Negative Concord Items inside AdjPs in Russian: An Experimental Study

Fyodor Baykov Lomonosov Moscow State University

Formal Approaches to Slavic Linguistics (FASL 31) McMaster University June 24-26, 2022

Strict negative concord in Russian

- The verbal negative marker *ne* is obligatory in sentences with negative adverbs or pronouns (=negative concord items, NCIs)
 - Irrespective of whether they precede the verb or follow it (1).

(1) Nikto ne daval nikomu nikakix sovetov.
Nobody.NOM NEG give.PST nobody.DAT no.GEN advice.GEN
'Nobody gave anybody any (piece of) advice.'

- There must therefore be some long-distance licensing relationship (Agree or movement) between the verbal negation and NCIs.
 - Purely semantic explanations were shown to be insufficient for Russian data (Brown 1999; Erschler 2021, *i.a.*).

Opaque domains for NCIs inside clauses

- Relatively little attention was paid to the locality conditions on intra-clausal NCI licensing in Russian.
 - As opposed to NCI licensing across an infinitival clause boundary (Xolodilova 2015; Gerasimova 2015; Gerasimova, Lyutikova 2021, *i.a.*).
- Rozhnova (2009)'s description of the constraints on NCI licensing across the boundaries of different types of lexical categories (DPs, AdjPs *etc.*) is a rare exception.
 - The data are gathered from corpora and the judgements provided by a handful of native speakers the author consulted.
 - Therefore, experimental investigation is welcome.

The generalization to be tested

- An NCI inside an AdjP may be licensed by verbal negation iff the AdjP containing it is a predicate, not a modifier of some nominal.
 - The generalization was formulated by Rozhnova (2009).
- Thus, the structure schematically represented in (2a) is acceptable, whereas that in (2b) is ungrammatical.

(2) a.
$$[_{NegP} ne ... [_{PredP} ... Pred^{0} [_{AdjP} Adj^{0} ... NCI]]]$$

b. $*[_{NegP} ne ... V^{0} [_{DP} D^{0} ... [_{AdjP} Adj^{0} ... NCI]]]$

Experimental conditions

2 conditions predicted to be **unacceptable**:

- GenNeg an NCI inside an AdjP which modifies an unaccusative subject in the genitive of negation (3).
- Attribute an NCI inside an AdjP which modifies an instrumental predicate nominal (4).
- 2 conditions predicted to be acceptable:
- LongForm an NCI inside a predicative AdjP with a long-form adjective in the instrumental (5).
- ShortForm an NCI inside a predicative AdjP with a short-form adjective (6).

Results

- The results of the experiment unequivocally support the generalization observed by Rozhnova (2009).
- Sentences with NCIs inside predicative AdjPs uniformly received high scores.
 - The form of adjective used (long or short) had no effect on the outcome.
 - The differences both among them and between any of them and grammatical fillers were statistically insignificant.
- Sentences with NCIs inside DP-modifying AdjPs were judged significantly worse irrespective of the presence of the genitive of negation.
 - Though both of these conditions were judged higher than ungrammatical fillers (which featured NCIs in the complete absence of predicate negation).

Prospects of an analysis

- Neither AdjP boundaries on their own nor DP boundaries create an opaque domain for NCI licensing.
 - See Rozhnova (2009) on negative concord across DP boundaries.
- A combination of DP and AdjP boundaries is opaque to NCI licensing.
 - As evidenced by DP-modifying attributive AdjPs.
- A possible account for this discrepancy may appeal to the argument vs adjunct status of predicative vs attributive AdjPs.
 - This, in turn, may be reflected in the way they are introduced in the derivation (ordinary Merge for arguments vs Pair-Merge for adjuncts, as proposed by Chomsky (2004)).

A consequence for the status of predicate AdjPs

- Our results may be <u>problematic</u> for an analysis regarding <u>predicative AdjPs</u> (especially headed by long-form adjectives) <u>as modifiers</u> of null or elided nouns.
 - Such an analysis was suggested e.g. by Babby (1973).
- If this were so, <u>no</u> structural <u>difference could be found</u> between sentences with predicative and modifying AdjPs.
- While there must be one which is responsible for the fact that only predicative and not DP-modifying ones may contain NCIs licensed by the verbal negative marker *ne*.

Thank you!

This research is supported by Russian Science Foundation, RSF project 22-18-00037 "Parametric model of agreement in the light of experimental data" realized at Lomonosov Moscow State University.

Analytical options

Opacity of attributive AdjPs and other types of constituents to NCI licensing may be modeled in a variety of ways.

- Reducing it to a version of Huang (1984)'s CED does not seem promising, since NCIs inside (transitive) subjects may be licensed by predicate negation (Rozhnova 2009).
- Relating it to phases may run into difficulties with selective opacity phenomena:
 - certain constituents may be opaque to some long-distance interactions but not others (see the next slide).
- Specifying a number of horizons (Keine 2016) for each of the probes is feasible in principle,
 - though it may look like a stipulation in the case at hand.

Locality of NC compared to other long-distance interactions

Structural configuration (constituent dominating the licensee)	Negative concord	Non-local NPIs (- <i>nibud</i> ' and – <i>libo</i> pronouns)	Anaphors bound by the matrix subject	<i>Wh</i> -movement (constituent questions and relative clauses)	Quantifier raising
Predicative AdjP	ОК	ОК	(ОК)	ОК	??
Attributive AdjP	*	ОК	*/ОК	*	*/???
Argumental DPs/NPs	ОК	ОК	ОК	???/*	??
Adjunctal DPs/NPs	*	ОК	ОК	*	*
Phrases headed by adverbial participles / converbs	*	ОК		*	*
Number of points in common with NC / discrepancies with NC		2/3	3/1	4/1	2/1

NB: the first column specifies the type of constituent *inside* which the element (NCI, anaphor or trace) involved in long-distant interaction is located (i.e. the type of lexical category whose boundary the licensing process has to cross).

It does not specify syntactic role of the licensee (NCI, anaphor or moved element) itself.

Experimental design

- Participant were asked to judge the sentences according to a 7point Likert scale.
- Each of the 4 lists included 3 training sentences, 16 experimental ones and 32 fillers (16 grammatical and 16 ungrammatical).
- 60 native speaker of Russian provided their judgments.
 - The experiment was carried out in May 2021.

(3) GenNeg:

(*)V sleduyushchem razdele ne bylo prostoj ni dlya kogo iz shkol'nikov zadachi. In next section NEG was simple.GEN for no-one of schoolboys task.GEN 'In the next there was no task (which would be) simple for any of the schoolboys.'

(4) Attribute:

(*)Sleduyushchee zadanie ne bylo prostoj ni dlya kogo iz shkol'nikov zadachej. Next problem NEG was simple.LONG.INSTR for no-one of schoolboys task.INSTR 'The next problem was not a simple task for any of the schoolboys.'

(5) LongForm:

Sleduyushchaya zadacha ne byla prostoj ni dlya kogo iz shkol'nikov. Next task NEG was simple.LONG.INSTR for no-one of schoolboys. 'The next task was not simple for any of the schoolboys.'

(6) ShortForm:

Sleduyushchaya zadacha ne byla prosta ni dlya kogo iz shkol'nikov. Next task NEG was simple.SHORT for no-one of schoolboys. 'The next task was not simple for any of the schoolboys.'

Comments on experimental material

- In all experimental sentences attributive AdjPs preceded the nouns they modified (i.e. were in prenominal position).
 - When planning the experiment I was unaware that position of an attributive AdjP w.r.t. the noun influences acceptability of NCI licensing for some speakers (this fact was not mentioned anywhere in the literature, and I do not find any contrast here myself).
- The NCIs inside AdjPs in all instances were represented by *ni dlya kogo* 'for nobody'.
 - Because "true" adjectival complements such as gordyj nikem 'proud of nobody' vary widely in their case marking, while strict experimental design necessitates uniformity among experimental sentences.

Results: interaction plot



Adjective structural position

Statistical information

Means and standard deviations before z-transfromation

	LongForm	ShortForm	Attribute	GenNeg(SUBJ)
Mean	5.277056	5.201717	3.315556	3.110132
Sd	1.593831	1.721466	1.857172	1.86757

• Means and standard deviations after z-transformation

	LongForm	ShortForm	Attribute	GenNeg(SUBJ)	Ungr.filller	Gram.filler
Mean	0.6545152	0.6491757	-0.2070811	-0.2923734	-0.8779321	0.784746
Sd	0.6466909	0.7254511	0.7794649	0.7543339	0.5485039	0.6880958

Tukey multiple comparisons of means

	diff	lwr	upr	p adj
LONG vs SHORT	0.02073076	-0.1774837	0.2189452	0.9931751
ATTRIB vs SHORT	-0.99208763	-1.1943394	-0.7898358	0.0000000
GENNEG vs SHORT	-1.07603369	-1.2778317	-0.8742357	0.0000000
ATTRIB vs LONG	-1.01281839	-1.2095878	-0.8160490	0.0000000
GENNEG vs LONG	-1.09676445	-1.2930674	-0.9004615	0.0000000
GENNEG vs ATTRIB	-0.08394606	-0.2843249	0.1164327	0.7028905

References

- Babby L.H. The Deep Structure of Adjectives and Participles in Russian // Language. 1973. №49(2). P.349–360.
- Brown, S. (1999). The Syntax of Negation in Russian: A Minimalist Approach. Stanford (CA): Center for the Study of Language and Information.
- Chomsky, N. (2004). Beyond Explanatory Adequacy // A. Belletti (ed.). Structures and Beyond: The Cartography of Syntactic Structures, Volume 3. New York: Oxford University Press, 2004. P. 104-131.
- Gerasimova, A. A. (2015). Licenzirovanie otricatel'nyx mestoimenij cherez granitsu infinitivnogo oborota v russkom yazyke [Licensing of negative pronouns across an infinitival clause boundary in Russian] // E.A. Lyutikova, A.V. Zimmerling, M.B. Konoshenko (eds.). Tipologiya morphosintaksicheskix parametrov-2015. Vol. 2. Moscow: MPGU. P. 47–61.

References

- Gerasimova, A. A., Lyutikova, E. A. (2021). Licenzirovanie otricatel'nyx mestoimenij v infinitivnyx klauzax: eksperimental'noe issledovanie [Licensing of negative pronouns in infinitival clauses: an experimental study] // Vladislava Warditz (ed.). Russian Grammar: System — Language Usage — Language Variation. Peter Lang: Frankfurt am Main. P. 177–190.
- Rozhnova, M. A. (2009). Sintaksicheskie svoystva otricatel'nyx mestoimenij v ispanskom I russkom yazykax [Syntactic properties of negative pronouns in Spanish and Russian]. MA thesis, Russian State University of Humanities.
- Szabolcsi, A. (2018). Strict and non-strict negative concord in Hungarian: A unified analysis // Boundaries crossed, at the interfaces of morphosyntax, phonology, pragmatics and semantics. Dordrecht: Springer. P. 227–242.
- Xolodilova, M. A. (2015). Inter-clausal negative concord. Poster for a talk at The Pragmatics of Grammar: Negation and Polarity. Caen: University of Caen Normandy.