

Playing Hide and Seek, or the Qualitative Side of the Aspect-Modality Interplay

(Old Russian and Old Serbian Case Studies)

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Slavic aspect and (diachronic) corpora (Johannes Gutenberg-Universität, Mainz, March 29th-31st, 2021)

Roadmap

- A brief overview of the compound futures in OR (OES);
- Modality, negation, and the dative-infinitive construction (on a possible functional overlapping in OR);
- How many ways to deal with an issue at the syntax-semantics interface?
- Where electronic corpora dare (on some strengths and limitation of corpus-based diachronic qualitative research);
- A comparison with Old Serbian (Ancient Štokavian);
- A bridge towards synchrony?

Research questions: an outline

- To what extent, in the absence of large tagged databases, could diachronic electronic corpora be effectively interrogated in order to spot multi-layered morphosyntactic patterns and/or tendencies?
- An exercise in complexity: a qualitative analysis of TAM interactions in three case studies (periphrastic compound futures; *prezens naprasnogo ožidanija*; dative-infinitive constructions);
- From forms to functions and vice versa (comparing constructions in the sense of BARÐDAL ET AL. 2012), but;
- Is a further (syntactic, semantic) formalization possible?

General remarks on *budušče složnoe* I

- There exists a large body of literature devoted to the functional analysis of several periphrastic constructions (mostly of Old Church Slavonic origin) with a non-past form of a modal or semi-modal verb governing either a proto-perfective (PPF) or a proto-imperfective (PIPF) infinitive form (VAILLANT 1966; GRKOVIĆ-MEJDŽOR 2007c):
 - I. *Xotěti* (lit. 'to want') + INF^{PPF/PIPF}
 - II. *Iměti* (lit. 'to have') + INF^{PPF/PIPF}
 - III. *Jati* (lit. 'to seize') + INF^{PIPF}
 - IV. Several compounds with the inchoative base **četi* (*načati, počati, učati, vžčati*, lit. 'to begin') + INF^{PIPF}
- Strong retention of lexical autonomy → low degree of grammaticalization;
- Out of the picture: *mošti* 'to can', *byti* 'to be', *stati* 'to become'

OR diachronic corpora

- OR and Middle Russian subcorpora in the NKRJa:
 - I. https://ruscorpora.ru/new/search-old_rus.html
 - II. https://ruscorpora.ru/new/search-mid_rus.html
 - a. PRO: accurate, ongoing morphosyntactic tagging (with reduced ambiguities), wide range of texts
 - b. CONTRA: no tree dependencies, parsing not consistent, no actional tagging
- Birch bark letters subcorpus in the NKRJa:
 - I. <https://ruscorpora.ru/new/search-birchbark.html>
- TOROT'S OR section:
 - I. <https://nestor.uit.no/>
 - a. PRO: accurate morphosyntactic tagging, tree dependencies, accurate parsing
 - b. CONTRA: more limited range of texts, no actional tagging

General remarks on *xotěti* (in OR)

- Frequent in bookish style, but also found in other documents as well (although to a somehow smaller and different extent);
- Possible Greek sources (in OCS): THÉLŌ + INF, MÉLLŌ + INF, other constructions (KOZLOV 2014: 128–133);

I. Dynamic modality (volition):

- (1) Edinoju de rьjuščju Rostislavu s družinoju svoeju, reče kotoraпъ: «Knjaže! *Хоѣju* na tja *piti*» (PVL 1978: 180, LL. 4–6)

II. Dynamic modality (intention):

- (2) A ne prisъleši mi polu pjaty grivъny a *xocu* ti *vyruti* vъ tja luscъsago novъgorožanina (N246; DND 2004: 280–281)

III. Deontic obligation (subject's intention + external circumstances):

- (3) Онъ же ne vnimaše того, glagolja: «Kako azъ *хоѣju* inъ zakonъ *prijati* edinъ? [...]» (PVL 1978: 78, LL. 3–4) ≈ «Kak mně prijati...»

IV. Prospective:

- (4) I stvoriša vѣče v gorodě i reša: «Se uže *хоѣmъ pomereti* отъ glada, a отъ knjazja pomoči nѣtu. [...]» (PVL 1978: 142, LL. 16–17)

General remarks on *iměti* (in OR) (1)

- Typical of bookish style;
- Possible Greek sources (in OCS): sigmatic futures, MÉLLŌ + INF (KOZLOV 2014: 134–138);
- Two attested present inflectional paradigms for *iměti* (with a possible functional distinction only in later stages, see PEN'KOVA 2021):
 1. *-je/*-jo (*iměju, iměeši*);
 2. Athematic (*imamь, imaši*) → highly preferred both as a full lexical verb and an auxiliary
- Formal mingling of paradigms → Mingling of functions:
 1. *Iměti* ≈ *imati*^{PIPF} 'to seize' [two inflectional paradigms as well: *-je/*-jo (*imaju, imaeši*) and athematic (*emlju, emleši*)];
 2. Athematic present inflection of *iměti* ≈ present inflection of *jati*^{PPF} (*-e/*-o + bilabial nasal formant: *imu, imeši*)

General remarks on *iměti* (in OR) (2)

- Deontic necessity (*ontologičeskaja neobxodimost'* in PEN'KOVA 2021: 218):

(5) I reče patrearchъ: «Čado věrnoe! Vo Xrista krestilasja esi, i vo Xrista oblečesja, Xristosъ *imaty* *sxraniti* tja» (PVL 1978: 76, LL. 7–8)

- Deontic obligation:

(6) «[...] ašče ne podstupite zautra, *predatisja imaty* pečeněgomъ?». I reče edinъ otrokъ: «Azъ priedu» (PVL 1978: 80, ll. 6–7)

- Some ambiguous examples:

I. Deontic necessity (*iměti*) or inchoativity + distributivity (*jati*)?

(7) I reša starci kozarъstii: «Ne dobra danъ, knjaže! My sja doiskaxomъ oružьemъ odinoju storonoju, rekše sabljami, a sixъ oružьe obojudu ostro, rekše mečъ. Si *imuty imati* danъ na nasъ i na iněxъ stranax» (PVL 1978: 34, LL. 2–6)

II. Deontic necessity (*iměti*) or prospective future (*xotěti*)? (JUR'EVA 2009: 56)

(8) «[...] *Blagosloviti* tja *imuty* (Radzivillovskaja, Akademičeskaja, Ipaťevskaja) / *xotjaty* (Lavrent'evskaja) synove rustii i v poslědnij rodъ vnukъ tvoix» (PVL 1978: 74, LL. 36–37)

General remarks on *jati* (in OR)

- Typical of spoken language and administrative writing;
- Used as a functional allomorph of *iměti* in the birch bark letters (only w/ additional aspectual restrictions on the infinitive form);
 - I. Inchoativity (also in combination with other semantically similar periphrastics):
 - (9) Tolko, ospo, *imete* mene *žalovatъ*, ottošlite, ospodo, ko mně gramotъku do Petrova dñi (N962; NGB 2015: 69–73)
 - (10) kakъ *imešъ* *prodavatъ* i ty dai namъ rži na poltinu kakъ ljudomъ posnešъ davatъ (N364; DND 2004: 606–607)
 - II. (Non-referential) distributivity:
 - (11) i xto *imetъ* tyi požni *kositъ*, i jazъ tuxъ poimaju da travu na vorotъ vzvjažju, da ixъ vedu v gorodъ (N962; NGB 2015: 69–73)

General remarks on *čęti-compounds (in OR)

- Unclear origin (Greek or Gothic translation of the Bible?);
- Preverbal elements (*po-*, *na-*, *u-*, *vъ-*) as semantically stable allomorphs with different geographical origin, diachronic distribution and (possibly) stylistic overtones (PEN'KOVA 2019) → *po-* and *na-* (PVL), only *po-* (DND, NGB), only *u-* (DDG);
- Less morphosyntactic and morphosemantic constraints (JUR'ÉVA 2020);
- It is the only periphrastic governed by an overtly PPF semi-modal verb → is future realized non-compositionally? → more marginal treatment;

I. (Future or atemporal) inchoativity:

- (12) «Toli ne budetъ mežju nami mira, oli kamenъ *načnetъ plavati*, a xmeľ *počnet tonuti*» (PVL 1978: 98, LL. 25–26)
- (13) Ači to ti *počъne pъnati* nesmi věře su[l]i[le] -- (-) (N820; DND 2004: 370–371)
- (14) Vidim bo igrišča utoločena, i ljudij mnogo množstvo na nix, jako *upixati načnutъ* drugъ druga, pozory dějušče ot běsa zamyšlenago děla, a cerkvi stojatъ (PVL 1978: 184, LL. 4–7)

Future, modality, and the negation

- When a negative operator takes scope over a (semi-)modal auxiliary, 'pure' temporal interpretations are blocked in favour of different (semantically intertwined) modal readings;
- Negation is usually merged high in the structure, although in some cases (cf. *xotěti*, *iměti*) it can take eventual scope and undergo further cyclic movement;
- Modal readings are usually (but not necessarily) backed up against the futural or prospective temporal argument of the (semi-)modal auxiliary;
- Several of these modal readings percolate from the OCS system to OR texts, although there are some interesting innovations as well

A gray area between constructions? (1)

1. *Ne* + *xotěti* + INF^{PPF/PIPF} (no actional or aspectual restrictions):

I. Dynamic modality (negative volition, 'for no reason whatsoever'; NEG-raising);

(15) A ty li mi zdě xlěba moego že *ne xoščeši dati*? (PVL 1978: 244, LL. 36–37)

(16) [*ne*] *xocete pri(s)[l]ati* lixo li vamo dobro li o mo(e)[m]o živote o jakoli vamo naboli[t]isja (N622; DND 2004: 579–580)

(17) Izjaslavu velja emu poiti · reka zemlja naša pogybae(ť) · a ty *ne xočeši poiti* [NKRJa: Suzdal'skaja letopis' // Polnoe sobranie russkix letopisej. T. I. Lavrent'evskaja letopis'. M., 2001. C. 287–540]

• Cf. w/ some occurrences of *prezens naprasnogo ožidanija*, especially in the birch bark letters:

(18) Eže mi oťsь dajať i rodi sьdajali a to za nimь a nyně vodja novuju ženu a mьně *ne vьdastь* (≈ ne xočetь vьdati) ničьto že (N9; DND 2004: 300–301)

(19) o(ť) slovjatě gramota kь gjurьcevi vyvedь otrokь na mikulu i na lěšanь vьzьmi polь pitě gr(i)v(ь)ně slavomire sьde *ne vьda* (≈ ne xočetь vьdati) (N1050; NGB 2015: 150–151)

A gray area between constructions? (2)

2. *Ne + iměti + INF^{PPF/PIPF}* (not found in vernacular):

I. With NEG-raising (eventual scope) → **negative deontic obligation** (calque from Greek *ou mé* + present/aorist subjunctive or aorist optative);

(20) «Ašče li poběgnemъ, sramъ imamъ. *Ne imamъ uběžati* (= *imamъ ne uběžati*), no stanemъ krěpko, azъ že predъ vami poidu [...]» (PVL 1978: 84, LL. 18–20)

II. Without NEG-raising (propositional scope) → **negative dynamic possibility** ('there is no way that I...', 'it is not in the cards for me that...', 'it is not destined that I...');

(21) «I se uže poběženъ esmъ ot nevěglasa, a ne ot apostolъ, ni ot mučenikъ, *ne imam* uže *carstvovati* vъ stranax sixъ» (PVL 1978: 132, LL. 27–28)

(22) «Srebromъ i zlatom *ne imam nalěsti* družiny, a družinoju nalězu srebro i zlato, jakože dědъ moj i otecъ moj doiskasja družinoju zlata i srebra» (PVL 1978: 140, LL. 36–38)

• Possible spoken counterparts of 2-II: *prezens naprasnogo ožidanija*, DI-constructions w/ *INF^{PPF/PIPF}*;

(23) A prosja zdě soli po semi ljubovъ za rublъ a naši xotja davatъ a na dñъ ni luba *ne prodasci* (≈ *ne imaši prodavati*) (St. R. 2; DND 2004: 684)

(24) jazo ti olovo poprodale i svinece i klepanie voxo uže *mne ne exati* vo sužedale vosku kupleiny (N439; DND 2004: 436)

A gray area between constructions? (3)

3. *Ne + jati* + INF^{PIPF}:

- I. No regular occurrences until the XIV/XV cc. → Often in contextual distribution with other inchoative periphrastics (PEN'KOVA 2019: 572–574), with DI-constructions or in later manuscripts (JUR'EVA 2009: 72–92);

(25) A ci pereměnit b[o]gъ Orъdu, a *ne imu davati* k Ordě, i mně danъ imati съ svoeě otčiny sebě, a tebě съ svoego uděla danъ imati sebě. [NKRJa: Dokončanie velikogo knjazja Vasilija Vasil'eviča s knjazem serpuxovskim i borovskim Vasiliem Jaroslavičem. Gramota v. kn. Vasilija Vasil'eviča kn. Vasiliju Jaroslaviču (1451–1456)]

- II. No direct evidence for a comparison with the other periphrastics, however:
 - a. *Jati* as the functional counterpart of *iměti* in vernacular texts (cf. ex. 11) → *ne + jati* as *ne + iměti*? (that amounts to a cognitive stipulation)
 - b. *Jati* as a functional variant of *četi-constructions → A possible semantic similarity with prospective *ne + xotěti*?

The third man out: DI-constructions (1)

- Basic structure: *dative subject* + (NEG) + $INF^{PPF/PIPF}$ → possibility of NEG-raising in OCS with explicitly tensed sentences (before the loss of present-tensed forms of *byti*, cf. HOLVOET 2003: 478);

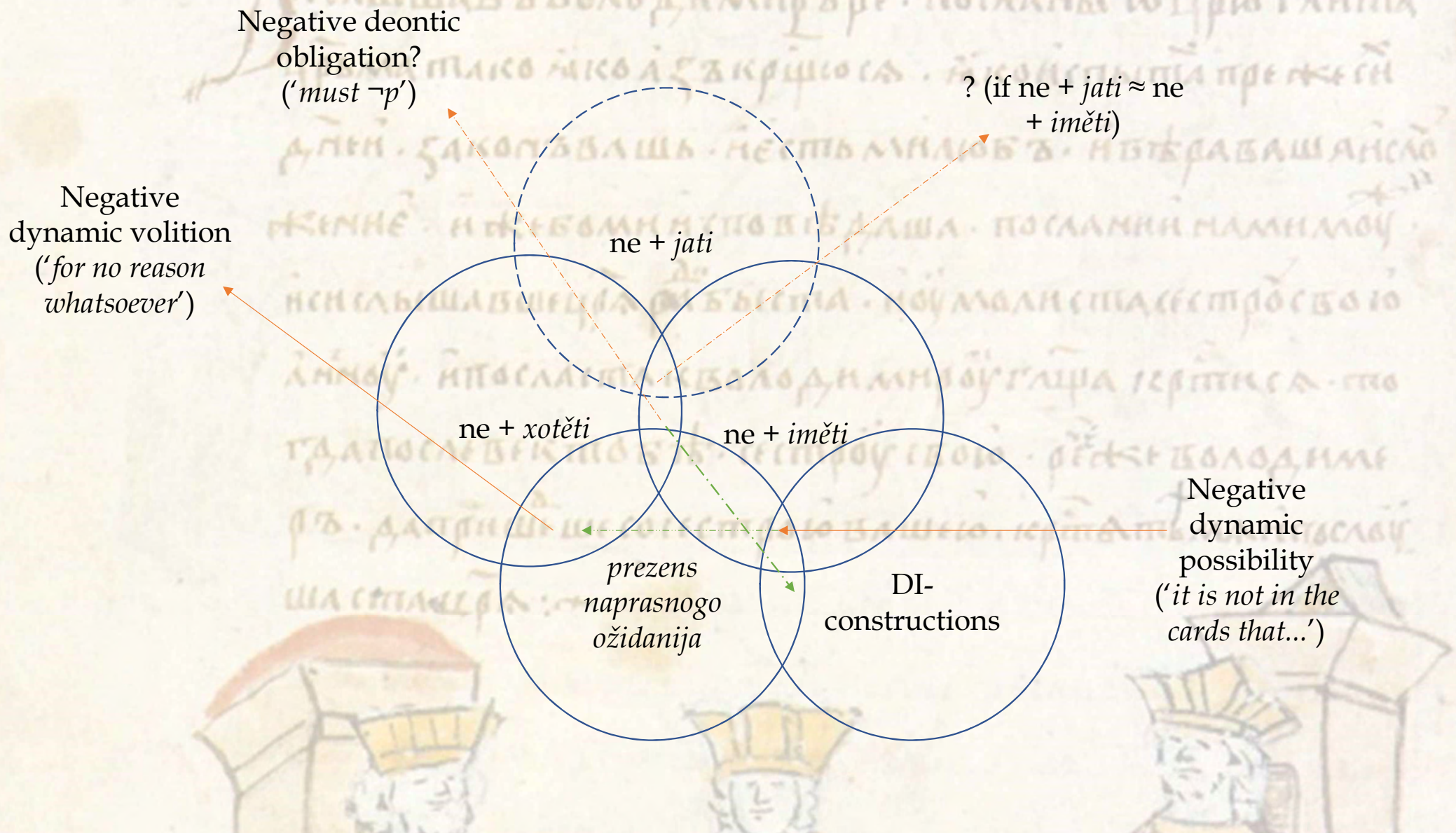
(26) otdavъ obščii dolgъ egože *ně(s) uběžati vsjakomu roženomu* [NKRJa: Volynskaja letopis' // Polnoe sobranie russkix letopisej. T. II. Ipat'evskaja letopis. M., 2001. C. 848–938]

- Originally, possessive structures of the type *mihi est X* (of possible PIE origin) + categorial reanalysis of an allative (purposive) NP now grammaticalized as an infinitive form (GRKOVIĆ-MEJDŽOR 2007A; HASPELMATH 1989) → a «possessive link» between DI-constructions and *ne + iměti*?
- Fuzzier meaning assignment w.r.t. aspectual marking → broader distribution w.r.t. CR cognate structures (without an overt modal operator);
- The formal status of the dative subject has been long controversial (see FRANKS 1995: 249–267 for a discussion) and it is not completely clear whether diachronically it has undergone significant (structural) changes (JUNG 2010)

The third man out: DI-constructions (2)

- Much alike the PNO, coalescence of different dynamic (volition, possibility) and deontic meanings → no clear-cut modal distinction (BESTERS-DILGER 1997: 24–25)

- (27) a pogynetъ bez nego *jemu ne platiti* o zakupě: Ože izъ xlěva vyvedutъ [NKRJa: Russkaja Pravda// GIM, Sinod. № 132, L. 615 ob. – 627 ob.]
- (28) razmolviša djurgja. rekuče *bratu tvoemu ne uderžati* kieva da ne budet. ego ni tobě ni onomu. djurgevi [NKRJa: Kievskaja letopis' // Ipat'evskij spisok (BAN 16.4.4), ll. 106ob.– 245. Opublikovana v izd.: Polnoe sobranie russkix letopisej. T. II. Ipat'evskaja letopis'. M., 2001. C. 285–715.]
- (29) I reče Bludъ Jaropolku: «Vidiši, koľko vojn u brata tvoego? *Nama ixъ ne pereboroti*. Tvorì mirъ sъ bratomъ svoimъ» (PVL 1978: 92, ll. 9–11)



Recurring features

	Telic predicate	Grammatical subject	Nominative subject	Controllable eventuality
Ne + <i>xotěti</i>	±	All persons	+	±
Ne + <i>iměti</i>	±	1[^] p. sing./pl.	+	-
Ne + <i>jati</i>	(+)	(All persons)	(+)	(-)
PNO	+	All persons	+	±
DI-constructions	±	All persons	degraded	±

I reče Bludъ Jaropolku: «Vidiši, koľko vojn u brata tvoego? *Nama ixъ ne pereboroti* ('We cannot overcome them', 'There is no way we can overcome them'). Tvorī mirъ sъ bratomъ svoimъ» (PVL 1978: 92, LL. 9–11)

Negative dynamic possibility:

- My ixъ *ne imamy pereboroti*. (bookish)
- (My ixъ *ne imemъ pereboroti*.) (possible vernacular variant for a.)
- (My ixъ *ne xotimъ pereboroti*.) (bookish, possible extension of the prospective meaning)
- My ixъ (nikakъ) *ne pereboremъ*. (vernacular)

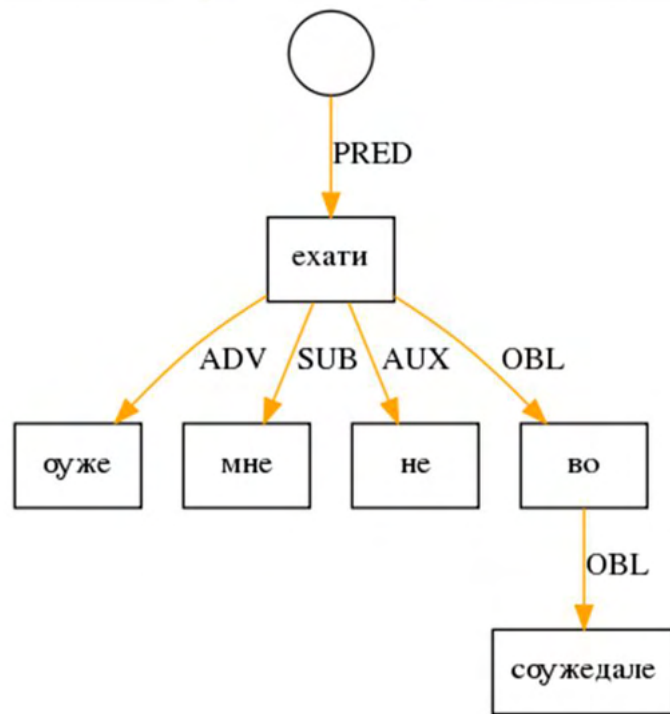
Left issues towards a further formalization

- If there is a common modal meaning shared by these periphrastics (i.e. *negative dynamic possibility*; functional head probably generated below TP), why is the grammatical subject not syntactically degraded in most of them? → are all these subjects VP-external?
- How does the modal pattern u.e. come about in all these constructions? → does it have a compositional character or is it determined by a prominent element, ex. the interaction between negation and the inner properties of the eventuality? (cf. Ekaterina Mišina's yesterday talk) → aspectual (morphological) marking does not seem to be central yet;
- Could we use formal (semantic) tools to «measure out» the controllability of an eventuality (or its lack thereof) in all these constructions?

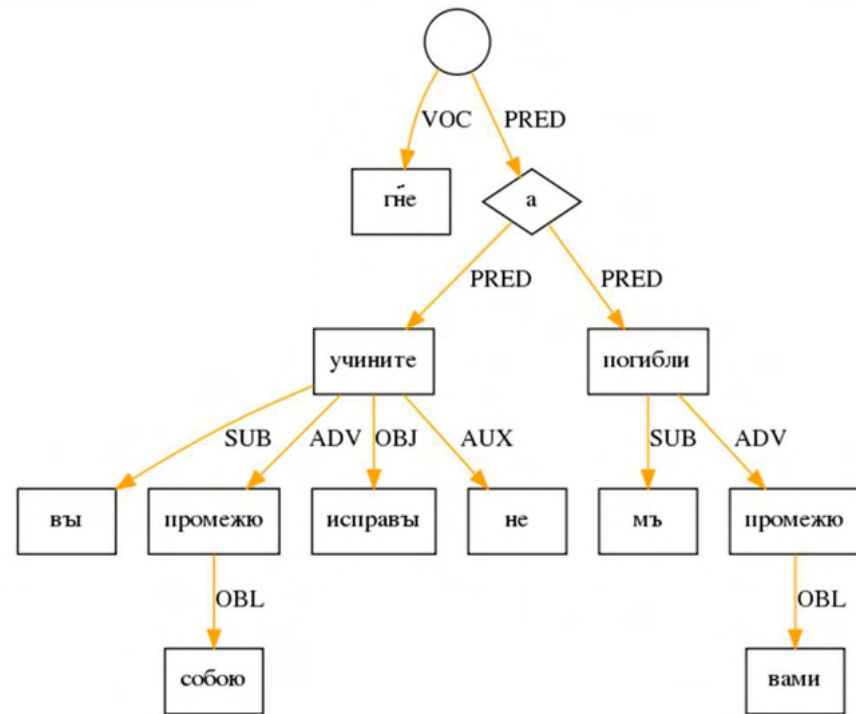
To what extent can electronic corpora help?

- TOROT: a treebank built upon an enriched dependency grammar scheme with the initial aim of studying the interaction of aspect and *Aktionsart(en)* in OR and Middle Russian (ECKHOFF ET AL. 2018);
- Some asymmetries at the syntax-semantics interface not easily captured by the treebank: NEG-raising, syntactic change (see OR negative cycle) and the like;
- Morphosyntactic correlations do not account (yet!) for similarities in actional patterns → can these parameters be sufficiently «formalizable», e.g. grammatically «taggable»?

A comparison from TOROT



uže *mne ne exati* vo sužedale (N439)



vy gñe proměžju soboju ispravy *ne učinite* a mѣ
proměžju vami pogibli (N361)

Old Serbian: a terminological note

- The label «Old Serbian» is not to be meant *stricto sensu* as a previous historical stage of the contemporary variant of the Serbo-Croatian dialectal continuum (as opposed to, say, «Old Croatian»);
- It rather has to be taken here as a synonymous expression for «Ancient Štokavian»;
- XI–XVIII c.: texts written in Old- and Neo-Štokavian dialects (even with sporadic Čakavian elements, see some older documents from Dubrovnik)

Old Serbian electronic corpora?

- No organic diachronic corpus for older Štokavian texts [with the partial exception of *Monumenta Serbica*, <http://monumentaserbica.branatomic.com/rukse/ruknew/rukmain.php>, which comprises both texts in Štokavian and OCS texts (of Serbian redaction)] → cf. Amir Kapetanović's ongoing project *Starohrvatski rječnik i korpus hrvatskoga jezika do konca 16. st.*;
- Digitalized corpus of legal, administrative, and oral-based documents;
 - I. A recent selection of tales and proverbs collected by Vuk Karadžić (KARADŽIĆ 2017);
 - II. *Monumenta serbica spectantia historiam Serbiae, Bosnae, Ragusii*, originally edited by Franc Miklošič (MONSERB 1964);
 - III. Two volumes of decrees and administrative documents, originally collected by Ljubomir Stojanović (SSPP 2006)

Compound futures in OS texts (GRKOVIĆ-MEJDŽOR 2012)

- Competing constructions: *xtěti* + INF^{PPF/PIPF}, *načeti/učeti* + INF^{PIPF}, *jeti* + INF^{PIPF}, *imati* + INF^{PPF/PIPF} → early constraints (already from the XII c.) on the licensing of independent NP^{PPF} forms in matrix clauses (conveniently, OR PNO is translated by means of OS volitive periphrastic);
- *Xtěti* is by far the dominant construction across Štokavian isoglosses → grammaticalization completed around the XIV c.;
- *Imati* is restricted to subordinate clauses, with the exception of some documents of Dalmatian and Bosnian origin (e.g. administrative documents from Dubrovnik, Matija Divković's *Besjede*), where it spreads to matrix clauses as well;

(30) Ovako i mi imamo njega ljubiti, tako da ni za jednu stvar od ovoga svijeta ne imamo ga uvrijediti ni se od njegove ljubavi odijeliti. (DIVKOVIĆ 2016: 175)

Modal values of the *ne + xtěti*-construction

- *Dynamic modality* (negative volition, ‘for no reason whatsoever’):

(31) i poslaхъ mnogo krati s odkupomъ da pojasъ da a on mi ga *ne kje dati*
[SSPP 2006, I: 70, №77 (1352), LL. 6–7]

(32) za to podobno ostaviti sinu materъ svoju i česa vogъ ne dopusti ako bi se zgodila smrtъ katarini da *ne imatъ dovesti* u kuću u svoju inu ženu za kućnicu na mistu gospoe katarine za života gospoe banice anke i da *neću* ništore *učiniti* suproćъ počteniju rečene [SSPP 2006, I: 279, №298 (1410), LL. 19–23]

- *Prospective / Deontic necessity* (‘it will be necessarily the case that $\neg p$ ’):

(33) da u vsemъ tvojemъ g^šptvě *nekješ imatъ* stanovitje kukje kako je svědočno množemi gospodami bilo [SSPP 2006, I: 261, №279 (1404), LL. 16–17]

- Differently from OR, future temporality is always prevalent;
- It is still unclear which and how many features may combine to give rise to a specific reading

OS DI-constructions

- Very low frequency of DI-constructions (PAVLOVIĆ 2009: 67–74) with deontic meaning, possibly for the early shift of OS towards a *habeo*-type language (GRKOVIĆ-MEJDŽOR 2007B: 200) → in contemporary Serbo-Croatian DI-constructions have virtually disappeared, exception being made for some fixed expressions such as *Bogu je plakati* ‘God forbid’ (VOJVODIĆ 2018: 234–256);
- Biclausal constructions with predicative adverbial elements (which take scope over the entire proposition) are already prevalent, but they fall beyond the scope of this presentation

Preliminary conclusions

- Spotting interactional patterns of aspect and modality in Slavic electronic (diachronic) corpora is much like playing *hide and seek*: semantic similarities between constructions can be stipulated but are still not easily accounted for, which hampers a further formalization;
 - I. Difficulty of tagging the actional properties of the eventualities u.o. → which parameters matter?
 - II. Modality in OR is not transparent, i.e. it seems not to always come about compositionally → semantic organization of autochthonous modal operators (vs. syntactic prominence of OCS-derived modal verbs);
 - III. No clear-cut semantic assignment w.r.t. aspect marking (which is problematic in contemporary languages as well);
 - IV. Residual issues: changes in OR negative cycle, OCS and cross-Slavic modal borrowings, disappearance of present-tensed forms of *byti*;
- Is the early grammaticalization of the futural volitive periphrastic in OS a key factor in the reduced occurrences of other modal periphrastics?

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