Looking into the Russian future

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On the basis of corpus data, we investigate the status of the future tense in Russian and its relationship to perfective vs. imperfective aspect. Despite the existence of large and extensively annotated corpora, arriving at an estimate of the frequency of future forms is confounded by various types of homonymy, as well as non-contiguity and variable word order in the case of periphrastic forms. We devise a methodology for taking these problems into account and discover that the future makes up 10,68% of the attestations of perfective verbs, whereas the imperfective future makes up only 1,07% of attestations of imperfective verbs. The overall estimated ratio of perfective futures to imperfective futures is 13:1. We furthermore analyze in detail the use of future forms and find that only about 56% of perfective future forms and 78% of imperfective future forms unambiguously describe future events. The remainder of uses express something else, such as: gnomic relationships, hypothetical and modal relationships, instructions, and performatives. We propose a radial category for the Russian future, which we describe with reference to Langacker’s (2008) model of tense and conceived reality.

Keywords: Russian, future tense, aspect, corpus, radial category.

Sur la base de données de corpus, nous examinons le statut du futur en russe et sa relation avec l’aspect perfectif et imperfectif. Malgré l’existence de grands corpus largement annotés, arriver à une estimation de la fréquence des formes de futur est confondu par différents types d’homonymie aussi bien que la non-contiguïté et l’ordre des mots variable dans le cas des formes périphrastiques. Nous concevons une méthodologie qui prend en compte ces problèmes et nous découvrons que le futur constitue 10,68% des attestations des verbes perfectifs, alors que le futur imperfectif constitue 1,07% uniquement des attestations des verbes imperfectifs. Le rapport global estimé entre le futur perfectif et le futur imperfectif est de 13:1. En outre, nous analysons en détail l’usage des formes de futur et nous observons que seulement environ 56% des formes de futur perfectives et 78% des formes de futur imperfectives décrivent de manière non-ambiguë des évènements futurs. Le reste des usages expriment autre chose, par exemple des relations gnomiques, des relations hypothétiques et modales, des instructions, des performatives. Nous proposons une catégorie radiale pour le futur en russe, que nous décrivons avec référence au modèle de temps et de réalité conçue de Langacker (2008).

Mots-clés: russe, futur, aspect, corpus, catégorie radiale.

# 1. Introduction: What is the status of the future tense in Russian?

A study of the future tense in Russian can ultimately serve both theoretical and practical purposes. In contrast to past and present, future is less anchored to an embodied experience. Future tense can be a speculation about events that may or may not happen, and this speculation becomes increasingly tenuous when we shift from proximate events to ones further removed in time. This lack of anchoring furthermore makes it possible to use future tense for situations that have no connection to tense at all, being rather observations of general truths. What is the semantic structure of the future tense, what meanings does it express and how are they related to each other? In Russian all verb forms express aspect, raising added questions in a study of future tense: what is the distribution of perfective vs. imperfective aspect in the future tense, both when expressing prototypical and non-prototypical meanings? These questions are relevant also to the teaching of Russian, since two of the largest sources of L2 errors stem from difficulties with verbal aspect and from overuse of periphrastic future forms. Better understanding of the distributions and meanings of Russian future forms are thus valuable both to linguists and to learners.

Scholars have previously remarked that the morphological forms associated with the future tense in Russian do not always express future tense. We bring several new perspectives to scholarship on the Russian future by measuring the occurrence of future forms and subjecting them to thorough semantic analysis, and by comparing the behavior of perfective as opposed to imperfective future forms. We discover that close to half of perfective future forms do not unambiguously express future, and the same is true for more than one in five imperfective future forms. We also give a breakdown of what other meanings are expressed by future forms and how this differs across perfective vs. imperfective aspect.

In the remainder of this section we provide a brief guide to the morphological expression of tense and aspect in Russian (Section 1.1), and an overview of relevant previous scholarship from both the Russian tradition and from the perspective of cognitive linguistics (Section 1.2). Section 2 addresses the multitude of obstacles to measuring the incidence of future forms in Russian and presents a methodology for overcoming these obstacles to arrive at an estimate based on corpus evidence. On the background of this estimate we undertake a detailed semantic analysis of the meanings expressed by perfective future forms in Section 3 and imperfective future forms in Section 4. The radial category of the future tense is presented in Section 5. We offer conclusions in Section 6.

## 1.1 Future and the relationship of tense to aspect as reflected in Russian morphology

All Russian verb forms express aspect[[1]](#footnote-1) as either perfective or imperfective. In the majority of instances, the aspectual difference is overtly marked by morphology, following one of two patterns, either: A) a prefix marks perfective as opposed to an imperfective verb without the prefix, or B) a perfective verb (often with a prefix) is opposed to an imperfective verb that is marked with a suffix. In the top half of Table 1, the “A” pattern is illustrated with the prefixed perfective verb *s-vjazat’* and its corresponding imperfective simplex verb *vjazat’*, both of which mean ‘knit, tie’ (but differ in aspect). The “B” pattern is illustrated in the bottom half of Table 1 with the perfective *pri-vjazat’* ‘tie one thing to another’ and the suffixed secondary imperfective *pri-vjaz-yva-t’* that shares the same meaning (with the only difference being in aspect).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | example verb:  infinitive | past (M.SG) | inflectional non-past  (3SG) | periphrastic (3SG) |
| “A” pattern | perfective prefixed with *s*- | *s-vjazat’*  ‘knit, tie’ | *s-vjaza-l*  ‘he knitted, tied’ | *s-vjaž-et*  ‘s/he will knit, tie’  [FUT] | - |
| simplex imperfective | *vjazat’*  ‘knit, tie’ | *vjaza-l*  ‘he knitted, tied’ | *vjaž-et*  ‘s/he knits, ties’ | *budet vjazat’* ‘s/he will knit, tie’  [FUT] |
| “B” pattern | perfective prefixed with *pri-* | *pri-vjazat’*  ‘tie one thing to another’ | *pri-vjaza-l*  ‘he tied one thing to another’ | *pri-vjaž-et*  ‘s/he will tie one thing to another’  [FUT] | - |
| imperfective suffixed with  -*yva*- | *pri-vjaz-yva-t’*  ‘tie one thing to another’ | *pri-vjaz-yva-l* ‘he tied one thing to another’ | *pri-vjaz-yva-et*  ‘s/he ties one thing to another’ | *budet*  *pri-vjaz-yva-t’* ‘s/he will tie one thing to  another’ [FUT] |

Table 1. Illustration of Russian tense and aspect morphology using verbs and forms related to vjazat’ ‘knit, tie’. Hyphens indicate morpheme boundaries in order to clarify the presence of aspectual prefixes (s- and pri- ) and suffixes (-yva).

Inflected verb forms in Russian can express two tenses, one that is past, and one that is not past. The non-past forms of perfective verbs (such as *s-vjaž-et* ‘s/he will knit, tie’ and *pri-vjaž-et* ‘s/he will tie one thing to another’) are associated with future tense (FUT), and we refer to them as “future forms” in this article. The corresponding non-past forms of imperfective verbs are associated with present tense. In addition, imperfective verbs can have a periphrastic form consisting of an auxiliary that expresses person and number combined with the imperfective infinitive form. The auxiliary is identical to the forms of the verb *byt’* ‘be’, which is the only verb in Russian that can be said to have a true dedicated future form; *budet* when it is not an auxiliary, for example, means ‘s/he will be’ as in (1).

|  |  |
| --- | --- |
| (1) | Zavtra on uže **budet** v Magadane. |
|  | ‘Tomorrow he **will** already **be** in Magadan.’ |
|  | [J. Rytxèu. V doline Malen’kix Zajčikov, 1962][[2]](#footnote-2) |

The periphrastic form with an imperfective infinitive is also associated with future tense (as in *budet vjazat’* ‘s/he will knit, tie’ and *budet pri- vjaz-yva-t’* ‘s/he will tie one thing to another’) and we call these “future forms” as well. The present study focuses on the future forms of both perfective and imperfective verbs such as those in the shaded boxes in Table 1.

## 1.2 Previous scholarship relevant to the future in Russian

### 1.2.1 The Russian future on the world map

From a typological perspective, to what extent is it typical to have a non-past form and/or a periphrastic imperfective future form? Chapter 67 in WALS by Dahl & Velupillai (2013) on the future tense describes only inflectionally marked future tenses. Map 67A describes Russian as having “no inflectional future” category because the perfective non-past form is not a dedicated future inflection.

In Bybee & Pagliuca (1987: 109, 111) the authors emphasize that cross-linguistically the main lexical sources of grammaticalization for future are verbs of desire, obligation and movement. Less popular are verbs of possession (‘have’) and existence (‘be’, ‘become’). Bybee & Dahl (1989: 90) state that a future marker is usually an auxiliary (or morpheme) with the meaning of desire; a construction meaning “moving toward a goal”; a copula or possession verb with an infinitive or other non-finite verb form. The Russian periphrastic future uses the verb of existence ‘be’ as an auxiliary, and thus it can be characterized as slightly rare.[[3]](#footnote-3) When it comes to Slavic languages, Andersen (2006: 12-13) distinguishes four main sources for periphrastic futures: modal verbs meaning ‘want to’/ ‘have to’, auxiliary ‘be’, ‘begin’ and ‘stand/become’. The Russian periphrastic future with ‘be’ falls into the same category as West Slavic, Western South Slavic and Eastern Slavic languages.

### 1.2.2 Non-future uses of future forms and future uses of non-future forms in Russian

Previous researchers have addressed the issue of non-future uses of the future tense in Russian, but as yet no careful measurement of this phenomenon has been undertaken. The amount of non-future uses was estimated at around 1/3 of the perfective future verb forms in the pre-corpus era (see Forsyth 1970: 120). Bybee & Dahl (1989: 88) also pointed out that when non-past forms are not used for indicating future, they have non-specific reference. A corpus-based grammar of Russian provides a detailed description of various categories (order, prohibition, instruction, permission, performative use, near-modal use, opportunity, habituals, etc.) of non-future uses of future forms (see Stojnova 2016b). These categories mostly apply to the perfective future forms. According to Stojnova (2016a), the imperfective future has two main non-future functions: imperatives (hortative and jussive) and non-referential uses that are not related to the future. Stojnova (2016a: 248) also points out that there are marginal non-future uses of the imperfective future that could be described in the same terms as the perfective non-future uses. Her studies are very detailed and informative, but her comparative review is based on random samples of only 100 corpus hits each.

It is not only the case that future forms can express non-future meanings: future meanings can also be expressed in various ways, not only by future verb forms. Stojnova (2018 §1.2 –1.5) lists the following possible forms and constructions that can express future tense:

* modal constructions with the auxiliary *byt’* ‘be’ in future tense (*budet dolžen* ‘will have to’,

*objazan* ‘will be required’; *budet nužno* ‘will need’, *možno* ‘will be possible’);

* infinitive constructions with future reference (*mne zavtra vstavat’ rano* ‘I need to get up early tomorrow’);
* constructions with passive participles (*budut sudimy* ‘will be judged’);
* “futural” participles: present active participles derived from perfective verbs (*spojuščij* ‘will have sung’).

Stojnova also describes use of present and past tense forms with future meaning. The present can express planned actions (*zavtra sažus’ rabotat’* ‘I (will) sit down to work tomorrow’), prospective (*ja sovsem zasypaju* ‘I am completely falling asleep’) or immediate future (*dveri zakryvajutsja* ‘the doors are closing’). Čujkova (2018: 53) notes that these uses of present tense forms to express future meanings are limited to certain semantic classes, namely verbs of motion and change of state.

Past verb forms in controlled situations (*nu, ja pošla* ‘well, here I go [lit. went]’) may also refer to actions in the future, cf. Stojnova (2018 §1.5.2) citing Bondarko (1971: 132-134). Furthermore there is the construction that consists of the verb *stat’* ‘begin, become’ in the future tense and an infinitive of an imperfective verb (*stanu delat’* ‘I will (begin to) do’): see Stojnova (2019) for a detailed description of the rivalry between *stanu* and *budu*.

We base our understanding of Russian future on Langacker’s model of tense (2008: 301) that consists of Conceived Reality, Reality, Current Reality, Immediate reality and Non-reality. Future is a projection forward in time from the perspective of Immediate reality. We propose that Russian non-future uses of the future tense can be explained by observing which of the realities and unrealities are adjacent to each other and how they relate to each other in Langacker’s model.

# 2. Corpus Overview of the Russian future tense

In order to put this research in perspective, it is helpful to have an overall idea of the relative and absolute frequencies of the forms that most commonly express future tense in Russian. In this article we focus specifically on the non-past forms of perfective verbs, as in *sprosi-t* [ask.PFV-FUT.31.SG] ‘s/he will ask’ and the periphrastic future forms of imperfective verbs, as in *bud-et sprašiva-t’* [be.FUT-3.SG ask.IPFV-INF] ‘s/he will ask’. For the purposes of this article, we will call these the “future forms” of Russian, with the understanding that this is a terminological convenience, since our main finding is that these future forms are often used for other expressive functions.

Our study is based on data from the Russian National Corpus, more specifically the portion of the corpus that has been morphologically disambiguated (available at ruscorpora.ru, henceforth “RNC”). However, as we detail below, the disambiguation available in this corpus eliminates only some, by far not all of the noise relevant to our inquiry.

Ideally, one would hope to get some global statistics on the distribution of perfective and imperfective future forms from the RNC. Unfortunately, due to various facts of Russian morphology and syntax, it is not easy to extract exact numbers reflecting all and only such future forms. These facts involve homonymy and non-contiguity of periphrastic forms.

## 2.1 Homonymy and non-contiguity of future forms

Homonymy is problematic for three reasons, involving syncretism within and across verb paradigms. The first type of homonymy occurs when a perfective non-past second person plural form is homonymous with the second person plural imperative form of the same verb, as in *pogovori-te*, which is analyzed either as [speak.PFV-FUT.2.PL] ‘you will speak’ or [speak.PFV-IMP.2.PL] ‘speak!’ depending on context. Note how these two examples illustrate the two possible interpretations of *pogovorite* ‘talk’, both from the same author. In (2a) we see the future form, and in (2b) we see an imperative form.

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| (2) | a. | … možet byt’ vy vse-taki **pogovorite** so svoim ženixom, ob”jasnite emu moju situaciju… |
|  |  | ‘…maybe you **will talk** with your fiancé anyhow, and explain my situation to him…’ |
|  |  | [Aleksandra Marinina. Poslednij rassvet. 2014] |
|  | b. | Poslušajte, **pogovorite** s rabotnikami policii… |
|  |  | ‘Hey, **talk** to the police officers...’ |
|  |  | [Aleksandra Marinina. Angely na l’du ne vyživajut. 2014] |

A second type of homonymy involves biaspectual verbs such as *operirova-t’* [operate.PFV/IPFV-INF] ‘operate’ that can express either aspect, again depending on context, as in *operiruj-ut* [operate.PFV-FUT.3.PL] ‘they will operate’ as in (3a) vs. [operate.IPFV-PRS.3.PL] ‘they operate’ as in (3b).

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| --- | --- | --- |
| (3) | a. | Zavtra ee **operirujut**. |
|  |  | ‘She **will be operated on** tomorrow.’ |
|  |  | [Nina Katerli. «Skvoz’ sumrak bytija» // «Zvezda», 2002] |
|  | b. | Nu čto ja mogla ej vozrazit’? Čto bol’šinstvo ― podavljajuščee! ― xirurgov **operirujut** besplatno? |
|  |  | ‘Well, what could I say to persuade her otherwise? That the vast majority of surgeons **operate** for free?’ |
|  |  | [I. Grekova. Perelom, 1987] |

Some prefixed motion verbs present a third type of homonymy, since they have two interpretations that are differentiated both by aspect and by semantics (involving two separate verbs), as in *s-xož-u* [roundtrip-walk.PFV-FUT.1.SG] ‘I will go and come back’ vs. in *s-xož-u* [down-walk.IPFV-PRS.1.SG] ‘I am going down’ which is also frequently part of the idiom *s-xodi-t’ s uma* [literally ‘walk down from mind’] meaning ‘go crazy’. Only the first one expresses future tense.

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| (4) | a. | Сirk ― èto detskie vospominanija i položitel’nye èmocii! Objazatel’no **sxožu**. |
|  |  | ‘The circus is childhood memories and positive emotions! I **will** definitely **go**.’ |
|  |  | [kollektivnyj. Forum: Poxod v cirk, 2010] |
|  | b. | Ja ponimaju, čto potixon’ku **sxožu** s uma. |
|  |  | ‘I understand that I’**m** slowly **losing** my mind.’ |
|  |  | [Sati Spivakova. Ne vsë, 2002] |

The homonymies described above are to some extent mitigated in the disambiguated portion of the RNC, however, exploration of this data turns up too much noise to allow for precise measures. Worse still is the problem of the periphrastic imperfective future which allows both for insertion of words and various orderings of words, and additionally is confounded by the existence of phrases that can “masquerade” as future forms. For example, in *bud-et snova sprašiva-t’* [be.FUT-3.SG again ask.IPFV-INF] ‘s/he will ask again’ there is the adverb *snova* ‘again’ between the parts of the future, and (5) shows that it is possible to have not just one intervening word form but many; in this example there are five. It is also possible to say *sprašiva-t’ bud-et* [ask.IPFV-INF be.FUT-3.SG] ‘s/he will ask’.

|  |  |
| --- | --- |
| (5) | I **budet** li ona mne tak že **nravit’sja** ili net ― ja ne znaju. |
|  | ‘And whether I **will like** her as well or not – I do not know.’ |
|  | [Evgenij Griškovec. OdnovrEmEnno, 2004] |

Furthermore, (6) shows that we can encounter multiple intervening words also when we have the reverse word order, with the infinitive first, intervening words, and then the auxiliary verb.

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| --- | --- |
| (6) | Tak ja dumaju, a **sprašivat’**, požaluj, ni u kogo ne **budu**. |
|  | ‘I think so, but I **will** probably not **ask** anyone.’ |
|  | [Alla Bossart. Povesti Zajceva // «Družba narodov», 1998] |

One can also find future expression of modals that govern infinitives, yielding both word-order options, as in *možno bud-et sprašiva-t’* [possible be.FUT-3.SG ask.IPFV- INF] ‘it will be possible to ask’ and *sprašiva-t’ bud-et možno* [ask.IPFV-INF be.FUT-3.SG possible] ‘it will be possible to ask’; both word orders are found in (7).

|  |  |
| --- | --- |
| (7) | Ved’ kogda-nibud’ ― on obeščal ― **sprašivat’ budet možno, možno budet sprašivat’**! |
|  | ‘After all, someday – he promised – it **will be allowed to ask**.’ |
|  | [Dina Rubina. Russkaja kanarejka. Bludnyj syn, 2014] |

These modal expressions look like imperfective future forms of the verb *sprašiva-t’* ‘ask’, but this is not the case. The future form of *byt’* ‘be’ in these examples is not the auxiliary of the periphrastic future but instead signals the tense that applies to the modal expressions with *možno* ‘possible’. Examples like these of future forms of *byt’* ‘be’ that just happen to be collocated with an imperfective infinitive are common in Russian, and there is no automatic way to disambiguate them in a corpus.

## 2.2 A sample to represent the overall incidence of future forms

Due to the challenges presented by homonymy and non-contiguity of periphrastic future forms, we have opted to select a group of ten high-frequency perfective and imperfective verb pairs (represented in Table 2 and Figure 1), in order to undertake a targeted study in which we manually check the examples to be certain that we include all and only the future forms of the verbs. We used frequency, plus morphological and semantic criteria to select this set of verbs. For all of these verb pairs, both the perfective and the imperfective verbs appear at a rate of over 100 total attestations (including all inflected forms) per million words (ipm) in the disambiguated subcorpus of the Russian National Corpus.

The verbs are ordered in both Table 2 and Figure 1 according to the overall frequency of the Perfective verbs. These verb pairs represent a variety of morphological means of marking aspectual oppositions in Russian, as shown in Table 2. Our sample contains four pairs of prefixed perfectives paired with primary imperfectives (“A” pattern in Table 1), four pairs of prefixed perfectives paired with secondary imperfectives (“B” pattern in Table 1), one pair of a primary perfective paired with a secondary imperfective, and one suppletive pair. We also represent semantic variety, with verbs that express both concrete and abstract actions, as well as verbs of speaking (verba dicendi).

Since our sample of ten verb pairs does not include either biaspectual verbs or prefixed verbs of motion, the only homonymy that is problematic is the type involving imperative vs. indicative forms. Three of the ten perfective verbs in Table 2 have second person plural future forms that are homonymous with imperatives, namely: *sprosite*, *polučite*, and *posmotrite*. All of the attestations of these forms found in the disambiguated RNC were analyzed by hand to determine which of them were truly future forms, and those future forms were added to the total numbers of all other future forms for those three verbs, thus giving accurate counts. The data in the rightmost column of Table 2 and in Figure 1 are thus based on the total number of perfective future forms adjusted to eliminate imperatives.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Verb pair | Gloss | Morphological marking of aspect | Total frequency (ipm) Perfective / Imperfective | Adjusted estimate of future forms (ipm)  Perfective / Imperfective |
| *sprosit’ / sprašivat’* | ‘ask’ | prefixed perfective / secondary imperfective | 817,70 /  270,85 | 32,98 /  3,74 |
| *dat’ / davat’* | ‘give’ | perfective simplex / secondary imperfective | 617,82 /  394,28 | 100,44 /  0,82 |
| *vzjat’ /* | ‘take’ | suppletive | 602,99 / | 68,46 / |
| *brat’* |  |  | 252,02 | 2,23 |
| *ponjat’ /* | ‘understand’ | prefixed perfective / | 597,83 / | 57,13 / |
| *ponimat’* |  | secondary imperfective | 659,96 | 1,48 |
| *uvidet’ /* | ‘see’ | prefixed perfective / | 527,53 / | 87,12 / |
| *videt’* |  | primary imperfective | 1047,07 | 1,24 |
| *polučit’ /* | ‘receive’ | perfective simplex / | 477,73 / | 58,30 / |
| *polučat’* |  | secondary imperfective | 171,24 | 4,20 |
| *podumat’ /* | ‘think’ | prefixed perfective / | 411,43 / | 27,65 / |
| *dumat’* |  | primary imperfective | 902,16 | 8,65 |
| *posmotret’ /* | ‘look’ | prefixed perfective / | 390,95 / | 51,30 / |
| *smotret’* |  | primary imperfective | 774,06 | 9,31 |
| *napisat’ /* | ‘write’ | prefixed perfective / | 332,15 / | 27,48 / |
| *pisat’* |  | primary imperfective | 442,25 | 8,12 |
| *prinjat’ /* | ‘accept’ | prefixed perfective / | 316,99 / | 27,82 / |
| *prinimat’* |  | secondary imperfective | 204,88 | 3,03 |

*Table 2.* *Sample of verb pairs that demonstrate relative frequencies of perfective and imperfective future forms in Figure 2. Verbs are arranged in descending order according to the total frequency for the perfective verbs (shown in the fourth column), which is visualized using hue in Figure 1.*

For each imperfective verb in Table 2, a sample of 100 attestations of infinitive forms was extracted and analyzed to determine the rate of genuine future forms, taking into account various word orders and discontinuous periphrastic forms to arrive at an estimate of the percentage of genuine futures. This number was used to adjust the total number of infinitives to arrive at an estimate of the actual occurrence of periphrastic future forms for each imperfective verb. In most cases this increased the total number of imperfective futures that were identified, since we were able to include all examples regardless of how many intervening words separated the auxiliary from the infinitive. Overall our targeted survey shows that the disambiguated RNC tends to underreport the number of both perfective and imperfective future forms.

Figure 1. Visualization of data in Table 2: sample of high-frequency verb pairs showing the relative distribution of perfective non-past and imperfective periphrastic future forms as a percentage of the total attestation for each verb. Overall total frequency of verbs is indicated by hue, with the darkest hue for verbs attested over 600 ipm, and the lightest for those under 400 ipm.

Figure 1 shows, for each verb, the percentage of future forms in relation to the total number of attestations. The green bars on the left represent the perfective verbs, in three groups according to overall frequency as indicated by hue, with the darkest for verbs attested over 600 ipm, the middle hue for verbs attested between 400-600 ipm, and the lightest for verbs attested less than 400 ipm. The blue bars on the right represent the imperfective verbs, again with hue to differentiate frequency. The main point of Figure 1 is to show that the frequency of perfective future forms far exceeds that of imperfective future forms, and this is true both from the perspective of each aspect, as well as from the perspective of total numbers. On average across our ten verb pairs, the perfective future makes up 10,68% of the attestations of perfective verbs, whereas the imperfective future makes up 1,07% of the attestations of imperfective verbs. For our ten verb pairs, the total number of perfective future forms is 3234, whereas for imperfectives we find 257 future forms. Therefore, the overall estimated ratio of perfective futures to imperfective futures is 13:1.

In the following two sections we investigate the extent to which perfective and imperfective future forms express future events, and what else they express when they do not unambiguously express future.

# 3. Database of Perfective Futures

In this section and the one that follows, the data is not restricted to the ten verb pairs reported on in Section 2.2. Instead we examine future forms of all verbs in samples from the RNC.

Data restricted to perfective future forms were downloaded from the RNC, pseudorandomized, and the first one thousand examples were analyzed by hand.[[4]](#footnote-4)

The data was classified into four major semantic groups and further annotated for information pertaining to semantics, negation, and modality. The four major classes are Future, Attenuated future, Gnomic and Directive. The Future class describes examples that can be safely attributed to the future tense. The Attenuated future presents some uncertainty because it refers to events that can be anchored to the past and/or present. Gnomics refer to events that are not grounded in terms of tense. Directives are actions that are expected to be executed immediately after the utterance is pronounced.

Figure 2. Distribution of semantic classes in the perfective database

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Group | Future | Attenuated future | Gnomic | Directive |
| Number of examples | 560 | 208 | 210 | 12 |

Table 3. Distribution of semantic classes in the perfective database[[5]](#footnote-5)

Figure 2 and Table 3 show the distribution of examples from our sample across the four semantic classes. The biggest class is Future, then Attenuated future and Gnomic are of nearly the same size. Directives are the smallest class with only 12 examples. Each of the classes is described in more detail in Sections 3.1—3.4.

## 3.1 Future

560 of 1000 examples of perfective future forms unambiguously express future tense, as in (8).

|  |  |
| --- | --- |
| (8) | Let čerez dvesti-trista vsë samo **obrazuetsja**, ― utešal Čexov, i ljudi tesnilis’ k nemu tolpoj. |
|  | ‘In two or three hundred years everything **will sort** **itself out**, Chekhov consoled, and people crowded around him.’ |
|  | [Aleksandr Kušner. Počemu oni ne ljubili Čexova? // «Zvezda», 2002] |

One of the attestations in our database is of a biaspectual verb of the type discussed in 2.1 above, where the interpretation is clearly Future:

|  |  |
| --- | --- |
| (9) | 8 fevralja v amerikanskom Solt-Lejk-Siti **startuet** XIX zimnjaja Olimpiada. |
|  | ‘On February 8th the XIX Winter Olympics **kicks off** in Salt Lake City in America.’ |
|  | [Pavel Černikov. Rossija v cifrax, 2002] |

In all of the examples in the Future class, we observe a prediction of an event that is to take place in the future, grounded in projected reality according to Langacker’s (2008: 306) model. While Future meaning is exactly what we would expect a future form to express, it is perhaps surprising that nearly half of the attestations in our sample cannot be clearly classified as Future. Recall that Forsyth (1970: 120) made a comparable but smaller estimate of one third.

## 3.2 Attenuated future

208 of the perfective future forms in our sample describe an event that cannot be unambiguously assigned to Future due to lack of certainty about their completion or the fact that they can relate events that are actually past or present. There are two ways in which uncertainty is introduced, namely through the use of Modal and Hypothetical expressions, covered in Sections 3.2.1 and 3.2.2. Posterior future, addressed in Section 3.2.3 is a reference to an event that takes place after a past event, but may be situated in any subsequent portion of the timeline (past, present, or future), and Performatives in Section 3.2.4 describe events contiguous with the present moment.

### 3.2.1 Modal

The largest group of Attenuated future examples falls in the category we label “Modal”. In these uses, the future forms indicate not future events, but future possibilities of events.

These uses can be interpreted according to Talmy’s (2000, vol. 1: Chapter 7) model of force dynamics as motivating forces (Agonists) and the removal of barriers (Antagonists).

In our database we find 72 examples of auxiliary verbs with modal meanings followed by an infinitive. Two verbs account for over half the data, with 21 examples of the verb *smoč’* ‘manage to’, and 20 of the verb *prijtis’* ‘have to’. Other verbs that occur more than once are *pozvolit’* ‘allow’ (6 examples), *stat’* ‘begin/become’ (5 examples), *udat’sja* ‘succeed’ (3 examples), and *sumet’* ‘succeed’ (2 examples).

|  |  |  |
| --- | --- | --- |
| (10) | a. | So vremenem agentstvo **smožet** prevratit’sja v krupnuju prodjuserskuju firmu, raspolagajuščuju ser’ëznymi sredstvami. |
|  |  | ‘Over time, the agency **will manage to** turn into a large production company with serious funds’. |
|  |  | [Artur Šumkov. Kinoèkonomika ne budet èkonomnoj, 2002] |
|  | b. | Da, mal’čiki, segodnja vam **pridëtsja** užinat’ s sosiskami… |
|  |  | ‘Yes, boys, today you **will have to** dine on sausages…’ |
|  |  | [Elena Pavlova. Vmeste my ètu propast’ odoleem! 2004] |
|  | c. | Sobytie budet togda, kogda my **zastavim** mèra rasskazat’, počemu “Xard-banku” otdali nedvižimost’ stoimost’ju 70 mln. za 14 mln. |
|  |  | ‘The event will happen when we **force** the mayor to tell why Hard-bank was given property worth 70 million for 14 million.’ |
|  |  | [Sergej Nikolaev. Raz vzryv, dva zaderžanie, 2003] |

The examples above contain both of the most frequent verbs from the sample: *smoč’* ‘manage’ and *prijtis’* ‘have to’, as well as a less frequent verb *zastavit’* ‘force’, which occurs only once in our database. These are not predictions, but rather statements of the relative confidence of the speaker that the events are likely to occur in the near future. The modal element adds dynamics of force to the main verb expressed by an infinitive. The examples, however, vary in structure and the force is applied in various manners. In (10a) the infinitive refers to the subject in nominative case, and here that subject (Agonist) will be empowered by a future situation in which there are no barriers (Antagonist). In (10b) the logical subject (in dative case) is also the same for the modal verb and the infinitive that it governs; an unnamed Agonist applies force to the logical subject. (10c) illustrates a modal verb and infinitive with different subjects: *my* ‘we’ for *zastavim* ‘(we) will force’ and *mèr* ‘mayor’ as the logical subject for *rasskazat’* ‘tell’.

### 3.2.2 Hypothetical

Our database contains 50 examples classed as Hypothetical, in 44 of which a hypothesis is introduced by means of *esli* ‘if’, as in (11). According to Fauconnier (1985: Chapter 3), *if* is a space-builder that sets up a mental space that is relatively subjective in relation to conceived reality (see Langacker 2008: 528). *Esli* ‘if’ takes the example from the plane of projection of the future to its border with non-reality.

|  |  |
| --- | --- |
| (11) | **Esli propustiš’** xot’ odno zanjatie po masterstvu, sčitaj, čto ty otčislena. |
|  | ‘**If** you **miss** even one acting lesson, consider yourself expelled.’ |
|  | [Sati Spivakova. Ne vsë, 2002] |

Each of the remaining six examples classed as Hypothetical is unique in our database, although there are some patterns, and all of them are introduced by space-builders. In four of them a hypothesis is introduced by a phrase such *somnevajutsja, čto* ‘they doubt that’, *pri uslovii, čto* ‘under the condition that’ (12), and *možet* as an abbreviated form of *možet byt’* ‘perhaps’.

|  |  |
| --- | --- |
| (12) | Po ocenkam Raytheon, firma mogla by izgotavlivat’ èti rakety pri stoimosti po 400 tys. doll. za každuju, **pri uslovii**, **čto** armija **zakažet** 1000 raket. |
|  | ‘According to Raytheon estimates, the firm could manufacture these missiles at a cost of $ 400 thousand for each, **provided** **that** the army **orders** 1,000 missiles.’ |
|  | [Vladimir Korovin. Novosti za rubežom // «Vozdušno-kosmičeskaja oborona», 2002] |

The main clause of this example belongs to non-reality, signaled by the conditional marker *by*. The clause introduced by *pri uslovii, čto* uses a perfective future form to describe a possible facilitating event. In the remaining two instantiations it appears that *esli* has been elided: see (13).

|  |  |
| --- | --- |
| (13) | Ne **progolosuem** ― uxudšitsja finansirovanie vsex rasxodov na social’nye nuždy, čto neizbežno skažetsja na avtoritete levyx sil i rezul’tatax očerednyx vyborov. |
|  | ‘(If) we **do** not **vote** – the financing of all expenses for social needs will deteriorate, which will inevitably have an impact on the authority of the forces on the left and the results of the next elections.’ |
|  | [Vladimir Fedotkin. Vlast’ i oppozicija, 2003] |

Seven of the examples in our database are classed as both Modal and Hypothetical, such as (14) that contains the hypothetical space-builder *esli* ‘if’ in combination with the modal verb *udat’sja* ‘manage’.

|  |  |
| --- | --- |
| (14) | Xorošo, **esli** strane **udastsja** perežit’ nynešnjuju “stabilizaciju” i ona ne perejdët v polnuju i okončatel’nuju degradaciju. |
|  | ‘It is good **if** the country **manages** to survive the current “stabilization” and it does not go into complete and final degradation.’ |
|  | [Aleksandr Xramčixin. Kompleks polnocennosti, 2003] |

### 3.2.3 Posterior future

We begin this section with another hybrid example, this one combining Modal use (signaled by *smoč’* ‘manage’) with the Posterior future, conditioned by the setting of what was said in the past:

|  |  |
| --- | --- |
| (15) | My ... vsegda govorili, čto po finansovym pričinam ne **smožem** sdelat’ èto vovremja i bez pomošči zapadnyx stran. |
|  | ‘We ... have always said that for financial reasons we **would not be able to** do this on time and without the help of Western countries.’ |
|  | [Dmitrij Litovkin. Sroki podviga perenosjatsja, 2002] |

There are all told 43 examples of Posterior future, most of them showing the same pattern as the above example, where the main clause contains a past tense finite verb form, and the future form appears in a subordinate clause.

Finally, we present an example that combines Hypothetical using *esli* ‘if’ with the Posterior future, occasioned by the fact that the document was sent in the past to be used in a hypothetical future scenario.

|  |  |
| --- | --- |
| (16) | ... kajzerom Vil’gel’mom II, v 1914 godu prislavšim v Peterburg dve noty ob ob”javlenii vojny, odnu ― na slučaj, esli Rossija **otkažetsja** ostanovit’ mobilizaciju ... |
|  | ‘…emperor Wilhelm II in 1914 had sent to Petersburg two declarations of war, one in case that Russia **refuses** to stop its mobilization…’ |
|  | [Maksim Sokolov. 21.IX – 27.IX // «Izvestija», 2002.09.27] |

### 3.2.4 Performative

Our dataset contains 37 examples of Performative Attenuated future. Performatives are defined as illocutionary acts that can be executed by uttering a sentence (see Searle 1989: 536). We also include near-performative uses in this class. Performative refers to an action that is either already completed (17) or approximately simultaneous (18) with another action. 35 of these examples contain first person forms, of these 21 are first person singular forms, and 14 are first person plural forms. The remaining two forms are a second person plural form and a third person singular form.

The expression of Performative is mostly restricted to verbs that describe speaking (*skažu* ‘I will say’, *nazovu* ‘I will name’, *opišem* ‘we will describe’) and other actions connected to verbal argumentation such as directing the focus of the hearer (*zametim* ‘we will note’, *podčerknem* ‘we will emphasize’, *rassmotrim* ‘we will examine’). We also find verbs used metaphorically to refer to discourse actions such as *dobavim* ‘we will add’ (speaking points), *ostanovimsja* ‘we will stop’ (meaning that we will spend time discussing certain points), *privedu* ‘I will bring’ (with direct objects *primer* ‘example’ and *vyderžku* ‘excerpt’ meaning that the speaker is inserting items into a discussion). We have two examples of Performative uses that involve other types of (nonverbal) actions: *pokažu* ‘I will show’ in a frame where the speaker is offering documents to an official, and *pogljažu* ‘I will take a look’ in a frame where the speaker takes a look at some chairs.

|  |  |
| --- | --- |
| (17) | My že **ostanovimsja** na bolee uporjadočennyx processax. |
|  | ‘We **will focus** on the more predictable processes.’ |
|  | [Sergej Dorenko. Levye sily – perezagruzka, 2003] |

In the text preceding (17), the author of an article about political processes is describing a situation and listing possible scenarios for these processes. The author has already decided that they are going to write about the more predictable processes well before this sentence is actually written. For this reason, the action of focusing attention signaled by *ostanovimsja* can be viewed as already completed.

|  |  |
| --- | --- |
| (18) | O planax **skažu**, čto xoču privezti domoj medali― na pamjat’. |
|  | ‘As for the plans, I **will say** that I want to bring the medals home, as a souvenir.’ |
|  | [Oleg Lisogor: «Čto tolku mečtat’? Rabotat’ nado!», 2002] |

In (18) the action of saying referenced by the verb in the main clause is simultaneous with the content described in the subordinate clause.

## 3.3 Directive

Whereas Performatives announce an action taken by the speaker, Directives deliver instructions to immediately perform an action that should be nearly simultaneous with the utterance. Our category of Directives is represented by 12 examples, all of which function similarly to imperatives, though they are realized morphologically in various ways, such as by means of finite forms as in (19).

|  |  |
| --- | --- |
| (19) | **Voz’mëš’** mikrofon. **Zakatiš’** glaza kartinno. Èto ty i bez mikrofona umeeš’. |
|  | ‘**Take** a microphone. **Roll** your eyes picturesquely. You can do it without a microphone as well.’ |
|  | [Zapis’ LiveJournal, 2004] |

Sometimes finite forms are combined with hortative markers like *pust’* ‘let, may’ as in (20).

|  |  |
| --- | --- |
| (20) | **Pust’** ta že učast’ **postignet** detej prezidenta Buša. |
|  | ‘**May** the same fate **befall** the children of President Bush.’ |
|  | [Aleksandr Proxanov. Prokuratura – kastet s programmnym upravleniem, 2003] |

## 3.4 Gnomic

The single biggest deviation from use of perfective finite forms to reference future are the Gnomic uses which we observe in 210 examples. In these examples, the perfective future forms refer not to a future event, but to situations that are not grounded in terms of tense.

These examples are distinct from the Future type described above (3.1 and 3.2) in that they do not describe events that can be located in projected reality. The Gnomic events do not derive their definiteness from a specific temporal location. Instead these events may appear at one or multiple locations in reality (including potential reality). They derive their definiteness from conceived reality available to the speaker (see Langacker 2008). In other words, they are anchored to another generalized situation that is accessible to the speaker. We use the term Gnomic to highlight the lack of a specific temporal location.

|  |  |
| --- | --- |
| (21) | Žarenaja kurica, zavërnutaja v fol’gu i uložennaja v plotno zakryvajuščujusja kastrjul’ku, **ostanetsja** dolgo tëploj. |
|  | ‘Fried chicken wrapped in foil and placed in a tightly closed saucepan **will remain** warm for a long time.’ |
|  | [M. Volodina. O fol’ge, 2002] |

In (21), the situation that grounds the event is any instance of a fried chicken wrapped in foil. Given this situation, the speaker can observe that it instantiates a Gnomic potential, namely that the chicken will stay warm. Metonymy plays a role here as well: a single event is picked out to represent a whole class of events.

Gnomic uses present various perspectives that connect to a variety of characteristics. These include the stability of salient features across time, modality and hypotheticality. We take up each submeaning in turn in the following subsections.

### 3.4.1 Stable scenarios

Some uses are Gnomic because they are grounded in encyclopaedic knowledge about how conceived reality functions. This can include generalizations based on the experience of the speaker and the Gnomic use can serve to deliver advice to a hearer.

|  |  |
| --- | --- |
| (22) | ― Dlja nas, pčël, v skošennoj trave proku nikakogo. Nektar iz neë ne **voz’mëš’**,― prodolžala staraja Pčela. |
|  | ‘― For us bees, there’s no use in cut grass. You **can't take** nectar from it ― continued the old Bee.’ |
|  | [Viktor Kologriv. Medovyj lug // «Murzilka», 2002] |

In (22), the bee has observed on previous occasions that cut grass is useless and conveys this as a stable fact to her interlocutor, one that is potentially infinitely reproducible. Possibility or lack thereof gives a modal flavor to such statements.

### 3.4.2 Modal

Some Gnomic uses directly involve modal verbs as auxiliaries to infinitive main verbs, as in (23).

|  |  |
| --- | --- |
| (23) | Za prevyšenie limita vam **pridëtsja** doplačivat’ iz rasčëta 15-30 centov za každyj kilometr probega sverx normy. |
|  | ‘For exceeding the limit you **have to** pay extra at the rate of 15-30 cents for each kilometer.’ |
|  | [Denis Litošik. Avtomobil’ naprokat // «Avtopilot», 2002.05.15] |

Here a rental car agent is stating a fixed rule about what happens when a client drives over a set number of kilometers. Note that if perceived without the broader context, (23) could refer to a single situation in the future.

### 3.4.3 Hypothetical

In Hypothetical Gnomic uses, we see an ‘if…then…’ semantic structure that can be occasioned only by future perfective forms, as in this example, or enhanced by words like *esli* ‘if’. Here there is no grounding in a specific time, but a prediction based on overall experience:

|  |  |
| --- | --- |
| (24) | Tiraž malen’kij, **vygonjat** ix iz odnoj tipografii, oni napečatajutsja v drugoj. |
|  | ‘The edition is small, (if) they **get kicked out** of one publishing house, they print them in another.’ |
|  | [D. Volkov, V. Sungorkin. Kuxnja upravljaemoj demokratii, 2003] |

This linking of one event to another is a common characteristic of Gnomics apparent also in the next two subsections.

### 3.4.4 Simultaneous (*to*…*to*, *čem*…*tem*)

Pairs of events that are linked by experience can be formally linked in grammatical constructions such as ‘*to*…, *to*…’ and ‘*čem*…, *tem*…’ as in (25).

|  |  |
| --- | --- |
| (25) | A **čem** dol’še **soxranitsja** prostranstvo igry, **tem** lučše dlja razvitija rebënka. |
|  | ‘**The** longer an opportunity for play **is preserved**, **the** better it is for the child’s development.’ |
|  | [Anna Fen’ko. Nevroz po povedeniju// «Kommersant-Vlast’», 2002] |

### 3.4.5 Habitual chain

The Habitual chain type has been described by Dickey (2000: 55-56) and Bondarko (1971: 197-208). Habitual chains describe the speaker’s knowledge about two or more events that typically take place in a given sequence. In a sense, habitual chains are also stable situations (not least because of metonymy).

|  |  |
| --- | --- |
| (26) | Byvaet, **spiljat** v tajge ogromnyj kedr, **privezut** v posëlok, a iz pustogo vnutri stvola medved’ vylezaet. |
|  | ‘It happens that they **cut down** a huge cedar in the taiga and **bring** it to the village, and a bear crawls out of the hollow trunk.’ |
|  | [Gennadij Snegirev. Medved’ // «Murzilka», 2003] |

Here the two events are cutting down and bringing the tree to the village, which form a fixed sequence regardless of when they take place. The Habitual chain use of the Gnomic is often used with sequences that took place repeatedly in the past.

### 3.4.6 Single events

A single event highlights a sudden or exceptional event that stands out as a figure in contrast to the background of what is usual (Dickey 2000: 57; Bondarko 1971: 213).

|  |  |
| --- | --- |
| (27) | Obyčno takie «pereboi ritma» slučajutsja, kogda, kak grom sredi jasnogo neba, **mel’knët** zagadočnyj son, kotoryj tak i xočetsja nazvat’ veščim. |
|  | ‘Usually ruptures in one’s rhythm take place when, like a stroke of lightning, one **gets a flash** of a mysterious dream that one feels must be prophetic.’ |
|  | [Aleksandr Volkov. Miry Stivena Xoukinga // «Znanie – sila», 2003] |

Here in (27) the background is the regular routines of a person’s life that are suddenly interrupted by a dream. This example also illustrates the description of a stable situation – something that “usually” happens.

## 3.5 Ambiguous biaspectual examples

Biaspectual verbs have non-past forms that can be interpreted either as present form of an imperfective verb or future form (with one of the described meanings) of a perfective verb (see the discussion in Section 2.1). In our database we find examples of non-past forms of biaspectual verbs that can be interpreted either as perfective future forms with a Gnomic meaning, or as imperfective present tense forms. While no amount of context can definitively distinguish between these two options, it is usually the case that one of the interpretations is more likely.

|  |  |
| --- | --- |
| (28) | V ètot [podrostkovyj] period, sčitaet Vygotskij, proisxodit glubokoe preobrazovanie voobraženija: iz subʺektivnogo ono **preobrazuetsja** v obʺektivnoe. |
|  | ‘In this [teenage] period, Vygotsky believes, a profound transformation of the imagination takes place: from the subjective, it **is transformed** into objective.’ |
|  | [E. P. Krupnik. Voprosy psixologii, 2003] |

In (28) the famous psychologist is referring to what usually happens in the life of an adolescent using the biaspectual verb *preobrazuetsja* ‘transforms’. Either Vygotskij is making a Gnomic statement about what always happens, or he is making a statement about a transformation that is currently happening from the internal perspective of the adolescent period.

# 4. Database of Imperfective Futures

In this section we examine and describe the database extracted from the RNC containing examples of imperfective future forms, namely the future form of the verb *byt’* together with the imperfective infinitive. In order to avoid the issues concerning periphrastic forms described in Section 2, the search in the corpus included imperfective future forms of the type ‘*budu* + infinitive’ at a distance of 1. Using the same procedure as for the perfective database, the downloadable sample was pseudorandomized and then analyzed by hand.

Even though we restricted the conditions of the search, ninety-five examples had to be excluded as noise. A significant part of the excluded examples was flagged because *budu* was syntactically connected to a word (such as the modals *možno*, *nado*, *nužno*) in the left context. An additional ninety-five examples were culled to bring the total to 1000.

The classification for the imperfective database is modelled after the perfective classification described in Section 3. The distribution of the examples across classes is shown in Table 4 and Figure 3, which are both organized similar to Figure 2 and Table 3 in Section 3.

The Future class strongly dominates in the imperfective database. Attenuated future and the slightly smaller Gnomic classes are of comparable size. Directives constitute a minority.

Figure 3. Distribution of semantic classes in the imperfective database

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Group | Future | Attenuated future | Gnomic | Directive |
| Number of examples | 778 | 133 | 84 | 5 |

Table 4. Distribution of semantic classes in the imperfective database

## 4.1 Future

The imperfective future forms in our database are more consistent than the perfective ones in terms of expressing a reference point in the future: 778 examples belong in that category. (29) illustrates a prediction for the events that are going to happen in the following year:

|  |  |
| --- | --- |
| (29) | V buduščem godu **budet prodolžat’sja** rost vredonosnyx programm dlja Linux, i vysoka verojatnost’ togo, čto v 2002-m pojavjatsja i polučat rasprostranenie virusy dlja Palm, Pocket PC, sotovyx telefonov. |
|  | ‘Next year, the growth of malware **will continue**, and it is highly likely that in 2002 viruses for Palm, Pocket PC and cell phones will appear and spread.’ |
|  | [S. Potresov. God virusnogo bespredela, 2001] |

There are three examples that refer to the future but have an additional meaning which comes not from the form but from the verb itself: *znat’* ‘know’. The main function of these examples is to threaten the hearer. The threat is accompanied by a subordinate clause that can optionally be attached by conjunctions *čto* ‘what’ and *kak* ‘how’. The action by which the hearer is threatened has already happened at least once, hence the knowledge about it is present, not future. The threat is the repetition of this past action in the future:

|  |  |
| --- | --- |
| (30) | Ingušskuju miliciju zdes’ ne ljubjat: “**Budut znat’**, čto takoe čečenskij ženskij batal’on!” |
|  | ‘The Ingush police is not popular here: “They **(will) know** better than to mess with a Chechen women’s battalion!”’ |
|  | [Elena Samojlova. «Ljubogo menta pokolotit’ mogu!», 2002] |

In (30) the women have already committed some kind of threatening action that inspired fear. And it is the knowledge that they are capable of this kind of action that belongs to the future.

## 4.2 Attenuated future

There are 133 attestations of the imperfective future forms that belong to the Attenuated future group which is half the size of the corresponding group in the perfective future database. We find the same subgroups: Section 4.2.1 covers the rare Modal usages, in 4.2.2 we describe the Hypothetical examples, Posterior future can be found in Section 4.2.3 and Performatives are in 4.2.4. Alternations (*čem*…*tem*…) are presented in Section 4.2.5.

### 4.2.1 Modal

Two important Russian imperfective verbs with modal meanings present paradigm gaps that prevent them from appearing in future forms: \**budu moč’* ‘(I) will be able’ and \**budet prixodit’sja* ‘will have to’ do not exist. Given this fact, this group could not be expected to be numerous. There are only three examples. Verbs *starat’sja* and *umet’* (31) are followed by infinitives:

|  |  |
| --- | --- |
| (31) | Skoro v našej strane každyj **budet umet’** čitat’ i pisat’! |
|  | ‘Soon everyone in our country **will be able to** read and write!’ |
|  | [I. Grekova. Fazan, 1984] |

The conjunction *kak* ‘how’ adds modal flavor to (32).

|  |  |
| --- | --- |
| (32) | ― Kak že ja **budu govorit’**, kogda vy vsë vremja perebivaete… |
|  | ‘How **am** I **supposed to talk** when you interrupt all the time…’ (lit. ‘how I will talk’) |
|  | [J. O. Dombrovskij. Xranitel’ drevnostej, 1964] |

In the broader context, in (31) the speaker has already been talking for a while and one of the listeners has been trying to stick a word in all the time. So, the speaker is outraged and tries to convey the idea that he would like the hearer to stop interrupting (in the nearest future). This idea is expressed in the form of a rhetoric question.

### 4.2.2 Hypothetical

In Hypothetical uses there is no guarantee that the relevant event will ever take place at all, so these examples do not describe predicted future events. The number of Hypothetical uses of the imperfective future is comparable with the perfective: 39 (versus 50 examples for perfectives). The space-builder *esli* ‘if’ remains the dominant means of expression in the group (31 examples):

|  |  |
| --- | --- |
| (33) | **Esli** ja ne **budu** **protirat’** zvëzdy každyj večer, ― dumal on, ― oni objazatel’no potusknejut. |
|  | ‘**If** I **don’t** [lit. **will** not] **wipe** the stars every night,’ he thought, ‘they will surely fade.’ |
|  | [Sergej Kozlov. Pravda, my budem vsegda? 1969-1981] |

Other ways of expressing hypotheticality include various space-builders and the elision of *esli*. The space-builders *budto* ‘as if’, *koli* ‘if’ and *eželi* ‘if’ are represented once each in our data. There are five examples where the space-builder ‘if’ is elided, one of which is presented here:

|  |  |
| --- | --- |
| (34) | **Budut obižat’**, **pristavat’** ― prixodi i žalujsja smelo. |
|  | ‘(If) they [lit. **will**] **offend**, **molest** (you) – come and complain without fear.’ |
|  | [È. G. Kazakevič. Zvezda, 1946] |

Lastly, similar to the situation in our perfective database, two examples fell into two categories at the same time: Hypothetical and Posterior future, as in (35).

|  |  |
| --- | --- |
| (35) | …dvoe iz nix zajavili, čto vernulis’ by v “P. O. R. T. O. S.”, **esli** organizacija snova **budet** **dejstvovat’**. |
|  | ‘…two of them said they would return to P.O.R.T.O. S. if the organization [lit. **will** **function**] **were** **to** **operate** again.’ |
|  | [Andrej Andreev. Buduščee prinadležit nam! 2003] |

In (35) *esli* builds a mental space where the organization that the speaker is talking about is functioning. In this mental space the people (‘they’) are happy to return. The clarification of the Posterior future element comes in Section 4.2.3.

### 4.2.3 Posterior future

The previous example (35) additionally illustrates Posterior future because the verb *zajavili* ‘said/declared’ puts the whole situation (including the mental space) into the past, as in reported speech. The Posterior future is the largest subgroup of Attenuated future: it includes 73 examples.

Posterior future sometimes refers to events that were supposed to happen in the past at some point after the moment of speaking but might not ever have happened at all, as in (36). In other cases, the event has not happened yet or is going to continue in the future, as in (37). However, most examples do not clearly indicate a difference between an event that happened after another event in the past or is still expected in the future, and one can only guess this from the context: see (38).

|  |  |
| --- | --- |
| (36) | On ždal, čto ja **budu provalivat’sja**, i xotel, čtoby ja provalilsja kak možno medlennej i interesnej. |
|  | ‘He expected [lit. that I **will** **fail**] me **to fail**, and wanted me to fail as slowly and interestingly as possible.’ |
|  | [Fazil’ Iskander. Trinadcatyj podvig Gerakla, 1966] |

In (37) the narrator describes a situation in which someone expected him to fail and this happened when he was in school. From a broader context, it is clear that the time when he might have failed has already passed because we learn further on that he succeeded. So, the failure never took place and the time period where it could have happened is already over.

|  |  |
| --- | --- |
| (37) | Podali čto-to takoe beloe, ja prinjal èto za mannuju kašu, no kogda poproboval, to ponjal, čto ja **budu est’** èto vsju svoju žizn’, po tri raza každyj den’. |
|  | ‘They served something white, I took it for semolina, but when I tried it, I realized that I [lit. **will**] **would** **eat** it all my life, three times every day.’ |
|  | [Natal’ja Skljarova. Esli by u medvedja bylo ruž’e, 2002] |

At the moment of producing sentence (37) the author was obviously alive and planning to continue to eat the food that she tasted for all the foreseeable future. So, the eating event began in the past and continues indefinitely.

|  |  |
| --- | --- |
| (38) | Èto označalo, čto otnyne specialistov po ètoj discipline **budut gotovit’** v gosudarstvennyx vysšix učebnyx zavedenijax. |
|  | ‘This meant that from that moment on specialists in this discipline [lit. **will**] **would** **be** **trained** in state higher educational institutions.’ |
|  | [Marija Kozlova. «Advokat», 2004.12.01] |

In (38) we do not know whether the training process has changed over time or not, so the duration of the event is unknown.

### 4.2.4 Performative

Twelve examples in the database are marked as Performatives. Here the imperfective uses demonstrate the same pattern as the perfective ones: 6 examples are first person singular forms, 4 examples are first person plural forms and 2 examples are third person plural, one of which is a passive construction and the other one refers to a reply by the speaker. Verbal argumentation is the primary meaning of the verbs in the Performative category, where we observe verbs like *rezjumirovat’* ‘summarize’, *obsuždat’sja* ‘discuss’, *vrat’* ‘lie’, *govorit’* ‘speak’, *pisat’* ‘write’ etc.

|  |  |
| --- | --- |
| (39) | Ja ne **budu rezjumirovat’** rezul’tatov izložennogo issledovanija i perexožu prjamo k vyvodam. |
|  | ‘I **will** not **summarize** the results of the study and (I) proceed directly to the conclusions.’ |
|  | [A.N. Leont’ev. Biologičeskoe i social’noe v psixike čeloveka, 1981] |

The author decides to skip the talk about one part of his research and this decision immediately (performatively) results in avoiding it proceeding to the next section.

### 4.2.5 Alternation

In the perfective database all Alternations belonged to the Gnomics (see Section 3.4.4). In the imperfective, however, there is one example where the first part of the Alternation introduced by *čem* happens in the present while the second part beginning with *tem* is in contrast with the first and is supposed to be fulfilled in the future:

|  |  |
| --- | --- |
| (40) | I **čem** ničtožnee moja rol’ v nastojaščej žizni, čem bescvetnee samyj fon moego suščestvovanija, **tem** jarče **budet** **sijat’** moë sentimental’noe, moë ščedroe, moë velikodušnoe i prekrasnoe solnce. |
|  | ‘And **the** more insignificant my role in real life, the more colorless the very background of my existence are, **the** brighter my sentimental, my generous, my benevolent and beautiful sun **will** **shine**.’ |
|  | [I. F. Annenskij. Vtoraja kniga otraženij, 1909] |

In addition, there are 3 more examples of Alternations that refer to an Attenuated future.

## 4.3 Directive

There are 5 examples of imperfective Directives and they are a diverse group. Two Directives are used in combination with the hortative marker *davajte* ‘let us’ (41).

|  |  |
| --- | --- |
| (41) | …a my **davajte budem volnovat’sja**, čtoby glupostej ne natvorit’ na svoëm učastke. |
|  | ‘…and **let us worry** about not doing stupid things on our site.’ |
|  | [Vasilij Grossman. Žizn’ i sud’ba, 1960] |

In (41) the instruction on worrying has already been followed (we are already worrying), making the action simultaneous with the utterance.

## 4.4 Gnomic

Similar to the perfective database, imperfective Gnomic uses make up a significant portion of deviations from the future meaning: 84 examples belong to this category.

|  |  |
| --- | --- |
| (42) | Sobaka ne **budet** **est’** togo, čem ja pitajus’. |
|  | ‘A dog **will** not **eat** what I eat.’ |
|  | [Sergej Dovlatov. Inaja žizn’, 1984] |

In (42) there is neither a specific dog, nor do we expect that there will be any dog in the future. It is just common knowledge that normally dogs eat something better than what the speaker has.

The pattern of subtypes among Gnomic uses in the imperfective partly follows but also partly deviates from that observed for perfective verbs in Section 3.4.

### 4.4.1 Stable scenarios

Thirteen examples are marked as Stable scenarios. The speaker’s experience or knowledge of the world and human nature provides the ground to generalize and give advice or instruction.

|  |  |
| --- | --- |
| (43) | Ne suščestvuet krizisa vozrasta ― suščestvuet strax, čto čto-to nezaplanirovannoe slučitsja v tvoej žizni, i ty ne **budeš’** **znat’**, čto delat’. |
|  | ‘An age crisis does not exist: there is a fear that something unplanned will happen in your life and you **will** not **know** what to do.’ |
|  | [Marija Vardenga. Galina Tjunina. Fragmenty belogo stixa, 2002] |

This philosophical passage is not limited to specific unplanned sudden future events; it relates a common and constant situation that many people find themselves in.

### 4.4.2 Hypothetical

Two examples are both Stable scenarios and Hypothetical, as (44) illustrates with the space-builder *esli* ‘if’ followed by a covert piece of advice.

|  |  |
| --- | --- |
| (44) | Xorošo, esli v vašem ugolke otdyxa **budet** **prisutstvovat’** takoj tradicionnyj èlement, kak voda. |
|  | ‘(It is/will be) good **if** there [lit. **will** **be**] **is** such traditional element like water in your garden retreat.’ |
|  | [Valerija Iršenkova. Svoj ugolok ja ubrala cvetami, 2003] |

This speaker is addressing someone who is designing a garden and wants to remind them to include a creek or fountain in their plans. Instead of giving advice directly and overtly, the speaker uses the Gnomic imperfective future as a subtle way to hint at a suggested option. Here the Gnomic performs the function of a politeness strategy. There are 7 more Hypothetical Gnomic uses, two of which are introduced by the space-builder *pri uslovii, čto* ‘provided that’.

### 4.4.3 Habitual chain

Even though nearly all of the examples in the database contain more than one verb form, there are only four salient Habitual chains in the Gnomic type.

|  |  |
| --- | --- |
| (45) | **Potom** Viktor Pavlovič dolgo **budet sidet’** nepodvižno, **potom** načnët kivat’ golovoj, kak-to pokorno, po-starčeski tosklivo. |
|  | ‘**Then** Viktor Pavlovich **will** **sit** motionless for a long time, **then** he will begin to nod his head, somehow docilely, with old-fashioned melancholy.’ |
|  | [Vasilij Grossman. Žizn’ i sud’ba, 1960] |

The person described in (45) has specific behavioral patterns, which are sequenced by means of *potom* ‘then’.

### 4.4.4 Single events

There is only one imperfective example that resembles a single event in the terminology of Dickey and Bondarko.

|  |  |
| --- | --- |
| (46) | Derevjannyj ili parketnyj pol nužno objazatel’no ukrepit’ (inače on **budet** **skripet’** i pod linoleumom), zadelat’ treščiny. |
|  | ‘A wooden or parquet floor must be strengthened (otherwise it **will** **creak** under the linoleum), (one also) needs to repair the cracks.’ |
|  | [Elena Volkova. Tot samyj linoleum, 2002] |

This example offers advice on how to do a good job, and is interrupted by a parenthetical clause that describes an undesirable alternative.

### 4.4.5 Gnomic uses restricted in the future

There are several examples that describe generalized events lacking temporal grounding, that are however bounded at some point in the future.

|  |  |
| --- | --- |
| (47) | Teper’ èto tol’ko vremennaja razluka duši i tela, vremja, kogda telo **budet otdyxat’** i **rassypletsja** v prax, togda kak duša **budet oživat’** vsë bolee i bolee, kak vsë razgorajuščeesja plamja, **do dnja**, kogda budet vosstanovlena cel’nost’, kogda my voskresnem i zaživëm žizn’ju Božiej voveki. |
|  | ‘Now this is only a temporary separation of the soul and body, the time when the body **will** **rest** and **crumble** to dust, while the soul **will come to life** more and more, like all the flaming fire, **until the day** when integrity is restored, when we are resurrected and live the life of God forever.’ |
|  | [mitropolit Antonij (Blum). Strastnaja sedmica, 1980] |

In (47) the author describes processes that are happening and will continue to happen in the future for a while until a specific event is supposed to take place (‘until the day when…’).

# 5. Radial category of meanings for future forms

The fact that we can use the same semantic classification for both perfective and imperfective future forms supports Stojnova’s (2016b: 248) thesis that there is a tendency to align the perfective and imperfective future tenses, and also makes it possible to posit a shared radial category of meanings for future forms. However, we find that the range of meanings is not identical across the two aspects. Figure 4 is a visualization of the radial category of meanings expressed by future forms in Russian.



Figure 4. Radial category of meanings expressed by Russian future forms. Major meanings are on the vertical axis, with Future as the prototype. Ovals represent submeanings, with boldface to indicate those that can overlap; P = perfective, I = imperfective.

The four major meanings of Russian future forms are arranged in square boxes, with a thick line around Future to indicate its status as the prototypical meaning in the network. All four of the major meanings are instantiated by both perfective and imperfective verbs. Directive is relatively marginal and therefore distant from the rest of the meanings. The remainder of the vertical axis shows relative temporal grounding of the meanings, with Future as the most grounded, followed by Attenuated future, which is partially grounded, and at an even further remove Gnomic, which lacks temporal grounding. The ovals represent the various submeanings presented in Sections 3 and 4. While most of the submeanings are attested for both perfective and imperfective verbs (“P, I”), Single event and Simultaneous meanings are found only with perfective verbs, and Alternation is found only with imperfectives. Bold face indicates submeanings that can combine with other submeanings, multiply motivating the use of future forms. Modal and Hypothetical are shared by the Attenuated future and Gnomic meanings and can combine both with Posterior uses of the Attenuated future and with Stable scenario Gnomic uses.

The layered diagram of the Russian future forms in Figure 4 captures the schematic simplicity of the radial category along with the complex interaction of both major uses and submeanings.

# 6. Conclusions

This article presents for the first time a credible estimate of the actual distribution of future forms in Russian, along with a detailed semantic analysis of their use. Manual inspection of a stratified sample of 2000 verb forms reveals that perfective futures occur at the rate of 11% of the total frequency of perfective verbs, whereas for imperfective verbs the value is 1%; perfective to imperfective future forms occur at a ratio of 13:1. A further sample of 1000 examples of perfective future forms and 1000 imperfective future forms was manually analyzed for meanings and submeanings. Only 56% of perfective future forms unambiguously express Future meaning, with the remainder expressing Attenuated future, Gnomic, and Directive meanings. Nearly 78% of imperfective future forms express Future meaning, and the remainder follow a pattern similar to that of the perfective forms, differing in the use of some submeanings. We present a layered radial category that captures the complex interactions among the major meanings and the submeanings of the future forms.

Overall, we find that perfective future forms are both more numerous and more varied in their expression of meaning. Gnomic uses of future forms stand out as particularly important, both for a theoretical understanding of future forms and for language pedagogy, which should focus more on perfective forms and their Gnomic uses.

# References:

Andersen, Henning. 2006. Periphrastic futures in Slavic. Divergence and convergence. Change in verbal systems. In Kerstin Eksell & Thora Vinther (eds.), *Issues in explanation*, 9-45. Bern: Peterbang.

AUTHOR2. 2007.

Bondarko, Aleksandr V. 1971. *Vid i vremja russkogo glagola*. Moscow: Prosveščenie.

Borkovskij, Viktor. I. & Pavel S. Kuznecov. 1965. *Istoričeskaja grammatika russkogo jazyka.* Moscow: Nauka.

Bybee, Joan L. & Östen Dahl. 1989. *The creation of tense and aspect systems in the languages of the world.* Amsterdam: John Benjamins.

Bybee, Joan L. & William Pagliuca. 1987. The evolution of future meaning. *The 7th international conference on historical linguistics*, 109-22. Amsterdam: Benjamins.

Čujkova, Oksana Ju. 2018. *Semantika buduščego vremeni v russkom, anglijskom i ispanskom jazykax. Vzaimodejstvie temporal’nosti, aspektual’nosti i modal’nosti.* Saint Petersburg. Saint Petersburg State University dissertation.

Dahl, Östen & Viveka Velupillai. 2013. The Future Tense. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. <http://wals.info/chapter/67> (31 January, 2020).

Dickey, Stephen M. 2000. *Parameters of Slavic aspect. A cognitive approach.* Stanford CA: CSLI Publications.

Fauconnier, Gilles. 1985. *Mental Spaces.* Cambridge/London: MIT Press.

Forsyth, James. 1970. *A Grammar of Aspect: Usage and Meaning in the Russian Verb.* Cambridge: Cambridge University Press.

Lakoff George. 1987. *Women, fire, and dangerous things.* Chicago: University of Chicago Press.

Langacker, Ronald W. 2008. *Cognitive grammar: A basic introduction*. New York: Oxford University Press.

Searle, John R. 1989. How performatives work. *Linguistics and philosophy* 12(5). 535-558.

Stojnova, Natalia M. 2016a. Nefutural’nye upotreblenija form buduščego vremeni. *Materialy dlja proekta korpusnogo opisanija russkoj grammatiki*. <http://rusgram.ru> (2 October, 2018).

Stojnova, Natalia M. 2016b. Analitičeskaja konstrukcija buduščego vremeni. *Materialy dlja proekta korpusnogo opisanija russkoj grammatiki.* <http://rusgram.ru> (2 October, 2018).

Stojnova, Natalia M. 2018. Buduščee vremja. *Materialy dlja proekta korpusnogo opisanija russkoj grammatiki.* <http://rusgram.ru> (2 October, 2018).

Stojnova, Natalia M. 2019. Buduščee nesoveršennogo vida i infinitivnoe sočetanie s glagolom statʹ kak konkurirujuščie konstrukcii v sovremennom russkom jazyke. *Russkij jazyk v naučnom osveščenii* (1). 58-83.

Talmy, Leonard. 2000. *Toward a Cognitive Semantics.* Cambridge, MA: MIT Press.

Zaliznjak, Anna A. & Aleksej D. Šmelev. 2000. *Vvedenie v russkuju aspektologiju.* Moscow: Jazyki russkoj kul’tury.

1. Biaspectual verbs might be considered a counterexample, but most scholars argue that in context a biaspectual verb always expresses only one aspect (see AUTHOR2 2007: 90 and Zaliznjak&Šmelev 2000: 10 and citations therein). [↑](#footnote-ref-1)
2. All examples in this article are cited from the Russian National Corpus (ruscorpora.ru), the metadata in their passports are given in square brackets. [↑](#footnote-ref-2)
3. Historically other auxiliary verbs have expressed future in Russian (see Borkovskiy & Kuznetsov 1963: 285-288). [↑](#footnote-ref-3)
4. Thirty-nine examples were flagged as “noise” because they did not illustrate the perfective non-past; these examples were misidentified as future in the RNC, when they were actually examples either of imperfective verbs or of biaspectual verbs in imperfective usage. An additional thirty-nine examples were drawn from the pseudorandomized data to bring the total to one thousand. All of the data and annotations described in this article can be accessed at URL. [↑](#footnote-ref-4)
5. The number of examples adds up to 990. Ten examples are biaspectual. Their behavior is discussed in 3.5. [↑](#footnote-ref-5)