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PROSPECTIVE ASPECT: SEMANTIC TYPOLOGY AND GRAMMATICALIZATION PATHS

Dissertation Summary for the purpose of obtaining academic degree Doctor of Philosophy in Philology and Linguistics

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Publications

Three publications, whereof the applicant is the sole author, were selected for the defence.

- Kozlov A. Towards the semantic typology of prospective aspect. // Voprosy Jazykoznanija. 2021. № 2. P. 27–51 Q2 Scopus
- Kozlov A. Iterative and avertive polysemy in Moksha Mordvin // Sprachtypologie und Universalienforschung - STUF. 2019. Vol. 72. No. 1. P. 133–159 Q2 Scopus
- 3. Kozlov A. Towards the grammatical semantics of Old Church Slavonic "хотъти / имъти + infinitive" periphrastic constructions. // Russian language and linguistic theory. 2014. № 1. P. 122–149.

 NRU HSE list of recommended journals

Conference presentations and public demonstrations of the results

The main results and conclusions of the present study have been presented in 2016–2020 in oral presentations at four international conferences:

- 1. XXII International Conference on Historical Linguistics, July 27–31 2015, Naples, Universita degli Studi Federico II, talk «Habitual and Avertive: One Polysemy Pattern in Moksha».
- 2. VI International Conference on Samoyedology. September 8–10 2016, Moscow, Institute of Linguistics, Russian Academy of Sciences, talk «Prospective in Tundra Nenets».
- 3. Workshop on typology of future and prospective temporal-aspectual semantic domain, December 8–10 2016, Saint-Petersburg, Institute for Linguistic Studies, Russian Academy of Sciences, talk: «Prospective aspect: semantics and diachrony».
- 4. 17th Conference on Typology and Grammar for Young Scholars. December 19-21 2020. Saint-Petersburg, Institute for Linguistic Studies, Russian Academy of Sciences, talk «Prospective Aspect and Temporal Adverbialis: an Attempt at a Typology».

1. Topic, contents and structure of the paper

The proposed dissertation focuses on the semantic typology of **prospective aspect**. Prospective, as understood in this paper, is an aspectual gram that denotes the preparation stage of a situation. In (0) prospective is encoded by the analytic construction *is about to*:

(0) English

The vessel is about to sink

The purpose of this study is to describe the typological parameters of prospective constructions' semantic diversity, as well as to outline their grammaticalization paths. This task was split into three parts:

- creating a series of cross-linguistically applicable tests that would identify distributional properties of prospective constructions;
- grouping prospective constructions from our sample in accordance with the results of these tests;
- analyzing cases of co-expression of prospective and some other meaning by means of the same marker or construction, and giving them, if possible, a diachronic interpretation.

The relevance of the topic of this study stems from two reasons: first, prospective constructions are in general insufficiently described, both in cross-linguistic and language-specific aspects. The second reason needs a more elaborate presentation. An important epistemological problem of present-day linguistic typology is that of comparability of linguistic phenomena. At times (in morphosyntactic research, for example) it is proposed that it is semantic notions that should to be used as comparative concepts [Haspelmath 2010]. This is based on the implicit assumption that the world's languages are tools for expressing roughly the same meanings. However, this becomes a problem in a typological study of semantics, when it is precisely the cross-linguistic similarity of meanings expressed by constructions under question that is problematized. It is thus significant to find independent definitions of these semantic notions, a goal to which our work tries to contribute.

The following theses are up for defense:

- the semantic domain of prospective is not homogeneous: the meanings of prospective constructions differs by language;
- to some extent, this semantic diversity can be described in terms of degree of salience of the two components of prospective's meaning — the preparation stage of a situation and the situation itself;
- these semantic characteristics correlate with cross-linguistically applicable diagnostics: whether the construction is compatible with definite time adverbials; aspectual adverbials such as 'still' and 'already'; adverbials indicating the length of the preparation stage, -- as well as whether the construction can serve as a consequent of a causal conditional.
- diachronically, prospective constructions evolve from having a more salient preparation stage and a less salient subsequent event to precisely the opposite. The preparation stage grows less and less salient and finally fully disappears, as the constructions evolves to denote future tense.

The theoretical significance of the dissertation:

- the study describes a semantic domain, exponents whereof are attested in many a world's languages but that has never been investigated in a detailed fashion before; thus, it makes a contribution into the typology of tense and aspect systems;

- the study proposes a method of a typological description of a semantic domain that contains meanings not easily explicable in words of natural language by means of a set of crosslinguistically applicable diagnostics;
- the study makes generalizations as to how the results of applying those diagnostics to prospective constructions may correlate with each other;
- the evidence on the diachrony of the prospective construction are important for the grammaticalization theory; in particular, they make important contribution into what is known about the evolution of future tense grams.

The practical significance of this study is mainly determined by the fact that it may be used for language-internal description of the semantic domain of future tense and prospective aspect. One of the appendices to the dissertation is a typological questionnaire which allows to describe semantics and distribution of a prospective construction in a given language. Futhermore, the results obtained in this study may be used for teaching various courses in graduate and post-graduate programs in linguistics, such as *Introduction to linguistics*, *General semantics*, *Grammatical typology*, etc., as well as teaching foreign languages.

The remaining part of this résumé will be a synopsis of the articles up for defense.

2. Heterogeneity of the semantic domain of prospective

In English, there are two prospective constructions: *be going to* (at least in one of its readings) and *be about to*.

- (1) a. Look, it is *going to* rain! b. Look, it is *about to* rain!
- (2) a. Mary should avoid lifting heavy things, because she is *going to* give birth.
 - b. Mary should avoid lifting heavy things, because she is about to give birth.

[Kozlov 2021]

It seems as though (1b) contains a stronger statement than (1a): something like this is typically uttered when the rain is soon to start. The same can be said about examples (2a-b).

One of the aims of Kozlov [2021] is to find a way of describing the semantic difference between *going to* and *about to* that would allow to check whether this opposition is typologically recurrent. The tool we propose to employ for that end is the combinability properties of prospective constructions.

Let us assume that the meaning of the following linguistic units (at least in one of their readings) is the same cross-linguistically:

- definite time adverbials such as 'tomorrow', 'on Monday', 'in two days';
- adverbials meaning 'still' and 'already';
- durational adverbials such as 'for two days';
- starting point adverbials such as 'since Monday'
- the morpheme introducing a conditional clause ('if').

If our assumption is correct, we would expect that the ability of prospective constructions to be combined with these units only depends on their semantics. Constructions that have the same meaning in different languages would be compatible and incompatible with the same units. This could then be used for the typological classification of prospective constructions.

The meanings of the units from the list above can, of course, be different in a trivial way: they can have more than one meaning. For example, the same markers can introduce conditional and temporal clauses, and the adverb meaning 'still' in aspectual/phase sense (roughly 'as formerly', referred to hereafter as "still₁") can also mean 'nevertheless' (as does the English *still*, corresponding both to Russian *vsë eščë* and *vsë-taki*.). This problem, though, can be avoided by securing the necessary interpretation of these units.

Furthermore, in each particular case, our assumption could also prove incorrect. However, we expect this to be detectable: first, the correlation between the diagnostics applied will be different from what we get from other data; second, there can be some other way of demonstrating the meaning differences.

Let us use 'still₁' and 'already' (the so called "aspectual / phasal particles") for a demonstration of our diagnostics. Such lexemes are usually polysemous (cf. König 1991:133—155 on their semantics); we are interested in the meanings demonstrated in the following examples from English (Kozlov 2020 gives more accurate semantic definitions):

- (3) a. The door is already closed.
 - b. The door is still closed.

As shown in (3), already and still are compatible with atelic imperfective clauses; *already* (not *still*, though) is also compatible with perfective statements in the past. What is important for us is that neither can be used with future perfective utterances

- (4) a. *I will already close the door
 - b. *I will still close the door

Thus, lexemes with these meanings can be used (with several reservations) to test the salience of the preparation stage. The English *about to* can be used with either:

(5) a. As far as Kim's parents knew, their daughter was still **about to** marry Robert (COCA) b. Meanwhile Constantine, journeying with incredible rapidity, reached his father, who was already **about to** expire (COCA)

The same is true about prospective constructions in Brazilian Portuguese and Italian:

Brazilian Portuguese

- (6) a. Ele ainda está para morrer 'He/she is still₁ about to die.'
 - b. Ele já está para morrer. 'He/she is already about to die.'

Italian

- (7) a. Ancora sta per morire 'He/she is still₁ about to die'
 - b. Sta già per morire. 'He/she is already about to die.'

The English *going to* is not compatible with *still* in its aspectual/phasal meaning (only the 'nevertheless' interpretation being available), but is compatible with *already* - which is the main test demonstrating that 'going to' retains the preparation stage component (and is not yet a *bona fide* future tense).

- (8) The coal in the fireplace is still going to die out
 a. OK 'The coal in the fireplace is on the verge of dying out nevertheless.'
 b. *'The coal in the fireplace is on the verge of dying out, as it was formerly.'
- (9) 'The coal in the fireplace is already on the verge of dying out.'

The same is true for the French construction with the verb *aller*:

French

(10) a. # L'enfant va toujours mourir

Exp.: 'The child is on the verge of dying, as he was formerly.'

b. OK L'enfant va déja mourir

Exp.: 'The child is already on the verge of dying.'

Constructions with similar properties can be found in other linguistic areas. For example, the Moksha construction with the verb *jorams* 'intend' also exhibits this pattern:

- (11) a. # ugəl¸'-n'ə jora-j-t' n'ingə mad-əm-s coal.PL-DEF want-NPST.3-SG still₁ die.out-INF-ILL Exp.: 'The coal in the fireplace is on the verge of dying out, as it was formerly.'
 - b. OK ugəl'-n'ə jora-j-t' n'i mad-əm-s coal.PL-DEF want-NPST.3-SG already die.out-INF-ILL 'The coal in the fireplace is already on the verge of dying out.'

Our sample allows us to make the following generalization: if a language has lexemes meaning 'already' and 'still₁', prospective constructions (if there are any) may be compatible with (a) both of these words; (b) only with the word meaning 'already'; (c) neither of these words. The fourth logical possibility — compatibility with only the word meaning 'still₁' — has not been attested. In other words, assuming prospectives tend to evolve into future tenses (more on that later), compatibility with 'still₁' is lost earlier in this than compatibility with 'already'.

3. Old Church Slavonic: data for a diachronic analysis of the prospective

The original meaning of the Old Church Slavonic verb *xotěti*, namely that of desire, is well documented; as such, it is used to translate the Greek $\theta \dot{\epsilon} \lambda \omega$:

(12) мытарь из далече стона. **не хотъаше** ни очию **възвести** на небо [Codex Marianus; Luke 18:13]

ό δὲ τελώνης μακρόθεν ἑστὼς οὐκ ἤθελεν οὐδὲ τοὺς ὀφθαλμοὺς ἐπᾶραι εἰς τὸν οὐρανόν 'But the tax collector, standing afar off, did not want so much as raise his eyes to heaven'

Xotěti-construction can also have a prospective meaning — and in these cases it often corresponds to a wide range of progressive constructions in the Greek original (cf. infinitive present γεμίζεσθαι

'to submerge' in (13); the Nicolskoye Tetraevangelion translates the form literally: *jako juže pogružati se jei*):

(13) бысть боурѣ вѣтръна велиѣ.влъны же вьливахж см въ ладинж. ѣко юже погразнжти хотѣаше. [Codex Marianus; Mark 4:37]

καὶ γίνεται λαῖλαψ μεγάλη ἀνέμου καὶ τὰ κύματα ἐπέβαλλεν εἰς τὸ πλοῖον ὅστε ἤδη γεμίζεσθαι τὸ πλοῖον

'And a great storm arose, and the waves beat into the boat, so that it was about to drown'.

Finally, this construction has a predestinative meaning (more on this in [Kozlov 2014]):

(14) се же рече о доусъ иже **хотъахж приимати** въроунжштеи въ него. [Codex Mariinus; John 7:39]

τοῦτο δὲ εἶπεν περὶ τοῦ πνεύματος ὁ ἔμελλον λαμβάνειν οἱ πιστεύσαντες εἰς αὐτόν 'This He spoke concerning the Spirit, whom those believing in Him were to receive'

The default way of expressing the future, though, is finite forms of the present (15); widespread are also constructions with the verbs *iměti* (16) and prefixed derivatives of -*čęti*:

(15) ѣще бо и поідж посрѣдѣ сѣни съмрътьным не оубонж см зъла ѣко ты съ мънонж юси [Psalterium Sinaiticum; 22:4]

έὰν γὰρ καὶ πορευθῶ ἐν μέσῷ σκιᾶς θανάτου οὐ φοβηθήσομαι κακά ὅτι σὸ μετ' ἐμοῦ εἶ 'Though I walk through the valley of the shadow of death, I will fear no evil.'

(16) иди елико имаши продаждь и даждь ништиимъ и **имѣти имаши** съкровиште на нбсхъ [Codex Zographensis; Mark 10:21]

ἕν σε ὑστερεῖ ὕπαγε ὅσα ἔχεις πώλησον καὶ δὸς τοῖς πτωχοῖς καὶ ἕξεις θησαυρὸν ἐν οὐρανῷ 'Go your way, sell whatever you have and give to the poor, and you will have treasure in heaven.'

For our purposes, modern literary Bulgarian can be considered a successor to the language state attested in Old Church Slavonic. In modern Bulgarian the auxiliary verb *xotěti* developed into *šte*, an analytical marker of the future tense:

Bulgarian

(17) Искайте, и **ще** ви **се даде**; търсете, и **ще намерите**; хлопайте, и **ще** ви **се отвори**. [BB Matthew 7:7]

'Ask, and it will be given to you; seek, and you will find; knock, and it will be opened to you'

A form of **xotěti** in the imperfect has grammaticalized in Bulgarian to mark future in the past, the consequent of a counterfactual conditionals, and also avertive:

(18) Като погледнах само кожицата на прасенцето, **щеше да** ми **изхвръкне** акъла. [Aleko Konstantinov. Bay Ganyo (1895)] 'I looked at the pig's skin and nearly lost my mind.'

In [Kozlov 2014] the following path of semantic evolution is argued for:

(0) desire \rightarrow (i) intentional \rightarrow (ii) prospective \rightarrow (iii) predestinative

In the imperfect:

(iii) predestinative \rightarrow (iv) avertive \rightarrow (v) counterfactual apodosis \rightarrow (vi) future in the past

In the present:

(iii) predestinative \rightarrow (vii) future tense

4. Moksha: prospective as a tool of semantic reconstructions

Typological data on what meanings tend to be co-expressed with prospective can be used for reconstructing the meaning of morphemes and their semantic evolution. In [Kozlov 2020] this is done to explain the polysemic nature of the *kšn'a*- affix in Moksha (Temnik subdialect). Data was collected by the author during 2013-16 period in Lesnoye Tsibayevo, Republic of Mordovia.

It is necessary to say that there are actually two morphemes under discussion: $-k\check{s}n'\partial$ - and $-\partial k\check{s}n'\partial$ - (the phonological difference can be seen on the surface only after consonant-final stems). Yet the /kšn'/ consonant cluster in Mordvin languages is fairly rare, while /o/ as an epenthetic vowel is extremely common, and thus it seems highly improbable that these were originally two different morphemes. In [Kozlov 2020] we make the assumption that this was historically one morpheme, which diverged into two, and slightly different phonological forms were assigned to each of the two meanings.

The $-k\check{s}n$ ' ∂ - morpheme is a marker of pluractionality (both event-external and event-internal):

Moksha

(19) mon rabotam-stə ps'i-l-gət-kšn'-an
I work-INF-ILL warm-VBZ-INCP-FREQ-NPST.1SG
'I {usually} sweat during work.'

The $-\partial k \check{s} n' \partial$ - morpheme marks avertive:

(20) mon ps'i-l-gəd-əkšnə-n'
I warm-VBZ-INCP-AVER-PST.1SG
'I almost started to sweat.'

Apart from phonology, these morphemes also differ in distribution. -kšn'ə- can be attached to a) phonologically heavy or morphologically complex stems, b) stems already bearing another frequentative marker. In the latter case it limits possible interpretations of frequentative to habitual.

- (21) a. avtobus-t s'id'əstə lotk-s'-i t'asə bus-PL often stop-FREQ-NPST.3SG here 'Buses often stop here.'

 1. 'Buses often stop here.' {generally; event-external interpretation}

 2. '{Look!} Buses are often stopping here' {observing a particular procession of buses; event-internal interpretation}
 - b. avtobus-t s'id'əstə lotk-s'ə-kšn'-i t'asə bus-PL often stop-FREQ-FREQ-NPST.3SG here 'Buses often stop here.'
 - 1. {generally; event-external interpretation }
 - 2. # {about a particular procession of buses; event-internal interpretation }

We propose two possible paths of semantic evolution to explain this polysemy: a) prospective \rightarrow

avertive (as already proposed for Bulgarian) and b) prospective → habitual. Prospective-habitual polysemy is independently attested, for example, in Tatar (50-51); [Kozlov 2020] attempts to give an explanation for such a semantic evolution.

- (22) kuzgališ bašlan-i-rga tor-a revolt start-ST-INF stand-ST 'The revolt is soon to start'
- (23) atla-gan saen akil bir-e-rge tor-a-siz step-PFCT each advice give-ST-INF stand-ST-2PL 'You give adivces all the time!' [lit. 'at each step']

Thus, we suppose that both meanings stem from the common, but lost by now, prospective meaning. This hypothesis is supported by meanings of $-(\partial)k\check{s}n'\partial$ - cognates in Balto-Finnic languages (among them, for example, a counterfactual conditional marker).

Conclusion

The present study is a description of the semantic domain of prospective aspect. In the beginning of its semantic evolution, the prospective is characterized by high degree of saliency of the preparation stage and low saliency of the subsequent event. In the end of the path, it is the other way round: the event that follows the reference time is the main or even the only semantic component, and the preparatory stage is backgrounded or altogether absent. Apart from future tense, the other grammatical notions prospective aspect may be related to diachronically, are avertive, future-in-the past, consequent of the counterfactual conditional, and habitual.

The main results of the research are also reflected in Appendix 4 to the dissertation, which is a typological questionnaire on the prospective-future semantic domain

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Appendix

Prospective-future semantic domain: typological questionnaire

0. Identification of a construction as denoting prospective aspect: compatibility with different temporal interpretations.

If the language in question has a grammatically encoded pas tenset, is the potential prospective compatible with it? If so, how is this combination interpreted?

(i) rain.PROSP.PST

If the language does not have a grammatically encoded past tense, is the potential prospective compatible with past temporal reference?

(ii) yesterday rain.PROSP Exp. meaning 'yesterday it almost started to rain'

1. Agentivity

Does the prospective construction impose any restrictions on the verb's arguments? Is the prospective compatible with predicates that have an animate patientive S-participant?

(iii) Alex fall.PROSP 'Alex is about to fall' {unintentionally}

Is the prospective compatible with predicates with an animate agentive S-participant?

(iv) Alex leave.PROSP 'Ales is about to leave'

Note: we must secure the construction to have the prospective interpretation (and not, e. g. intentional)

2. Temporal adverbials

Is the prospective compatible with adverbial modifiers referring to a time after the reference time?

Water boil.PROSP soon
Water boil.PROSP in five minutes
Food end.PROSP tomorrow
Food end.PROSP on Monday

Does this compatibility depend on information structure? To answer this question, the phrases (3a-d) need to be checked against two different contexts: in the case of (3c), for example, can it be an answer both What will happen now? (adverbial is the topic) and When will the food end? (adverbial is the focus)? (More appropriate language-specific ways of fixating the information status of the adverbial are possible.)

3. 'already' and 'still'

(vi)

He already die.PROSP 'He is already about to die'

Cup still fall.PROSP 'The cup is still about to fall' This branch already break.PST, but the other still break.PROSP

4. Preparation stage adverbials

(vii) a. This tree branch break.PROSP for two days

Exp. meaning: 'This tree branch has been about to break off for two days'

b. This tree branch break.PROSP since the last storm Exp. meaning: 'This tree branch has been about to break off since the last storm'

5. Conditional construction

Can the prospective construction be used in a consequent of a causal conditional sentence (i. e. a conditional sentence where a causal relation between an antecedent and a consequent holds)?

(viii) If you touch the table, the cup fall.PROSP

6. Contradiction with a future statement:

Is it possible to conjoin a clause with a prospective construction (with a present reference time) and a clause asserting negation of the same proposition, only encoded by a default future tense?

- (ix) a. The cup fall.PROSP but it will not fall
 - b. The cup fall. PROSP but it never will