, stamp'	107
<b><i>pritisnut'</i></b>	'press towards'	166
<b><i>protisnut'</i></b>	'force, squeeze (through/into)'	46
<b><i>stisnut'</i></b>	'squeeze; clench; hug'	1,619
<b><i>vtisnut'</i></b>	'squeeze in'	474
<b><i>vytisnut'</i></b>	'squeeze out'	16
<b><i>zatisnut'</i></b>	'squeeze somewhere'	29
<i>tknut'</i>	'poke, prod, jab'	2,352
<b><i>podotknut'</i></b>	'tuck into'	136
<b><i>pritknut'</i></b>	'stick somewhere'	110
<b><i>protknut'</i></b>	'pierce'	434
<b><i>utknut'</i></b>	'stick into'	192
<b><i>votknut'</i></b>	'stick in, drive in'	1,130
<b><i>zatknut'</i></b>	'stop up; stick, thrust'	1,151

<i>tolknut'</i>	'push, jostle, nudge, hustle'	3,293
<b><i>natolknut'</i></b>	'give idea, lit. push onto idea ( <i>na čto</i> )'	190
<b><i>ottolknut'</i></b>	'push away; alienate'	1,239
<b><i>podtolknut'</i></b>	'push slightly; urge, encourage'	1,375
<b><i>protolknut'</i></b>	'push through'	202
<b><i>stolknut'</i></b>	'push off/away; bring together, cause to collide'	646
<b><i>vtolknut'</i></b>	'push in'	277
<b><i>zatolknut'</i></b>	'push somewhere'	41
<i>topnut'</i>	'stamp (one's foot)'	321
<b><i>pritopnut'</i></b>	'stamp slightly'	86
<i>trjaxnut'</i>	'shake, jolt'	1,251
<b><i>otrjaxnut'</i></b>	'shake down/off'	397
<b><i>peretrjaxnut'</i></b>	'turn around, rummage through'	73
<b><i>strjaxnut'</i></b>	'shake off'	814
<b><i>vstrjaxnut'</i></b>	'shake (up), rouse'	702
<b><i>vytrjaxnut'</i></b>	'shake out'	333
<i>tronut'</i>	'touch, feel, disturb, affect'	4,879
<b><i>zatronut'</i></b>	'affect; touch (on)'	1,703
<i>truxnut'</i>	'act like a coward'	10
<b><i>struxnut'</i></b>	'become fainthearted'	149
<i>vernut'</i>	'return'	10,234
<b><i>dovernut'</i></b>	'turn, rotate'	26
<b><i>navernut'</i></b>	'wrap around, eat (colloq.)'	91
<b><i>obvernut'</i></b>	'wrap, wrap up'	12
<b><i>otvernut'</i></b>	'unscrew, turn off'	537
<b><i>perevernut'</i></b>	'flip, invert, turn over, upset; turn inside out'	3,276
<b><i>podvernut'</i></b>	'twist, turn up; tuck under, sprain'	406
<b><i>povernut'</i></b>	'rotate, turn'	7,484
<b><i>privernut'</i></b>	'screw onto'	42
<b><i>provernut'</i></b>	'crank, pull off'	331
<b><i>razvernut'</i></b>	'unfold, develop'	5,459
<b><i>svernut'</i></b>	'fold/roll up, curl, swerve, turn; curtail, cut down'	5,438
<b><i>vvernut'</i></b>	'insert, put/get in'	254

<i>vyvernut'</i>	'invert, turn inside out'	1,453
<i>zavernut'</i>	'wrap up, roll up; enfold, envelope; screw tight'	3,065
<i>vil'nut'</i>	'twist and turn; wag, frisk'	328
<i>uvil'nut'</i>	'dodge, evade'	148
<i>vizgnut'</i>	'yelp, squeal, squeak'	30
<i>vzvizgnut'</i>	'squeal, screech'	903
<i>xixiknut'</i>	'giggle, snigger, chuckle'	693
<i>podxixiknut'</i>	'slightly giggle, snigger, chuckle'	16
<i>xlebnut'</i>	'gulp down, drink down (also metaph.)'	744
<i>otxlebnut'</i>	'sip, take a sip (of)'	529
<i>prixlebnut'</i>	'nip'	20
<i>xlestnut'</i>	'lash, switch, whip'	334
<i>perexlestnut'</i>	'flow over (metaph.)'	37
<i>podxlestnut'</i>	'whip up'	71
<i>zaxlestnut'</i>	'flow over, swamp; grip, seize (metaph.)'	592
<i>xlopnut'</i>	'slam, slap, smack/clap'	3,509
<i>prixlopnut'</i>	'smack (dead)'	380
<i>zaxlopnut'</i>	'slam shut'	1,686
<i>xlynut'</i>	'gush, pour, rush, flood'	1,520
<i>naxlynut'</i>	'well up; surge; gush'	552
<i>otxlynut'</i>	'flood/rush back'	123
<i>prixlynut'</i>	'flood to/towards'	56
<i>sxlynut'</i>	'flow back, subside'	265



## Appendix 2: Distribution of past passive participle forms (Chapter 3)

This appendix shows the proportion of corpus examples containing a past passive participle for Pref-Nu verbs and Only-Nu verbs. The verbs are listed alphabetically. Verbs that are not listed in this appendix were not found with any examples of past participles in the Russian National Corpus (years 1950-2019). The searches for past participles were carried out in July 2019. Ambiguous forms, such as *tronut'* that can be either a masculine singular past passive participle form with the meaning 'be touched' or an indicative 3<sup>rd</sup> person plural with the meaning '(they) will touch', were examined manually and non-participle forms were taken out, as shown in the rightmost column of the table.

### Past passive participles and Pref-Nu verbs

Pref-Nu	#All ex.	#PPP	%PPP	#Non-participle forms
<i>dovernut'</i>	26	2	7,69 %	0
<i>izrygnut'</i>	32	1	3,13 %	0
<i>naděrnut'</i>	11	1	9,09 %	0
<i>nadvinut'</i>	543	300	55,25 %	0
<i>nakinut'</i>	1,743	399	22,89 %	7
<i>nasunut'</i>	29	18	62,07 %	0
<i>navernut'</i>	91	16	17,58 %	1
<i>obděrnut'</i>	631	6	0,95 %	0
<i>obmaknut'</i>	376	16	4,26 %	0
<i>obmaxnut'</i>	61	2	3,28 %	1
<i>obvernut'</i>	12	4	33,33 %	0
<i>oděrnut'</i>	30	9	30,00 %	5
<i>okliknut'</i>	1,778	10	0,56 %	21
<i>oprokinut'</i>	1,943	563	28,98 %	14
<i>oprysnut'</i>	35	1	2,86 %	0
<i>otčerknut'</i>	101	62	61,39 %	0
<i>otděrnut'</i>	492	13	2,64 %	0
<i>otkinut'</i>	1,838	408	22,20 %	6
<i>otkolupnut'</i>	43	2	4,65 %	0
<i>otkovyrnut'</i>	24	2	8,33 %	0
<i>otodvinut'</i>	2,124	247	11,63 %	13
<i>otpixnut'</i>	252	1	0,40 %	0
<i>otpugnut'</i>	226	2	0,88 %	7
<i>otrjaxnut'</i>	397	2	0,50 %	0
<i>otrygnut'</i>	37	4	10,81 %	0
<i>otščelknut'</i>	30	1	3,33 %	0
<i>otščipnut'</i>	101	3	2,97 %	1

<b>Pref-Nu</b>	<b>#All ex.</b>	<b>#PPP</b>	<b>%PPP</b>	<b>#Non-participle forms</b>
<i>otstegnut'</i>	358	17	4,75 %	6
<i>otšvyrnut'</i>	508	5	0,98 %	5
<i>ottisnut'</i>	107	81	75,70 %	0
<i>ottolknut'</i>	1,239	3	0,24 %	8
<i>otvernut'</i>	537	29	5,40 %	7
<i>perečerknut'</i>	555	213	38,38 %	6
<i>pereděrnut'</i>	742	15	2,02 %	1
<i>peredvinut'</i>	402	38	9,45 %	8
<i>perekinut'</i>	1,023	373	36,46 %	8
<i>perelistnut'</i>	77	1	1,30 %	0
<i>perepljunut'</i>	143	1	0,70 %	2
<i>pereprygnut'</i>	428	1	0,23 %	2
<i>peresunut'</i>	10	1	10,00 %	0
<i>peretrjaxnut'</i>	73	3	4,11 %	2
<i>perevernut'</i>	3,276	1,118	34,13 %	28
<i>perexlestnut'</i>	37	6	16,22 %	1
<i>počerpnut'</i>	603	231	38,31 %	9
<i>podčerknut'</i>	7,180	2,005	27,92 %	11
<i>podděrnut'</i>	340	6	1,76 %	0
<i>poděrnut'</i>	340	299	87,94 %	0
<i>podkinut'</i>	757	48	6,34 %	27
<i>podmignut'</i>	2,097	1	0,05 %	0
<i>pododvinut'</i>	311	10	3,22 %	2
<i>podotknut'</i>	136	59	43,38 %	1
<i>podpixnut'</i>	29	1	3,45 %	0
<i>podstegnut'</i>	222	36	16,22 %	3
<i>podsunut'</i>	956	92	9,62 %	23
<i>podtolknut'</i>	1,375	4	0,29 %	12
<i>podvernut'</i>	406	139	34,24 %	0
<i>podvinut'</i>	584	20	3,42 %	3
<i>podxlestnut'</i>	71	15	21,13 %	1
<i>pokinut'</i>	8,180	740	9,05 %	89
<i>povernut'</i>	7,484	527	7,04 %	48
<i>pridvinut'</i>	792	107	13,51 %	1
<i>prikinut'</i>	1,394	30	2,15 %	3
<i>pripugnut'</i>	212	3	1,42 %	2
<i>priščelknut'</i>	70	1	1,43 %	1
<i>priščipnut'</i>	11	2	18,18 %	0
<i>prišlepnut'</i>	38	7	18,42 %	2
<i>pristegnut'</i>	438	198	45,21 %	3
<i>pristuknut'</i>	159	4	2,52 %	6
<i>pritisnut'</i>	166	64	38,55 %	2

<b>Pref-Nu</b>	<b>#All ex.</b>	<b>#PPP</b>	<b>%PPP</b>	<b>#Non-participle forms</b>
<i>prtknut'</i>	110	26	23,64 %	0
<i>pritopnut'</i>	86	1	1,16 %	0
<i>privernut'</i>	42	11	26,19 %	0
<i>prixlopnut'</i>	380	16	4,21 %	28
<i>pročerknut'</i>	10	8	80,00 %	0
<i>proděrnut'</i>	58	23	39,66 %	1
<i>prodvinut'</i>	1,185	934	78,82 %	4
<i>prokinut'</i>	11	4	36,36 %	0
<i>propixnut'</i>	52	1	1,92 %	1
<i>prosunut'</i>	756	40	5,29 %	3
<i>protisnut'</i>	46	3	6,52 %	0
<i>protknut'</i>	434	67	15,44 %	10
<i>protolknut'</i>	202	1	0,50 %	2
<i>provernut'</i>	331	10	3,02 %	2
<i>raskinut'</i>	1,745	508	29,11 %	4
<i>rasplesnut'</i>	252	16	6,35 %	0
<i>rasstegnut'</i>	2,051	829	40,42 %	2
<i>razděrnut'</i>	50	18	36,00 %	0
<i>razdvinut'</i>	1,074	214	19,93 %	5
<i>razmaxnut'</i>	24	5	20,83 %	0
<i>razvernut'</i>	5,459	1,935	35,45 %	27
<i>sbryznut'</i>	78	22	28,21 %	0
<i>sděrnut'</i>	563	43	7,64 %	8
<i>sdunut'</i>	29	2	6,90 %	1
<i>sdvinut'</i>	2,489	766	30,78 %	9
<i>skinut'</i>	1,755	37	2,11 %	31
<i>skovyρνnut'</i>	84	1	1,19 %	2
<i>smaxnut'</i>	627	1	0,16 %	12
<i>spixnut'</i>	287	6	2,09 %	6
<i>sprysnut'</i>	37	12	32,43 %	0
<i>spugnut'</i>	611	28	4,58 %	9
<i>srygnut'</i>	26	1	3,85 %	0
<i>stisnut'</i>	1,619	528	32,61 %	3
<i>stolknut'</i>	646	4	0,62 %	15
<i>strjaxnut'</i>	814	1	0,12 %	8
<i>svernut'</i>	5,438	970	17,84 %	43
<i>utknut'</i>	192	3	1,56 %	0
<i>vdoxnút'</i>	1,139	2	0,18 %	5
<i>vdunut'</i>	25	5	20,00 %	1
<i>vdvinut'</i>	51	30	58,82 %	0
<i>voskliknut'</i>	7,766	1	0,01 %	0
<i>votknut'</i>	1,130	322	28,50 %	19

<b>Pref-Nu</b>	<b>#All ex.</b>	<b>#PPP</b>	<b>%PPP</b>	<b>#Non-participle forms</b>
<i>vpixnut'</i>	191	7	3,66 %	4
<i>vprysnut'</i>	54	22	40,74 %	2
<i>vsknut'</i>	1,803	125	6,93 %	2
<i>vskriknut'</i>	1,954	1	0,05 %	0
<i>vsprygnut'</i>	173	1	0,58 %	0
<i>vsprysnut'</i>	20	4	20,00 %	0
<i>vspugnut'</i>	275	112	40,73 %	1
<i>vstegnut'</i>	12	2	16,67 %	0
<i>vstrjaxnut'</i>	702	3	0,43 %	2
<i>vsunut'</i>	272	28	10,29 %	4
<i>vtisnut'</i>	474	157	33,12 %	4
<i>vtolknut'</i>	277	4	1,44 %	3
<i>vvernut'</i>	254	9	3,54 %	1
<i>vyčerknut'</i>	992	202	20,36 %	16
<i>vydernut'</i>	1,258	97	7,71 %	20
<i>výdoxnut'</i>	1,623	12	0,74 %	1
<i>vydvinut'</i>	3,835	1,448	37,76 %	34
<i>vykinut'</i>	2,282	107	4,69 %	105
<i>vykliknut'</i>	36	2	5,56 %	5
<i>vykovyrnut'</i>	21	3	14,29 %	0
<i>vykriknut'</i>	1,418	22	1,55 %	4
<i>vypixnut'</i>	104	7	6,73 %	6
<i>vyplesnut'</i>	540	54	10,00 %	5
<i>vypljunut'</i>	396	24	6,06 %	2
<i>vyščelknut'</i>	33	3	9,09 %	0
<i>vysunut'</i>	978	100	10,22 %	5
<i>vyšvyrnut'</i>	406	37	9,11 %	20
<i>vytisnut'</i>	21	19	90,48 %	0
<i>vytrjaxnut'</i>	333	18	5,41 %	9
<i>vyvernut'</i>	1,453	536	36,89 %	15
<i>vzděrnut'</i>	694	389	56,05 %	20
<i>začerknut'</i>	484	188	38,84 %	2
<i>začerpnut'</i>	466	9	1,93 %	1
<i>zaděrnut'</i>	443	195	44,02 %	1
<i>zadvinut'</i>	509	120	23,58 %	6
<i>zakinut'</i>	1,537	182	11,84 %	5
<i>zapixnut'</i>	430	14	3,26 %	5
<i>zaprokinut'</i>	707	202	28,57 %	2
<i>zaščelknut'</i>	146	10	6,85 %	0
<i>zaščipnut'</i>	19	1	5,26 %	1
<i>zastegnut'</i>	1,068	473	44,29 %	1
<i>zasunut'</i>	1,995	202	10,13 %	20

<b>Pref-Nu</b>	<b>#All ex.</b>	<b>#PPP</b>	<b>%PPP</b>	<b>#Non-participle forms</b>
<i>zašvyrnut'</i>	122	2	1,64 %	1
<i>zatisnut'</i>	29	19	65,52 %	0
<i>zatknut'</i>	1,151	211	18,33 %	24
<i>zatolknut'</i>	41	1	2,44 %	1
<i>zatronut'</i>	1,703	644	37,82 %	28
<i>zavernut'</i>	3,065	1,226	40,00 %	25
<i>zaxlestnut'</i>	592	45	7,60 %	11
<i>zaxlopnut'</i>	1,686	52	3,08 %	11

### Past passive participles and Pref-Nu verbs

<b>Only-Nu</b>	<b>#Total ex.</b>	<b>#PPP</b>	<b>%PPP</b>	<b>#Non-participle forms</b>
<i>bryznut'</i>	745	4	0,54 %	13
<i>gljanut'</i>	5,397	1	0,02 %	0
<i>dvnut'</i>	1,243	31	2,49 %	20
<i>děrnut'</i>	2,477	2	0,08 %	10
<i>kinut'</i>	2,883	69	2,39 %	69
<i>kliknut'</i>	306	2	0,65 %	5
<i>kljunut'</i>	701	1	0,14 %	14
<i>kriknut'</i>	12,557	5	0,04 %	0
<i>pljunut'</i>	2,449	4	0,16 %	0
<i>svistnut'</i>	780	5	0,64 %	8
<i>stegnut'</i>	75	2	2,67 %	0
<i>stuknut'</i>	2,564	16	0,62 %	31
<i>sunut'</i>	6,428	46	0,72 %	46
<i>tisnut'</i>	115	13	11,30 %	1
<i>tknut'</i>	2,352	6	0,26 %	0
<i>tolknut'</i>	3,293	1	0,03 %	0
<i>topnut'</i>	321	1	0,31 %	0
<i>tronut'</i>	4,879	1,027	21,05 %	175
<i>trjaxnut'</i>	1,251	1	0,08 %	0
<i>xlestnut'</i>	334	2	0,60 %	1
<i>xlopnut'</i>	3,509	4	0,11 %	13
<i>šlěpnut'</i>	586	3	0,51 %	25



## Appendix 3: Contexts in the experiment (Chapters 6 and 7)

All the contexts used in the experiment were taken from the Russian National Corpus. Some of them were slightly shortened to prevent survey fatigue. In this appendix, the contexts are shown in alphabetical order according to the unprefix verb, e.g. *děrnut'* 'pull once'. The contexts are shown in the same way as they were presented to the participants, i.e. containing all three verbs. However, the English translations of the contexts show the lexical meaning intended by the author, i.e. the lexical meaning of the original verb.

---

### ***Děrnut'* – *Zaděrnut'* – *Zaděrgat'***

#### ***Děrnut'* 'tug at once'**

*Pomnju, kak-to raz v metro mal'čonka [děrnul/zaděrnul/zaděrgal] Volodju za rukav i govorit: "Djadja, tebe razve ne skučno odnomu tam, naverxu stojat'?" – potomu što mal'čik byl maljusen'kij, a Volodja byl očen' roslyj.*

'I remember once in the metro a little boy tugged at Volodja's sleeve and said: "Mister, isn't it boring standing up there alone?" because the boy was very small and Volodja was very tall.'

#### ***Zaděrnut'* 'close (curtains)'**

*Redaktor vstal iz-za stola, podošël k oknu, postojal okolo nego i [děrnul/zaděrnul/zaděrgal] štoroku.*

'The editor raised from the table, walked up to the window, stood there for a while and closed the curtains.'

#### ***Zaděrgat'* 'begin to jerk'**

*Deti zavorožënno sledili za podrostkom, vxodivšim v vodu. Mal'čik vošël v grjaz' i [děrnul/zaděrnul/zaděrgal] kolenkami, ritmično i negluboko prisedaja.*

'The children were spellbound as they watched the young teenager who was walking into the water. The boy walked into the mud and jerked with his knees, rhythmically crouching a bit.'

---

### **Gljanut' – Progljanut' – Progljadet'**

#### **Gljanut' 'take a look at once'**

*Ja [gljanula/progljadela/progljanula]na časy i ne poverila – oni pokazyvali sovsem drugoe vremja, čem tam, okolo bulgakovskogo doma.*

'I took a look at the clock and couldn't believe what I saw: it showed a completely different time than over there, by Bulgakov's house.'

#### **Progljanut' 'appear'**

*Tuči razošlis', [gljanulo/progljadelo/progljanulo] solnce, i srazu stalo očen' žarko.*

'The clouds cleared up, the sun appeared, and instantly it got really warm.'

#### **Progljadet' 'overlook'**

*Žalko, čto takaja zamečatel'naja ženščina ne našla sebe nikogo. I žal' mužčin, kotorye [gljanuli/progljanuli/progljadeli] èto solnyško.*

'What a pity that such a wonderful woman hasn't found herself anyone. And what a pity for the men who have overlooked this sweetie.'

---

### **Kinut' – Nakinut' – Nakidat'**

#### **Kinut' 'throw onto once'**

*Poka ja v užase pytalas' čto-to skazat', Iljuša lovko snjal s gost'i botinki i [kinul/nakinul/nakidal] na neë odejalo.*

'While I in horror was trying to say something, Iljuša aptly pulled the shoes off his guest and threw a blanket over her.'

#### **Nakinut' 'throw onto'**

*Ljudmila Nikolaevna nadela pal'to, [kinula/nakinula/nakidala] na golovu platok i pošla na ulicu.*

'Ljudmila put on her coat, threw a shawl on her head, and went outside.'

#### **Nakidat' 'throw a lot of'**

*Odin raz s pomošč'ju meška Deda Moroza molodoj čelovek predlagal ljubimoj ruku i serdce. V mešok [kinuli/nakinuli/nakidali] množestvo bumažnyx snežkov – i kol'co tože položili. Devuška iščet i naxodit korobočku s kol'com. Radosti bylo očen' mnogo.*

'One time a young man used Santa's bag to propose to his beloved. [They] threw lots of paper snowflakes into the bag, and the ring too. The girl looked and finds the box with the ring. There was much joy.'

### ***Kinut' – Pokinut' – Pokidat'***

#### ***Kinut' 'deceive, abandon once'***

- *Neuželi nam pridetsja rabotat' na ètix merzavčikov, kotorye [kinuli/pokinuli/pokidali] nas god nazad na ostrove?*

'Will we really have to work for these bastards who cheated us on the island a year ago?'

#### ***Pokinut' 'leave'***

*S groxotom naletela èlektrička i, zabrav vsej passażirov, [kinula/pokinula/pokidala] stanciju.*

'With a roar the train flew in, and, when all passengers had gotten on board, it left the station.'

#### ***Pokidat' 'throw in a disorderly heap'***

*Ja [kinul/pokinul/pokida] vešči v mašinu i vyexal so dvora.*

'I threw the things into the car and drove out of the yard.'

---

### ***Kinut' – Zakinut' – Zakidat'***

#### ***Kinut' 'throw once'***

*Mulligen [kinul/zakinul/zakidal] za dver' kusok mjasa. Sobaka rinulas' za nim.*

'Mulligen threw a piece of meat behind the door. The dog rushed after it.'

#### ***Zakinut' 'throw somewhere'***

*Gleb [kinul/zakinul/zakidal] nogu na nogu i položil na koleno ajpèd.*

'Gleb crossed one leg over the other and placed his iPad on his knees.'

#### ***Zakidat' 'throw to cover'***

*Glebov i Bagrecov uložili mertveca obratno v mogilu i [kinuli/zakinuli/zakidali] eë kamnjami.*

'Glebov and Bagrecov put the dead body back into the grave and filled it with stones.'

---

***Kriknut' – Vskriknut' – Vskričat'***

***Kriknut' 'shout once'***

«Nikto iz vas ne budet sčastliv v brake!» – [kriknula/vskriknula/vskričala] v temnotu belokuraja deva i prevratilas' v ved'mu.

“None of you will be happy in marriage!” the fair maiden cried out in the dark and turned into a witch.’

***Vskriknut' 'give a sudden shout'***

Ja ne ljublju kolbasu, – proiznės Xolmogorov. Mladšen'kij počti [kriknul/vskriknul/vskričal] ot neožidannosti: "Razve možno prožit' bez kolbasy?!"

“I don’t like sausage,” Xolmogorov said. Mladšen'kij almost cried out in surprise, “Is it really possible to live without sausage?”

***Vskričat' 'exclaim'***

– Ostav'te menja, Oleg, požalujsta, – poprosila ona. Lopnulo togda ego naprjažënnoe spokojstvie. – Da pojmi že ty, nakonec, čto ja v tebja vljublën! – [kriknul/vskriknul/vskričal] on.

“Leave me alone, Oleg, please,” she begged. At this point he could no longer keep calm [...]. “Will you finally understand that I am in love with you!” he cried.’

---

## **Listnut' – Perelistnut' – Perelistat'**

### **Listnut' 'flip once'**

*Na sosednem stule on obnaručil zabytyj kem-to utrennij nomer «Èl'-Pajs», [listnul/perelistnul/perelistal] paru stranic... Skučnyj bezdarnyj mir kopošilsja, kak obyčno ... čto tam u nix?*

'On the chair next to him he found a morning edition of «Èl'-Pais» that someone had forgotten and flipped a couple of pages... A boring mundane world was bustling about as usual... what was new there?'

### **Perelistnut' 'flip'**

*Prjaničkov stojal u stola. On vzjal tetrad' i [listnul/perelistnul/perelistal] neskol'ko stranic.*

'Prjaničkov stood by the table. He took the notebook and flipped through a few pages.'

### **Perelistat' 'flip'**

*Nelli Sergeevna zašla k Larise v komnatu i uvidela u neë knigu s zakladkoj. Ona vzjala v ruki, pročitala nazvanie, [listnula/perelistnula/perelistala] neskol'ko stranic.*

'Nelli Sergeevna stopped by Larisa in her room and noticed a book with a bookmark. She grabbed it into her hands, read the title and flipped through a few pages.'

---

## **Liznut' – Sliznut' – Slizat'**

### **Liznut' 'lick once'**

*Kot privstal na zadnie lapy ot radosti, čto ego ne gonjat, i [liznul/sliznul/slizal] palec xozjaina.*

'The cat stood up halfway on his back feet from joy because they were not chasing him away and licked his owner's finger.'

### **Sliznut' 'lick off'**

*Na ščëku Ljuby neožidanno vykatilas' sleza, zažglas', zakrovenela, zasvetilas' na isxodjaščem solnce. Ljuba [liznula/sliznula/slizala] slezu.*

'Suddenly a tear fell down on Ljuba's cheek, got warm, mixed with the blood, and shone in the sunrise. Ljuba licked away the tear.'

### **Slizat' 'lick off'**

*V dikoj jarosti Makkaviti vcepilsja v stol, prokorjabal na nem desjat' borozd i [liznul/sliznul/slizal] s pal'cev krov'.*

'In wild anger Makkaviti seized the table, made ten scratches on it, and licked the blood off his fingers.'

### **Maxnut' – otmaxnut' – otmaxat'**

#### **Maxnut' 'wave once'**

*Učitel' snova pytalsja čto-to ob "jasnit' emu, no ne očen' trezvyyj posle vesěloj noči traktirščik ne stal ego i slušat' – pri pervom že slove o zakonax mexaniki prenebrežitel'no [maxnul/otmaxnul/otmaxal] rukoj.*

'Once again the teacher tried to explain something to him, but being far from sober after a lively night the tavern owner didn't even try to listen: As soon as the laws of mechanics were mentioned, he scornfully waved his hand.'

#### **Otmaxnut' 'wave away'**

*– Možet, mne vyjti? – sprosila Xvatov. Kapitan blagorodno [maxnul/otmaxnul/otmaxal] rukoj.*

'“Perhaps, I should leave?” Xvatov asked. The captain waved him away in a noble fashion.'

#### **Otmaxat' 'cross some distance'**

*Kogda Pavel i Ljuba vyčerčivali maršrut na karte, podsčitali: šli oni dve nedeli, [maxnuli/otmaxnuli/otmaxali] bolee trex soten kilometrov.*

'When Pavel and Ljuba traced their route on the map, they made a count: they had been walking for two weeks and had moved more than three hundred kilometers.'

---

### **Pixnut' – zapixnut' – zapixat'**

#### **Pixnut' 'shove, thrust once'**

*Menja [pixnuli/zapixnuli/zapixali] v spinu i zastavili vzbežat' po veduščim k perexodu stupen'kam.*

'They pushed me in the back and made me run up the steps to the crossover.'

#### **Zapixnut' 'shove somewhere'**

*– Odnadždy nam popalsja pokojnik s očen' nastyrnymi rodstvennikami, oni prjamotaki nasil'no [pixnuli/zapixnuli/zapixali] otcu Aleksiju kupjury v karman, – rasskazyvaet otec Nikon.*

'“One time we buried a deceased person with very pushy relatives; they literally stuffed money into father Aleksej's pockets by force,” tells father Nikon.'

#### **Zapixat' 'shove somewhere'**

*Ja rešila svarit' mužu bul'on. Čto možet byt' prošče, kazalos' mne. Kupila kuricu, [pixnula/zapixnula/zapixala] v kastrjulju, zalila vodoj.*

'I decided to make soup for my husband. What could be easier, I thought. I bought chicken, stuffed it into the pot, and poured water over it.'

---

***Prygnut' – Zarygnut' – Zaprygat'***

***Prygnut' 'jump once'***

*Devuška, kotoraja rabotala v bare gostinicy, vyzvala noč'ju taksi, i ja v čem byl [prygnul/zaprygnul/zaprygal] v mašinu i uexal v drugoj gorod.*

'The girl who was working in the hotel bar called a taxi during the night and I jumped into the car as I was and went to another city.'

***Zaprygnut' 'jump somewhere'***

*V bol'ničku popal mal'čik (Mixaj), s paraproktitom. Xirurgi razrezali emu zadnicu krestom. A Mixaj, kogda očnulsja ot narkoza, sbežal. Prišel domoj i [prygnul/zaprygnul/zaprygal] na lošad'.*

'A boy (Mixaj) with Paraproctitis ended up in the hospital. The surgeons sliced open his rear end with two incisions forming a cross. However, when Mixaj woke up from the anesthesia, he ran away. He came home and jumped up on his horse.'

***Zaprygat' 'begin to jump'***

*Molodoj čelovek rešil prepodnesti devuške cvety. Odnako krasavica, polučiv buket, ne [prygnula/zaprygnula/zaprygala] ot sčast'ja, a soslavšis' na ploxuju pogodu, stremitel'no isčezla.*

'A young man decided to give flowers to a girl. When the beauty received the bouquet, however, she didn't start jumping for joy, but rather made a comment about the bad weather and dashed off.'

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## **Ščelknut' – Zaščelknut' – Zaščelkat'**

### **Ščelknut' 'click once'**

*Ja otper dver' i vključil svet. Denis zabralsja v kreslo. Sam ja vynul iz xolodil'nika banku piva i tut že [ščelknul/zaščelknul/zaščelkal] kryšečkoj.*

'I opened the door and turned on the light. Denis went for the arm chair. I got a can of beer out of the fridge and popped the lid.'

### **Zaščelknut' 'latch'**

*Fomin teplo pozdravil operativnikov s uspešno provedennoj operaciej, poprosil dat' emu naručniki, [ščelknul/zaščelknul/zaščelkal] ix u sebja na zapjast'jax i sel v milicejskuju «šesterku».*

'Fomin heartily congratulated the members of the police force with a successful operation, asked them to give him the handcuffs, fastened them around his wrists, and got into the police car.'

### **Zaščelkat' 'begin to click'**

*Xranitel'nica kabineta uselas' za komp'juter i [ščelknula/zaščelknula/zaščelkala] klavišami.*

'The office worker sat down before the computer and began clicking on the keyboard.'

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## **Tolknut' – Natolknut' – Natolkat'**

### **Tolknut' 'push once'**

*U Savel'eva smert' Ivana Ivanoviča zatronula, osvetila, potrevožila kakie-to tëmnye ugolki duši, [tolknula/natolknula/natolkala] ego na kakie-to rešenija.*

'Ivana Ivanovič's death touched, lit up and disturbed some dark corners in Savel'ev's soul: it pushed him to make some decisions.'

### **Natolknut' 'give idea (lit. push to idea)'**

*Stat'ja «Božij promysel» [tolknula/natolknula/natolkala] na nekotorye razmyšlenija.*

'The article "God's providence" led me to certain reflections.'

### **Natolkat' 'push a lot of'**

*U menja bylo dve sumki: v odnu rebjata [tolknuli/natolknuli/natolkali] bumagi, karandašej. V drugoj sumke byli moi «ličnye» veščiški.*

'I had two bags: the kids stuffed one of them full of paper and pencils. In the other bag, I kept my "private" belongings.'

### **Topnut' – Pritopnut' – Pritopat'**

#### **Topnut' 'stamp once'**

*Grustnaja Feja vyterla kulačkom slezy, [topnula/pritopala/pritopnula] nožkoj ob led i skazala: — Ja ne mogu vernut'sja domoj! Vyšla na minutku poiskat' podsnežniki, a moroz v èto vremja nakryl rodničok ledjanym steklyškom.*

'The sad fairy wiped her tears off with her fist, stamped her foot on the ice and said: "I can't go back home! I went out for a minute to look for snowdrops, but in the meantime the frost covered the spring with a glacing of ice.'

#### **Pritopnut' 'make a little stamp'**

*Tonja nadela vtoruju tuflju, vstala i lixo [topnula/pritopala/pritopnula].*

'Tonja put on the second shoe, stood up and took a few daring steps.'

#### **Pritopat' 'arrive by foot'**

*Leo [topnul/pritopal/pritopnul] v komnatu, uselsja i zastyl, vyžidatel'no gljadja na menja.*

'Leo walked into the room, sat down and froze as he looked at me with expectation.'

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### **Trjaxnut' – Vytrjaxnut' - Vytrjasti**

#### **Trjaxnut' 'shake once'**

*Ja nemnogo [trjaxnul/vytrjaxnul/vytrjas] čajnik i, kogda strujka vylilas' na sneg, otpil neskol'ko xorošix glotkov i pošël dal'se.*

'I shook the teapot a little, and when a little stream poured out on the snow, I took a few swigs and went on.'

#### **Vytrjaxnut' 'shake out'**

*General Sivers sel na pesok, snjal tapki, [trjaxnul/vytrjaxnul/vytrjas] ix i, ne toropjas', nadel snova.*

'General Sivers sat down in the sand, pulled off his slippers, shook them and slowly put them on again.'

#### **Vytrjasti 'shake out'**

*My koe-kak [trjaxnuli/vytrjaxnuli/vytrjasli] pesok iz obuvi, nadeli ee i otpravilis' v gorod.*

'Somehow we managed to shake the sand out of our shoes, and we put them on again and set off towards the city.'

### ***Tknut' – utknut' – utykat'***

#### ***Tknut' 'poke once'***

*Zarubin razvernulsja na siden'e vsem svojim ščuplym telom i [tknul/utknul/utykal] Antona pal'cem v plečo.*

'Zarubin stretched out his whole frail body on the car seat and poked Anton in the shoulder with his finger.'

#### ***Utknut' 'stick into, between'***

*Artur s Petrovičem pritvorilis' spjaščimi, [tknuli/utknuli/utykali] golovy v složennye na kolenjax ruki, i ix ne stali trevožit'.*

'Artur and Petrovič pretended to be asleep, stuck their heads into their hands that were folded on their knees, and no one tried to disturb them.'

#### ***Utykat 'stick all over'***

*Pered Borisom postavili neprostuju zadaču: sdelat' «superavtomobil' 2000 goda». Prežde vsego, mašinu [tknuli/utknuli/utykali] monitorami, kotorye prinimali telekanaly so vsego mira.*

'Boris was put to a challenging task: to create "the best car for the year 2000". [They] started by filling the car with monitors that could connect with TV-channels from all over the world.'

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### ***Xlopnut' – zaxlopnut' – zaxlopat'***

#### ***Xlopnut' 'slam, clap once'***

*Čerez mgnovenie svet pogas, i ja uslyšal kak Ekaterina [xlopnula/zaxlopnula/zaxlopala] dver'ju.*

'One moment later the light went out and I heard Ekaterina slam the door.'

#### ***Zaxlopnut' 'slam shut'***

*Nastja skol'znula na voditel'skoe siden'e, [xlopnula/zaxlopala/zaxlopnula] dvercu i opustila steklo.*

'Nastja slipped into the driver's seat, slammed the door and rolled down the window.'

#### ***Zaxlopat' 'begin to slam'***

*Artemij švyrnul granatu v dvernoj proem, ot vzryvnoj volny [xlopnuli/zaxlopali/zaxlopnuli] dveri sosednix kvartir.*

'Artemij threw the grenade into the doorway, and from the explosion the doors in the neighbor apartments began to slam.'

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