On the structure of Russian infinitival clauses, with special attention to negative concord

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Annotation

The aim of my talk is to examine difference between subject and object control infinitives in Russian in licensing negative concord items. It turns out that negative concord is licit across the infinitive's boundary but illicit across the finite clause's boundary. Interestingly, negative concord in subject control infinitives is rated much higher than in object control infinitives; yet, the latter is still acceptable. To account for these oppositions in respondents' ratings we need a three-way distinction between subject control infinitives, object control infinitives and finite embedding. In my talk, I put forward the hypothesis about the structural difference between subject and object control infinitives explaining their behavior with respect to negative concord; I also show that this hypothesis can be successfully applied to account for other differences between subject and object control infinitives outlined above.

Plan of the talk:

- 1. Russian infinitival clauses as local domains
- 2. Negative concord and its properties
- 3. NC in control infinitives: an experiment
- 4. Analysis
- 5. Conclusions and further questions

1. Russian infinitival clauses as local domains

1.1. Between clausemate locality and finite embedding

Phenomena sensitive to a minimal clause: infinitive's boundary opaque

— binding of the reciprocal *drug druga* (Rappaport 1986)

(1) a. Vy ne zastavite podrostkov otpravljat' drug drugu kakoj-libo trek. you NEG force.FUT.2PL teenagers.ACC send.INF each_other.DAT any track 'You_i cannot force teenagers_j PRO_j to send any track to each other_{j/*i}.' [RNC]

b. Sekundanty predložili nam podat' drug drugu ruki, seconds.NOM propose.PST.PL us.DAT give.INF each_other.DAT hands.ACC no my otkazalis'.

but we refuse.PST.PL

'Our seconds_i asked $us_j PRO_j$ to shake hands with each other_{j/*i}, but we refused.' [RNC] or

'Our seconds, proposed $u\boldsymbol{s}_j$ that they, shake hands with each other, $_{i/*j}$, but we refused.' or

'Our seconds_i proposed us_j that we_{i+j} shake hands with each other $*_{i/*j/i+j}$, but we refused.'

Phenomena sensitive to a minimal clause: infinitive's boundary opaque

- disjoint reference of the pronominal and the subject (Rappaport 1986)
- (3) Stroganovy predložili Ermaku s tovariščami vstupit' k nim
 Stroganovs propose.PST.3PL Yermak.DAT with comrades.INSTR enter.INF to them.DAT
 na službu.
- on service.ACC

'The Stroganovs_i asked [Yermak and his comrades]_j PRO_j to enter their_{i,*j} service...' [RNC]

or

'The Stroganovs_i proposed to [Yermak and his comrades]_j that they_i enter their $*_{i,j}$ service...'

or

The Stroganovs_i proposed to [Yermak and his comrades]_j that they_{i+j} enter their_k service...'

Between clausemate locality and finite embedding

Phenomena sensitive to a minimal finite clause: infinitive's boundary transparent

— binding of the reflexive *sebja* (Rappaport 1986)

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(5) Dumskie lobbisty predlagajut svjaščennoslužiteljam pereložit' Duma's lobbyists.NOM propose.PRS.3PL priests.DAT shift.INF
na sebja čast'social'nyx funkcij gosudarstva.
on themselves.ACC part.ACC social functions.GEN state.GEN
'Duma's lobbyists<sub>i</sub> ask priests<sub>j</sub> PRO<sub>j</sub> to put on themselves<sub>i,j</sub> certain social functions of the state.' [RNC]
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or

'Duma's lobbyists_i propose to the $priests_j$ that they_i put on themselves_{i,*j} certain social functions of the state.'

Phenomena sensitive to a minimal finite clause: infinitive's boundary transparent

— *wh*-extraction: available out of infinitival complements (Lyutikova 2009) but restricted out of declarative finite clauses (Müller&Sternefeld 1993, Khomitsevich 2007, Antonenko 2010, Bailyn 2020)

(6) Ot kogo xozjain prosil bereč' dom? vas ego ask.PST.SG.M you.ACC guard.INF from who.GEN master his house.ACC 'From whom_i did the master ask you to protect his house t_i?' [RNC] (7) *Kakuju knigu ty dumaeš', čto Petr pročital? which.ACC book.ACC you.NOM think.PRS.2SG that Petr read.PST.SG.M 'Which book_i do you think that Petr read t_i?' [Müller & Sternefeld 1993] (8) a. $^{?*}$ Kogo ty dumaeš', Ivan priglasil? čto who.ACC you.NOM think.PRS.2SG that invite.PST.SG.M Ivan 'Who_i do you think that Ivan invited t_i?' [Khomitsevich 2007] b.[?]Kogo ty priglasil? xočeš', čtoby Ivan who.ACC you.NOM want.PRS.2SG that Ivan invite.SUBJ.SG.M 'Who_i do you want Ivan to invite t_i?' [Khomitsevich 2007]

1.2. Infinitive's type matters

A rough classification

— analytical future construction

aspectual (IPF) and voice (ACT) restrictions, only higher NEG

— aspectual construction

aspectual (IPF) and voice (ACT) restrictions, only higher NEG

FUNCTIONAL RESTRUCTURING

— modal construction less restricted than aspectual; depends on the type of modality RAISING / FUNCTIONAL RESTRUCTURING

— control infinitives:

- subject control (=same-subject infinitival clauses)
- object control (=different-subject infinitival clauses)

— floating quantifiers (Comrie 1974, Franks 1995, Babby 1998, Landau 2008)

subject control infinitives: agreeing (NOM) pattern

(9) Ivan xočet pojti na večerinku odin. Ivan.NOM want.PRS.3SG go.INF to party.ACC alone.M.SG.NOM
'Ivan wants to go to the party alone.' [Franks 1995: ch.6]

object control infinitives: non-agreeing (DAT) pattern

(10) Maša poprosila Vanju prijti odnomu. Masha.NOM ask.PST.SG.M Vanya.ACC come.INF alone.M.SG.DAT
'Masha asked Vanya to come alone.' [Franks 1995: ch.6]

NB: the non-agreeing pattern is found in more opaque configurations, e.g. in purpose infinitives headed by the overt complementizer *čtoby*:

(11)Ljubapriexala,čtobypokupat'maslosamoj.Lyuba.NOMcome.PST.SG.FCOMPbuy.INFbutter.ACCself.F.SG.DAT'Lyuba came in order to by the butter herself.' [Franks 1995: ch.6]

— secondary predicate adjectives (Nichols 1981, Franks 1995, Bailyn 2001, Madariaga 2007, a.m.o.)

subject control infinitives: agreeing (NOM) / non-agreeing (INSTR) pattern

(12) Ivanželaetvernut'sjadomojgolodnyj /golodnym.Ivan.NOMwish.PRS.3SG return.INFhome hungry.M.SG.NOMhungry.M.SG.INSTR'Ivan wants to return home hungry.'

object control infinitives: non-agreeing (INSTR) pattern

 (13) Maša poprosila Vanju vernut'sja domoj golodnym / *golodnyj/*golodnogo Masha.NOM ask.PST.SG.F Vanya.ACC return.INF home hungry.M.SG.INSTR hungry.M.SG.NOM/ACC
 'Masha asked Vanya to return home hungry.'

— primary predicate adjectives (Nichols 1981, Franks 1995, Bailyn 2001, Lyutikova 2010, a.m.o.)

subject control infinitives: short form / non-agreeing (INSTR) long form

(14) Ivanželaetbyt'sčastliv /sčastlivym.Ivan.NOMwish.PRS.3SGbe.INFhappy.SHORT.M.SGhappy.LONG.M.SG.INSTR'Ivan wants to be happy.'

object control infinitives: non-agreeing (INSTR) long form

(15) Maša želaet Vane byt' sčastlivym / *sčastliv.
 Masha.NOM wish.PRS.3SG Vanya.DAT be.INF happy.LONG.M.SG.INSTR happy.SHORT.M.SG
 'Masha wishes Ivan to be happy.'

— analytical passives (Lyutikova 2010)

subject control infinitives: short form / non-agreeing (INSTR) long form of the participle

(16) Ivanželaetbyt'ubit /ubitym.Ivan.NOMwish.PRS.3SGbe.INFkilled.SHORT.M.SGkilled.LONG.M.SG.INSTR'Ivan wants to be killed.'

object control infinitives: non-agreeing (INSTR) long form of the participle

(17) Maša želaet Ivanu byt' ubitym / *ubit.
Masha.NOM wish.PRS.3SG Ivan.DAT be.INF killed.LONG.M.SG.INSTR killed.SHORT.M.SG
'Masha wishes Ivan to be killed.'

1. RUSSIAN INFINITIVAL CLAUSES AS LOCAL DOMAINS

Summary: Russian infinitival clauses as local domains

	clause-mate	subject control infinitives	object control infinitives	finite embedding (<i>čtoby / čto</i> clauses)
local anaphor binding (<i>drug</i> <i>druga</i> 'each other'), disjoint reference of pronominals	+			
short-form adjectives and participles in primary predicates	+	+	_	(n/a)
agreeing NOM adjectives in secondary predicates	+	+	_	(n/a)
agreeing NOM floating quantifiers (<i>sam</i> 'himself', <i>odin</i> 'alone', <i>ves</i> ' 'all')	+	+	_	
reflexive binding (<i>sebja</i> 'oneself')	+	+	+	—
wh-movement	+	+	+	+/

1. RUSSIAN INFINITIVAL CLAUSES AS LOCAL DOMAINS

Summary: Russian infinitival clauses as local domains

- ambivalent status of control infinitives
- binary split (very consistent judgments!)
- three oppositions:
 - simple vs complex clause
 - subject vs object control
 - finite vs non-finite embedding

[complement clauses; nominative subject]

New phenomenon: negative concord (NC)

2. NC and its properties

2.1. Russian *ni***-pronouns as strict negative concord items** (NCI) (summary: Garzonio 2019)

— licensed by the clausemate sentential negation expressed by the preverbal clitic particle ne 'not'

(18)Karaev *(ne) rasskazal nikomu 0 svoem Karaev.NOM NEG tell.PST.SG.M nobody.DAT about his.PREP otkrytii. slučajno sdelannom accidentally made.PREP discovery.PREP 'Karaev did not tell anybody about his accidental discovery.' [RNC] čto tebja nikto *(ne) ljubit. (19)Ne dumaj, NEG think.IMP COMP you.ACC nobody.NOM NEG love.PRS.3SG 'Do not think that nobody loves you.' [RNC]

NB: negative preverbal clitic is obligatory with preverbal NCIs; hence strict NC.

Russian *ni*-pronouns as negative concord items (NCI)

— scope of sentential negation indicated by the preverbal negative particle includes the subject (19) but cannot be extended to the superordinate clause (20)

(20)Petrov pytalsja ne otvlekaťsja ot dorogi.

Petrov.NOM try.PST.SG.M NEG get_distracted.INF from road.GEN

'Petrov tried to remain focused on the road (lit. tried to not get distracted from the road).'

* 'Petrov did not try to get distracted from the road.'

NB: I abstract away from substandard cases discussed by Kholodilova 2015 and Letuchiy 2017 where NCIs are licensed by a lower constituent negation in adjectival SCs and under functional restructuring, and then undergo A-movement.

(21)Nikto okazalsja ne gotov.
nobody.NOM appear.PST.SG.M NEG ready.SHORT.M.SG
'Nobody turned out to be ready.'

Russian *ni*-pronouns as negative concord items (NCI)

— clauses containing *ni*-pronouns are never interpreted as involving double negation

(22) Tol'ko, požalujsta, poka ne govori nikomu ničego! only please yet NEG tell.IMP nobody.DAT nothing.GEN
'But please do not tell anybody anything yet!' [RNC]
*'But please do not tell nobody nothing!'

NB: Fitzgibbons (2008) points out that *ni*-pronouns functioning as predicates or complements of P can be licensed outside the scope of negation (Кто был никем, тот станет всем). Not surprisingly, under negation such contexts are ambiguous: both NC and double negation interpretations are available.

(23) Vanja ne sčital Iru nikem. [Fitzgibbons 2008] Vanja NEG consider.PST.SG.M Ira.ACC nobody.INSTR
DN: 'Vanja did not consider Ira a nobody.' (he considered her a worthy person) NC: 'Vanja did not consider Ira anybody.' (i.e. had no opinion of her) Importantly, neither non-licensed *ni*-pronouns nor DN interpretation are licit in argumental positions.

2.2. Locality of NC

The clausemate constraint on *ni*-pronouns licensing is lifted in infinitival complements (Gerasimova 2015, Kornakova et al. 2016)

(24)a. Kolduny ne veljat rabotnikam ničego est' sorcerers.NOM NEG order.PRS.3PL workers.DAT nothing.ACC eat.INF

vo vremja lovli.

during fishing.GEN

'Sorcerers do not allow workers to eat anything while pearl fishing.' [RNC]

b. Nikto ne velit rabotnikam ničego est'. nobody.NOM NEG order.PRS.3SG workers.DAT nothing.ACC eat.INF 'Nobody requires that the workers to eat anything.'

Various accounts of NC identify it with other types of syntactic processes:

— binding approach (Progovac 1994): *ni*-pronouns as local NPIs which require a local antecedent (negative Infl, truth-conditional operator in C)

— operator movement approach (Zanuttini 1991, Haegeman and Zanuttini 1991, Haegeman 1995): strict NCIs as negative quantifiers which have to undergo overt or covert movement to the scope (A-bar) position)

— agreement approach (Zeijlstra 2004, Haegeman&Lohndal 2010): NCIs are indefinites bearing a [uNEG] feature which requires a c-commanding [iNEG] element.

Locality of NC

— binding approach to NCIs and binding theory two relevant domains: minimal clause (cf. *drug druga* and *on*) or minimal finite clause (*sebja*)

— operator movement approach to NCIs and locality of *wh*-movement across the non-finite clause boundary (and finite subjunctive clause boundary)

— agreement approach to NCIs and locality of other types of agreement depends on the features involved and on the direction of agreement

A-dependencies / A-bar dependencies (and subtler feature hierarchies) downward probing + upward valuation / upward probing + downward valuation interpretability and valuation

one-to-one or one-to-many correspondence between probes and goals

2.3. Positions of NCIs

2 positions:

- base position
- preverbal position

Proforms and phrasal categories

(25) Ničego ne znaju, kakie takie dollary, nothing.GEN NEG know.PRS.1SG which.PL.NOM such.PL.NOM dollars.NOM ne videla ja nikakix dollarov... 1 and NEG see.PST.SG.F LNOM dollars.GEN no.PL.GEN 'I don't know anything, which dollars (do you mean), I didn't see any dollars...' [RNC] (26) Kakoj bumažnik, nikakogo bumažnika ne vižu! which wallet, no.GEN wallet.GEN NEG see.PRS.1SG 'Which wallet, I don't see any wallet!' [RNC] (27) Tjotka večerom smotrela televizor, evening.INSTR watch.PST.SG.M TV.ACC aunt.NOM no ne videla i ne slyšala ničego. but NEG see.PST.SG.F and NEG hear.PST.SG.F nothing.GEN 'The aunt watched TV in the evening, but didn't see or hear anything.' [RNC]

2. NC AND ITS PROPERTIES

Positions of NCIs in control infinitives

3 positions:

— base position

(28) Ja ne xoču pečalit' Vas ničem. I.NOM NEG want.PRS.1SG sadden.INF you.ACC nothing.INSTR 'I don't want to be a cause of your sadness.'

- preverbal position: before infinitive
- (29) Ty ne xočeš' ničego dobavit' k skazannomu? you.NOM NEG want.PRS.2SG nothing.GEN add.INF to said.LONG.N.SG.DAT
 'You don't want to add anything to this, do you?' [RNC]

— preverbal position: before matrix verb

(30) Značit, vyničemnexotitepomoč'partii.thusyou.NOM nothing.INSTR NEG want.PRS.2PLhelp.INFparty.DAT'Thus, you don't want to help the party in anything.' [RNC]

Positions of NCIs in control infinitives

Proforms and phrasal categories:

- proforms tend to be located in preverbal positions
- phrasal categories tend to stay in the base position

Pilot study, RNC search

Table 1. Positions of NCIs in subject control configurations; the matrix verb xotet' 'want'

Position of NCI	Example	Proforms, hits	Phrasal categories,
			hits
base	NEG+want+INF+nobody/no X	68	164
before INF	NEG+want+nobody/no X+INF	217	5
before matrix verb	nobody/no X+NEG+want+INF	209	17

Positions of NCIs in control infinitives

Questions

— base vs. derived positions (before infinitive and before matrix verb) or base-generation in all the three positions?

— if movement, does it result from NC (operator movement) or is it independent from NC?
 — does the position of the NCI affect acceptability (binding/agreement)?

(31) a. NEG-phrase in argument position, no NC, double negation interpretationda $[_{AGRP}$ Valere $[_{NEGP}$ nie $[_{TP}$ ti niemandkenten-kent(en)-kentthatValerenotnobodyV+TNEG-V+TNEG-know+AGR'that Valere doesn't know nobody', i.e. Valere knows someone

b. NEG-phrase in scope position, NC da $[_{AGRP}$ Valere_j $[_{NEGP}$ niemand nie $[_{TP}$ t_j t_i kent] en-kent] (en)-kent] that Valere nobody not V+T NEG-V+T NEG-know+AGR 'that Valere doesn't know anyone' [West Flemish; Haegeman 1995, adapted] (32) a. *Mary_i thinks Bill likes these pictures of herself_i.

b. Mary_i wonders [which pictures of herself_i]_j Bill likes best t_j.

3. NC in control infinitives: an experiment

Lyutikova&Gerasimova 2021

Materials

2x3 factorial design: INFINITIVE TYPE (subject control/object control) NI-PRONOUN POSITION (base/before infinitive/before matrix)

Lexicalization:

Matrix verbs

6 non-Neg-raising subject control verbs (probovat' 'try', riskovat' 'risk' ...)

6 non-Neg-raising object control verbs governing ACC (prosit' 'ask', zastavlyat' 'force' ...)

Infinitives

12 verbs that govern DAT, which means that in case of object control, matrix verb and infinitive assign different cases

NCI

nikto 'nobody'

4 tokens per condition; 6*4=24 target sentences

Materials

Basic structure of stimuli

subject + NEG + matrix verb + (matrix object) + infinitive + continuation (DO or PP)



BEFORE MATRIX



Examples

(31) a. subject control, base position (a)

Konsul'tant ne proboval pomogat' nikomu v razvitii biznes-proekta. adviser.NOM NEG try.PST.SG.M help.INF nobody.DAT in developing business project

b. subject control, before infinitive (b)

Konsul'tant ne proboval nikomu pomogat' v razvitii biznes-proekta. adviser.NOM NEG try.PST.SG.M nobody.DAT help.INF in developing business project

c. subject control, before matrix verb (c) Konsul'tant nikomu ne proboval pomogat' v razvitii biznes-proekta. adviser.NOM nobody.DAT NEG try.PST.SG.M help.INF in developing business project 'The adviser wasn't trying to help anybody with business project development.'

Materials

Basic structure of stimuli

subject + NEG + matrix verb + (matrix object) + infinitive + continuation (DO or PP)



Materials

Fillers (1:1)

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span the range of acceptability
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— grammatical fillers: -libo pronouns instead of ni-pronouns + negation (33)
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— ungrammatical fillers: ni-pronouns, no negative particle (34)
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Task

rating task, acceptability judgments on a 7-point Likert scale

(33) Akademik ne ubeždal kollegu komu-libo ustupat' academician.NOM NEG persuade.PST.SG.M colleague.ACC anybody.DAT give_up.INF

mesto v pervom rjadu

seat.ACC in first.PREP row.PREP

'The academician was not persuading his colleague to give up to anybody a seat in the first row.'

(34) Literator želal posvyaščať nikomu svoe poslednee stixotvorenie.
 writer.NOM want.PST.SG.M dedicate.INF nobody.DAT his last.ACC poem.ACC
 Lit. 'The writer wanted to vow to nobody his last poem'. (ungram.)

Participants

153 participants recruited online via Yandex.Toloka crowdsourcing platform and via social media postings

- av. 25 participants for each list
- 25 participants (16%) excluded (\geq 50% of errors in comprehension questions)
- 128 respondents (78 females; mean age 34, min 15, max 73, SD 14)

Results

both raw and z-score transformed data

	z-score transformed			raw ratings			
	before matrix verb	before infinitive	base position	before matrix verb	before infinitive	base position	
Subject control	0.546	0.482	0.130	4.70	4.55	3.72	
Object control	-0.816	-0.111	-0.228	1.61	3.20	2.90	

Table 2. Mean acceptability ratings for the 3x2 factorial design

ANOVA: significant main effect INFINITIVE TYPE (df = 1, F = 737.46, p << 0.05) NI-PRONOUN POSITION (df = 2, F = 44.84, p << 0.05) interaction between these two factors (df = 2, F = 113.44, p << 0.05)

3. NC IN CONTROL INFINITIVES: AN EXPERIMENT

Results

Post-hoc pairwise comparisons (Tukey's post-hoc test)

Figure 1. Acceptability ratings (z-score) for *ni*-pronouns.

All significant differences marked with * between the relevant boxes



3. NC IN CONTROL INFINITIVES: AN EXPERIMENT

Results

Figure 2. Interaction plot of acceptability ratings (z-score) for target and filler items. Error bars indicate standard error.



Results

Three factors impacting on the acceptability of *ni*-pronouns in control infinitives:

(i) locality of NC (subject vs object control)

(ii) preverbal/postverbal position of the pronoun

(iii) movement to the matrix clause.

Locality of NC

clause-mate, subject control INF > object control INF > finite embedding (=ungram)

	alausa mata	subject	object	finite embedding	
	clause-mate	control INF	control INF	(<i>čtoby / čto</i> clauses)	
reciprocal binding, disjoint	+	_		_	
reference of pronominals					
short-form ADJ and PART	+	+	_	(n/a)	
agreeing NOM adjectives	+	+	_	(n/a)	
agreeing NOM FQs	+	+	_	_	
NCI licensing	+	+	+/	_	
reflexive binding	+	+	+	_	
wh-movement	+	+	+	+ _	

3. NC IN CONTROL INFINITIVES: AN EXPERIMENT

Preverbal position of the object pronoun

preverbal > postverbal

Movement of the object pronoun to the matrix clause

subject control infinitives >> object control infinitives (=ungram)

	alausa mata	subject	object	finite embedding
	Clause-Illate	control INF	control INF	(<i>čtoby / čto</i> clauses)
reciprocal binding, disjoint	+	_		_
reference of pronominals				
short-form ADJ and PART	+	+	_	(n/a)
agreeing NOM adjectives in	+	+	_	(n/a)
secondary predicates				
agreeing NOM FQs	+	+	_	—
movement of <i>ni</i> -pronouns	(n/a)	+	—	
to the matrix clause				
NCI licensing	+	+	+/	—
reflexive binding	+	+	+	_
wh-movement	+	+	+	+ _

Phenomena to account for:

- NC in subject control infinitives
- degraded (but still acceptable) status of NC in object control infinitives
- split between subject and object control infinitives wrt:
 - NOM of FQs
 - NOM of adjectival secondary predicates
 - short form of primary adjectival predicates
 - short form of passive participles
 - raising of *ni*-pronouns

4. Analysis

4.1. Subject control vs object control infinitives: radical restructuring

Babby 1998

object control infinitives are CPs

subject control infinitives are VPs

(36) Ivan xočet [vp pojti na večerinku odin].
Ivan.NOM want.PST.SG.M go.INF to party.ACC alone.M.SG.NOM
'Ivan wants to go to the party alone.'

Cf. (Lexical) Voice restructuring in Wurmbrand 1998, 2001, 2004, 2013 Predictions:

- only unergatives and transitives in subject control configuration
- case-dependence of the object on transitivity of the matrix verb
- no PRO, hence no partial control

— no functional projections of the clause, hence no voice alternation, no aspectual alternations, no separate temporal interpretation

Subject control vs object control infinitives: radical restructuring Passive and unaccusative infinitives

(37) a. My nikogo ne xotim učit' i nikem ne xotim we nobody.ACC NEG want.PRS.1PL lecture.INF and nobody.INSTRNEG want.PRS.1PL
 byt' poučaemy.

be.INF lectured.PART.SHORT.PL

'We don't want to lecture anybody and we don't want to be lectured by anybody.' [RNC]

b. My riskuem byt' vybrošeny v dalekoe prošloe, we risk.PRS.1PL be.INF throw.PART.SHORT.PL in distant.ACC past.ACC kogda vračam ešhe ničego ne bylo izvestno ob antibiotikax.

'We risk to be thrown into the distant past, where doctors knew nothing about antibiotics.' [RNC]

(38) On by xotel rodit'sja snova objazatel'no kaktusom. he.NOM SUBJ want.SG.M get_born.INF again obligatorily cactus.INSTR 'He would like to be born again as a cactus, by all means '[RNC]

'He would like to be born again as a cactus, by all means.' [RNC]

Subject control vs object control infinitives: radical restructuring Transitive infinitives with intransitive subject control verbs

(39) Ja stremljus' napisat' pravdu o samom sebe. I.NOM strive.PRS.1SG write.INF truth.ACC about self.PREP REFL.PREP 'I strive to write truth about myself.' [RNC]

(40) Ja toropilsja zašhitit' dissertaciju,
I.NOM hurry.PST.SG.M defend.INF thesis.ACC
potomu čto u Lidy Roždestvenskoj papa professor.
because at Lida.GEN R.-GEN dad.NOM professor.NOM
'I was in a hurry to get my PhD, because Lida R.'s dad was a professor.' [RNC]

Subject control vs object control infinitives: radical restructuring Partial control

(41) V takom slučae ja predlagaju dať drug drugu nedelju propose.PRS.1SG give.INF each other.DAT in this.PREP case.PREPI.NOM week.ACC informacii. na sbor for collecting.ACC information.GEN 'If so, I propose that we give each other another week to collect information.' [RNC] (42) No velikij getman rešil skoree poest' drug druga, but great.NOM hetman.NOM decide.PST.SG.M rather eat_up.INF each other.ACC sdat'sja. čem surrender.INF than

'(Kaluga was starving.) But the Great Hetman decided to rather eat each other than surrender.' [RNC]

Subject control vs object control infinitives: radical restructuring Elements of clausal functional structure

— Voice alternations

(43) Ja ne xoču sčitaťsja vašej ženoj...
I.NOM NEG want.PRS.1SG consider.PASS.INF your.INSTR wife.INSTR
'I don't want to be considered your wife if I can't be your wife in all honesty.' [RNC]

— Aspectual alternations

whatever aspectual morphology in subject control infinitives

— Negation

(44) V Moskve, voobražaja oxotu, on mečtal
in Moscow.PREP imagine.GER hunting.ACC he.NOM dream.PST.SG.M
nikuda ne toropit'sja.

nowhere NEG hurry.INF

'In Moscow, imagining the hunting, he wished not to hurry anywhere.' [RNC]

— Temporal interpretation

(45)Borodankovskazalmne, čto tyxočeš'vypisyvat'sjazavtra.Borodankov.NOMtell.PST.SG.M me.DAT that you.NOM want.2SG check out.INFtomorrowtomorrow'Borodankov told me that you want to check out tomorrow.' [RNC]

4.2. Size restructuring in subject control infinitives

Typology of restructuring, Wurmbrand 2014

Phenomena: Long object movement (LOM), clitic climbing (CC), long scrambling (SCR), future interpretation of the infinitive (FUT)

- voice restructuring (infinitives are $VP/v_RP/Voice_RP$) LOM
- size restructuring



CC: If the local ΣP is available, clitics (or coindexed pro if clitics are base-generated in Spec, ΣP) cannot climb to the higher clause due to criterial freezing. SCR: if feature driven, patterns with CC and targets ΣP ; alternatively, LD-SCR available.

Size restructuring in subject control infinitives

Russian data

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Subject control:-LOM+FUT+CC+SCRObject control:-LOM+FUT-CC+SCRFinite:-LOM+FUT-CC+SCR (Bailyn 2020)
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(48) a. On (ej) xotel / namerevalsja / soglasilsja (ej) otvetit'.
he.NOM her.DAT want.PST.SG.M / intend.PST.SG.M / agree.PST.SG.M answer.INF
'He wanted / intended / agreed to answer to her.'
b. On (*[?]ej) prosil (Mišu) / treboval (ot Miši) / rasporjadilsja
he.NOM her.DAT ask.PST.SG.M M.ACC / demand.PST.SG.M from M./ order.PST.SG.M
(ej) otvetit'.

int.: 'He asked Misha / demanded from Misha / ordered to answer to her.'

- CC possible out of subject control infinitives, but not object control infinitives
- subject control infinitives have their own position for clitics

— clitics are not frozen in the subject control infinitive, but can climb out of it to the matrix clause

Size restructuring in subject control infinitives

General idea

— Object control infinitives are full-fledged CPs (or SAPs, Lyutikova&Tatevosov 2020)

— Subject control infinitives are truncated structures lacking A-bar domain but hosting a ΣP

— Spec, ΣP is an A-position

(49) $CP \gg \Sigma P_A \gg TP_{FUT} \gg vP \gg VP$

Predictions

— Object control infinitives are opaque for A-dependencies and only allow A-bar movement through CP (*wh*, LD-SCR)

— Subject control infinitives are transparent for A and A-bar dependencies (Case, ϕ , CC, *wh*, LD-SCR)

4.3. How does it work?

Floating quantifiers

— FQs copy the case of their controller DP and are informative of the case properties of PRO (Sigurðsson 1991, Babby 1998, Landau 2008)

- PRO is case-marked (*u*Case) and has ϕ -features ($u\phi$)
- feature sharing (Pesetsky&Torrego 2007) / multiple agree (Zeijlstra 2012) approach
- infinitival C as a source of the "second dative" (Landau 2008)
- two routes of control: PRO control (subject c.) vs. C control (object c.) (Landau 2008)

Object control infinitives: ϕ -agreement mediated by C, dative case assignment by C

(50)...
$$DP_i [i\phi] \dots [_{CP} C_i [u\phi] [_{TP} PRO_i [u\phi] [uCase] \dots FQ_i [u\phi] [uCase] \dots]]$$

Subject control infinitives: ϕ -agreement and case assignment across the TP boundary

(51)... T
$$[u\phi]$$
 ... DP_i $[i\phi]$ $[uCase]$... $[_{TP}$ PRO_i $[u\phi]$ $[uCase]$... FQ_i $[u\phi]$ $[uCase]$...]

Short form / instrumental of long form in primary adjectival predicates

- structural difference between SF and LF (Babby 1973, 1975; ...)
- LF involves an additional functional layer (adjP) introducing *u*Case
- Pred as a source of INSTR (Bailyn 2001, 2012; Madariaga 2007, Matushansky 2008...)
- SF is an AP theta-licensing its own argument (Geist 2010; Grashchenkov 2018)
- SF can be licensed by adj or by the finite agreeing T / NOM subject

SF as a predicate: requires an accessible finite agreeing T

(52) $\begin{bmatrix} TP & DP/PRO_i T \begin{bmatrix} AuxP & Aux \begin{bmatrix} AP & t_i A \end{bmatrix} \begin{bmatrix} uGen \end{bmatrix} \begin{bmatrix} uNum \end{bmatrix} \begin{bmatrix} uFin \end{bmatrix} \end{bmatrix}$

LF as a predicate, INSTR : licensed locally, independently of T (53) $[_{TP} DP/PRO_j T [_{PredP} t_j Pred [_{adjP} Op_i adj [_{AP} pro_i A]_{[uGen]} [_{uNum}] [_{uFin}]]_{[uCase]}]]$

Short form / instrumental of long form in primary adjectival predicates

Subject control infinitives: SF and LF equally available SF as a predicate:

(54)... $T_{[iTns]}$... $[TP PRO_i T [AuxP Aux [AP t_i A] [uGen] [uNum] [uFin]]]$

LF as a predicate: (55)... $T_{[iTns]}$... $[TP DP/PRO_j T [PredP t_j Pred [adjP Op_i adj [AP pro_i A][uGen] [uNum] [uFin]][uCase]]]$

Object control infinitives: SF licensing is blocked by C SF as a predicate: (56)...T_[*i*Tns] ... [_{CP} C [_{TP} PRO_i T [_{AuxP} Aux [_{AP} t_i A] [_{*u*Gen]}[_{*u*Num]}[_{*u*Fin]}]]]

LF as a predicate: (57) $T_{[iTns]} \dots [_{CP} C [_{TP} PRO_j T [_{PredP} t_j Pred [_{adjP} Op_i adj [_{AP} pro_i A]_{[uGn]} [_{uNm]} [_{uFin]}]_{[uCase]}]]]$

Negative Concord:

— licensing of NCIs across CP boundary acceptable (though degraded if compared to that across TP)

- raising of NCIs to the matrix clause across CP boundary illicit

Proposal:

- NC is an instance of syntactic agreement (Zeijlstra 2004)
- NCIs bear valued uninterpretable polarity feature [uNEG]
- NCIs need to agree with an interpretable variant of this feature on the polarity operator of the clause (\leftarrow Radical Interpretability)
- sentential negation is instantiated by NegP of the following structure
- (58)



Negative Concord: predictions

- if a clause has a negative operator, it has a *ne*-clitic on the verb
- NCIs can be licensed if there is an accessible NegP (clause-mate or in the matrix cl.)

— *ne* is not like other NCIs in that it cannot be licensed from the matrix clause

Zeijlstra 2004, strict NC in Czech:

(59) Nikdo ne-volá.nobody NEG-calls'Nobody is calling.'

(60) $[NegP \ Op_{[iNEG]} \ Neg \ [_{\nu P} \ nikdo_{[uNEG]} \ [\nu' \ nevola_{[uNEG]}]]]$

If NCIs can be licensed from the matrix clause, then we expect that the negative particle on the verb can be construed with the matrix negation, too:

(61) $[NegP \ Op_{[iNEG]} \ Neg \ ... V \ [TP \ NCI_{[uNEG]} \ ... \ ne-_{[uNEG]} \ ... \]]$

This amounts to the expectation that negative particle in the infinitival clause can correspond to the interpretable negation of the matrix clause, which is not borne out. (62)Petrov pytalsja [ne otvlekat'sja ot dorogi].

Petrov try.PST.SG.M NEG get_distracted.INF from road.GEN 'Petrov tried to remain focused on the road (lit. tried to not get distracted from the road).' *'Petrov did not try to get distracted from the road.'

Negative Concord: locality

— NC is multiple agreement

— NC can proceed across the TP boundary

Evidence: negative operator can license *ni*-pronouns in subject position; therefore, it should merge higher than TP. Accordingly, NC in simple clauses crosses TP as well.

— in the general case, NC cannot cross CP subject control infinitives: NC $(63) \dots [NegP \ Op_{[iNEG]} \ Neg_{[uNEG]} \ [TP \ ... T \ ... V \ [TP \ PRO \ T \ [\ ... \ NCI_{[uNEG]} \ ...]]$

object control infinitives: NC disrupted by the standard infinitival C (64) ... [NegP $Op_{[iNEG]} Neg_{[uNEG]} [_{TP} ... T ... V [_{CP} C [_{TP} PRO T [... NCI_{[uNEG]} ...]]]$

object control infinitives: NC restored if C bears [uNEG](65)... $[NegP Op_{[iNEG]} Neg_{[uNEG]} [_{TP} ...T ... V [_{CP} C_{[uNEG]} [_{TP} PRO T [... NCI_{[uNEG]} ...]]]$

NB: negative Cs attested cross-linguistically

Negative Concord: locality

— C[uNEG] enables NC across the CP boundary, being the last resort for saving the derivation with unlicensed NCIs inside CP

— however, C[uNEG] comes at a cost, turning CP into the weak phase (\rightarrow additional burden on processing mechanisms)

— this is why stimuli with NC in object control infinitives received lower ratings than those with NC in subject control infinitives



Type of infinitive 🕂 Subject control infinitives 🕂 Object control infinitives

Raising of *ni*-pronouns

— movement of *ni*-pronouns to the preverbal position is an instance of movement to ΣP (i.e., to A-position)

Evidence: preposition of the *ni*-pronoun does not license parasitic gaps Ivlieva 2007: parasitic gaps in Russian are licensed in adjunct clauses by both overt (*wh*-movement, topicalization) or covert (contrastive focus *in situ*) A-bar movement

- (66) a. Ja ne uznál Kolju_i, daže rassmotrev ego_i /*[?]e_i.
 I.NOM NEG recognize.PST.SG.MKolya.ACC even examine.GER he.ACC
 'I didn't recognize Kolya even after having examined him.'
 - b. Kogó_i ty ne uznal t_i, daže rassmotrev e_i? who.ACC you.NOM NEG recognize.PST.SG.M even examine.GER 'Who didn't you recognize even after having examined?'
 - c. *[?] Ja nikogó_i ne uznal, daže rassmotrev e_i. I.NOM nobody.ACC NEG recognize.PST.SG.Meven examine.GER int.: 'I didn't recognize anybody even after having examined them.'
- in subject control infinitives, movement to the local ΣP and to the matrix ΣP are equally available (TP boundary does not block A-dependencies)

— in object control infinitives, movement to the matrix ΣP is blocked by C.

5. Conclusions and further questions

— subject vs.object control infinitives: regular opposition wrt A-dependencies

	clause-mate	subject control INF	object control INF	finite embedding (<i>čtoby / čto</i> clauses)
reciprocal binding, disjoint	+			_
reference of pronominals				
short-form ADJ and PART,	+	+	—	(n/a)
primary predicates				
agreeing NOM adjectives in	+	+	—	(n/a)
secondary predicates				
agreeing NOM FQs	+	+	—	_
movement of <i>ni</i> -pronouns	(n/a)	+	—	
to the matrix clause				
NCI licensing	+	+	+/	_
reflexive binding	+	+	+	_
wh-movement	+	+	+	+ _

Further questions

— agreement approaches to anaphora

Can we explain different properties of anaphors by drawing upon their ϕ -features' sets? Binding domains for both reflexive and reciprocal anaphors differ from the locality domain of the agreement phenomena clustering together.

— selection or exfoliation

Should we consider TP-infinitives as a result of exfoliation of uniformly projected CP infinitives, or rather as a selectional requirement of subject control verbs?

CP-infinitives have their own positive characteristics which can be tested in the absence of exfoliation triggers.

DAT of PRO (and of FQ) is unavailable in subject control infinitives (contra Baykov 2020)

(67) Ivanxočetpojtinavečerinkuodin / *odnomu.Ivan.NOMwant.PRS.3SGgo.INFtoparty.ACCalone.M.NOM / alone.M.DAT'Ivan wants to go to the party alone.'

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