Canadian Journal of Linguistics/Revue canadienne de linguistique, 68(1): 31–73, 2023
doi: 10.1017/cnj.2022.41

Negative Concord and locality in Russian

EKATERINA LYUTIKOVA AND ANASTASIA GERASIMOVA
Lomonosov Moscow State University, Moscow, Russia
lyutikova2008@gmail.com

Abstract

This article addresses locality conditions on Negative Concord (NC) in Russian. We examine long-distance licensing of "negative" *ni*-pronouns in subject- and object-control infinitives. Existing theories of negative concord rely in one way or another on the movement of negative concord items (NCI): either as a direct licensing condition, or as a prerequisite for entering a local configuration with the licensor. Consequently, theories predict that *ni*-pronoun movement to the matrix clause (i.e., the local domain of the matrix licensor) would increase acceptability of *ni*-licensing. Using experimental data, we explore various linear positions available for *ni*-pronouns in the matrix clause and in embedded infinitival clauses. We show that movement is not required for long-distance licensing, and that derived positions of *ni*-pronouns are independent of *ni*-licensing. We argue that although *ni*-licensing and movement both obey locality constraints, they differ as to the type of locality required. This article presents evidence for recent proposals that movement and agreement have different properties with respect to locality constraints.

Keywords: negative concord, negative pronouns, infinitives, locality constraints, Russian

Résumé

Cet article traite des conditions de localité sur la concordance négative en russe. Nous examinons la légitimation à longue distance des pronoms «négatifs» *ni* dans les infinitives à contrôle par le sujet et les infinitives à contrôle par l'objet. Les théories existantes de la concordance négative s'appuient sur le mouvement des éléments de concordance négative d'une façon ou d'une autre : soit comme condition directe de la légitimation, soit comme condition préalable à l'entrée dans une configuration locale avec l'élément légitimant ('licensor'). Par conséquent, les théories prédisent que le mouvement des pronoms *ni* vers la proposition matrice, c'est-à-dire le domaine local de l'élément légitimant dans la matrice, augmenterait l'acceptabilité de la légitimation de *ni.* À l'aide de données expérimentales, nous explorons diverses positions linéaires disponibles pour les pronoms *ni* dans la matrice et les propositions infinitives enchâssées. Nous montrons que le mouvement n'est pas nécessaire à la légitimation à longue distance et que les positions dérivées des pronoms *ni* sont indépendantes de leur légitimation. Nous soutenons que bien que la légitimation et le mouvement de *ni* obéissent

This research is supported by the Russian Science Foundation, RSF project 22-18-00037, carried out at Lomonosov Moscow State University, https://rscf.ru/en/project/22-18-00037/.

tous les deux à des contraintes de localité, ils diffèrent quant au type de localité requise. L'article présente des données appuyant des propositions récentes selon lesquelles le mouvement et l'accord ont des propriétés différentes en ce qui concerne les contraintes de localité.

Mots-clés: concordance négative, pronoms négatifs, infinitifs, contraintes de localité, russe

1. Introduction

In this article, we address locality conditions on negative concord in Russian. Russian *ni*-pronouns, which demonstrate negative concord, are licensed in semantically negative clauses and require a clausemate preverbal clitic particle *ne* 'not' which introduces sentential negation (Brown 1999, Paducheva 2011). The clausemate constraint on *ni*-pronoun licensing is lifted in infinitival complements (Gerasimova 2015, Kornakova et al. 2016), where *ni*-pronouns can be licensed from the matrix clause.[1]

Existing theories of negative concord differ as to the exact mechanisms underlying licensing of negative elements, and therefore imply differing locality constraints, as well as options to overcome them. In this article we consider three approaches. First, the binding approach (Progovac 1994), which identifies the relation between the negative pronoun and sentential negation with the relation of the anaphor and its binder. Next, the operator-movement approach (Haegeman 1995, Haegeman and Zanuttini 1991), which subsumes the relation between the negative pronoun and sentential negation under the more general spec-head relation between an operator and a head providing it with its scope position. And lastly, the agreement approach (Zeijlstra 2004), which equates the relation between the negative pronoun and sentential negation with (reverse) agreement. While making similar predictions for clausemate licensing, these approaches differ in explaining long-distance licensing: namely, taking different positions as to the dependence of long-distance licensing of an element on its raising to the more local vicinity of the licensor. In this article, we investigate long-distance licensing of *ni*-pronouns in subject- and object-control infinitives, which have been claimed in the previous literature to be structurally different, and confront theoretical predictions with empirical generalizations. The latter come from the experimental study of acceptability judgments. Exploring various linear positions available for *ni*-pronouns in matrix and embedded clauses, we show that the licensing of *ni*-pronouns by matrix negation cannot be explained within the models involving clause-level locality by assuming overt or covert movement of *ni*-pronouns to the matrix clause, and that the licensing domain of sentential negation should be extended to include infinitival complements.

[1]Abbreviations used: ACC: accusative; COMP: complementizer; DAT: dative; GEN: genitive; INSTR: instrumental; IMPF: imperfect; NCI: negative concord item; NEG: negative; NOM: nominative; NPI: negatively-polarized item; NSI: non-specific indefinite; NPP: negatively-polarized pronoun; PART: participle; PL: plural; PREP: preposition; PST: past; RNC: Russian National Corpus; SC: small clause; SHORT: short form; WCO: weak crossover.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

The article is organized as follows. In section 2 we lay the groundwork for the current study: we first present generalizations of the distribution of *ni*-pronouns and show that they exhibit strict negative concord; then, we discuss infinitival complements involving subject and object control and their transparency / opacity to syntactic processes. Section 3 contains an overview of the three approaches to negative concord, including a summary of the predictions for Russian. In section 4, the experimental study is described. Section 5 presents the discussion of the results and their implications for the theory of licensing.

2. SETTING THE SCENE

In this section we discuss the distribution of Russian *ni*-pronouns and present their licensing conditions. Then we turn to Russian infinitival complements and address the differences in the syntactic structure of subject and object control infinitives.

2.1. *Ni*-pronouns

Russian possesses a series of "negative" *ni*-pronouns (*nikto* 'nobody', *ničto* 'nothing', *nigde* 'nowhere', etc.), which are licensed by the clausemate sentential negation expressed by the preverbal clitic particle *ne* 'not'. This is demonstrated in examples (1a–b). Example (1a) shows that omission of the negative particle yields ungrammaticality; while this omission is similarly ungrammatical in the finite complement clause in (1b), despite the presence of the negative particle in the matrix clause.

(1) a. *Karaev* **(ne)* *rasskazal* *nikomu* *o* *svoem*
Karaev.NOM NEG told nobody.ACC about his.PREP
slučajno *sdelannom* *otkrytii.*
accidently made.PREP discovery.PREP
'Karaev did not tell anybody about his accidental discovery.' RNC[2]

b. *Hotja* *poroj* *mne* *ne* *kažetsja,* *čto* *on*
although sometimes me.DAT NEG seems that he.NOM
voobšče **(ne)* *ljubit* *nikogo.*
at_all NEG loves nobody.ACC
'Although sometimes it does not seem to me that he likes nobody at all.' RNC

While *ni*-pronouns require the negative particle, the negative particle is able to negate the clause it appears in on its own, as in (2a).[3] The scope of sentential negation indicated by the preverbal negative particle includes the subject (2b), but cannot be extended to the superordinate clause (2c). This last is true for infinitival clauses as well: (2d) cannot be interpreted as involving the negative operator in the matrix clause.

[2]Russian National Corpus, available at: <http://ruscorpora.ru/new/>
[3]In this article, we set aside other uses of *ne* involving constituent negation.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

(2) a. *Professor* *Delozano* *ne* *ljubit* *svoih* *učenikov!*
professor.NOM Delozano.NOM NEG loves his.ACC students.ACC
'Prof. Delozano does not like his students!' RNC
(= 'it is not the case that Prof. Delozano likes his students')

b. *Nikto* *ne* *ljubit* *svoih* *učenikov.*
nobody.NOM NEG loves his.ACC students.ACC
'Nobody likes his students.'

c. *Izvestno,* *čto* *professor* *Delozano* *ne* *ljubit* *svoih*
known that professor.NOM Delozano.NOM NEG loves his.ACC
učenikov.
students.ACC
'It is known that Prof. Delozano does not like his students.'
*'It is not known that Prof. Delozano likes his students.'

d. *Petrov* *pytalsja* *ne* *otvlekat'sja* *ot* *dorogi*
Petrov.NOM tried NEG be_distracted from road.GEN
'Petrov tried to remain focused on the road'
Literally: Petrov tried to not get distracted from the road. RNC
* 'Petrov did not try to get distracted from the road.'

Importantly, clauses containing *ni*-pronouns are never interpreted as involving double negation, neither for single (3a) nor for multiple (3b) *ni*-pronouns.

(3) a. *Nikto* *ne* *ljubit* *svoih* *učenikov.*
nobody.NOM NEG loves his.ACC students.ACC
'Nobody likes his students.'
* 'Nobody does not like his students.'

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

Ni-pronouns can generally appear in one of two positions in the clause: the position where the corresponding non-negative argument / adjunct belongs (base position, as in (1)), or the position in front of the (preverbal) negative particle, as in (4). These positions are difficult to tell apart for subject *ni*-pronouns (2b), since subjects normally precede the verb.

(4) a. *Karaev* *nikomu* **(ne)* *rasskazal* *o* *svoem*
Karaev.NOM nobody NEG told about his.PREP
slučajno *sdelannom* *otkrytii.*
accidentally made.PREP discovery.PREP
'Karaev did not tell anybody about his accidental discovery.' RNC

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

We see in (4) that movement of *ni*-pronouns to the left of the verb and of negation affect neither the negative particle requirement nor the single negation interpretation. In other

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

words, whatever the position of the *ni*-pronoun in the clause (which can be altered, for instance by scrambling), these generalizations still hold.

Russian *ni*-pronouns are the only items that appear solely under negation and participate in negative concord, that is, they demonstrate all the properties of *n-words* (Laka 1990), which appear in negative concord structures and can also be used as fragment answers with negative meaning. We conclude that Russian belongs to the class of strict negative concord languages, in which negative concord requires the presence of the negative marker (Giannakidou 1998, 2020). In what follows, we will dub phrasal elements undergoing negative concord 'negative concord items' (NCIs), following Giannakidou's (2020) notation.

The two other classes of polarity-sensitive items in Russian, non-specific indefinite *-nibud'* pronouns (NSI) and negatively polarized *-libo* pronouns (NPP), show different distribution with respect to *ni*-pronouns (Paducheva 1985, 2015; Haspelmath 1997). *-nibud'* NSIs are licensed by non-veridical operators; importantly, *-nibud'* pronouns are not licensed by clausemate sentential negation and have to be replaced by *ni*-pronouns in negative concord contexts. Unlike *-nibud'* NSIs, the licensing conditions for *-libo* pronouns do not include positive contexts and irrealis non-specific contexts; however, these pronouns are allowed in the scope of sentential negation, both clausemate and long-distance. The difference between *-libo* and *ni*-pronouns is that *-libo* NPPs, just as *-nibud'* NSIs and unlike *ni*-pronouns, are found in conditionals, interrogatives and under universal quantification.

2.2. Infinitival complements

Russian possesses a number of infinitival constructions which differ as to their distribution and internal structure. Among clausal complements, we identify subject- and object-control infinitives.[4]

Subject- and object-control infinitives differ as to a number of properties. The first property is case marking of floating quantifiers, which has been investigated in depth by Babby (1998).

Floating quantifiers – a group of adjectival elements including *sam* 'oneself', *ves'* 'all' and *odin* 'alone' – agree with their controller in gender and number and copy its case. In finite clauses, floating quantifiers controlled by the nominative subject thus is assigned the nominative case (5a). Subject-control infinitives exhibit the same pattern (5b). Crucially, in object-control infinitives, floating quantifiers referring to the infinitive's subject are assigned the dative, regardless of availability of a dative antecedent to agree with (5c).[5] Dative floating quantifiers are also attested in infinitival complements of nouns, in purpose infinitives headed by

[4]Russian lacks raising out of infinitival clauses (see Lyutikova 2022). A number of raising verbs selects for small clauses (SC) with non-verbal predicates. Modal verbs in their epistemic (but not agent-oriented) use can be argued to involve functional restructuring (Wurmbrand 2001). In this case, the infinitive spells out only a part of the extended verbal projection, and the monoclausal configuration emerges.

[5]Babby notes that in colloquial Russian, some speakers allow floating quantifiers in object-control infinitives to take the case of the controller:

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

the complementizer *čtoby* 'to, in order to', and in infinitival clauses with arbitrary PRO.[6]

(5) a. *On* *ezdit* *tuda* *odin.*
he.NOM goes there alone.NOM
'He goes there alone.'

b. *On* *ljubit* *ezdit'* *tuda* *odin.*
he.NOM loves go there alone.NOM
'He likes to go there alone.'

c. *Ona* *poprosila* *ego* *ne* *ezdit'* *tuda* *odnomu.*
she.NOM asked he.ACC NEG go there alone.DAT
'She asked him not to go there alone.'

There are several accounts of the pattern (Greenberg and Franks 1991, Babby 1998, Testelets 2001), which differ with respect to the following assumptions: (i) whether dative floating quantifiers copy the default dative case of PRO (Babby 1998, Testelets 2001) or receive it independently of PRO (Greenberg and Franks 1991); (ii) whether the antecedent of the nominative floating quantifier is the matrix subject (Babby 1998) or the nominative PRO, which copies the matrix subject's case under control (Testelets 2001). Most important, all of the accounts rely on the structural distinctions between subject- and object-control infinitives. Babby (1998) argues that subject-control infinitives lack PRO and clausal functional structure; the implied infinitive's subject is identified with the matrix subject via predication.[7] Object-control infinitives, on the other hand, are full-fledged CPs and contain PRO, which is invariably dative in Russian. Testelets (2001) opts for a less radical account, where both subject- and object-control infinitives host PRO, but its case properties are different. In subject-control configurations, the case feature on PRO can be identified[8] with the case feature of its controller DP in the matrix clause. When the case feature of the matrix subject gets valued as nominative, this value is simultaneously assigned to PRO. Object-control configurations, on the other hand, are opaque, both for the feature identification and for the subsequent valuation, and the case feature of PRO can only receive the default value. Since syntactic opacity can be due to either

(i) *Ona* *poprosila* *ego* *ne* *ezdit'* *tuda* *odnogo.*
she.NOM aksed he.ACC NEG go there alone.ACC
'She asked him not to go there alone.'
Babby considers this pattern as involving restructuring.

[6]Structural dative found in Russian infinitival clauses is often called "the second dative", following the suggestion of Comrie (1974).

[7]Babby's (1998) account is reminiscent of Wurmbrand's (2001) lexical restructuring. However, agentivity restrictions do not apply to Russian subject-control infinitives (see below), which makes Babby's analysis heavily dependent on the base-generation of the subject outside of the verbal domain.

[8]This identification may be thought of as a particular case of Pesetsky and Torrego's (2007) feature sharing. Testelets uses the descriptive term 'case agreement', which, taken literally, implies several unwelcome theoretical consequences. In this article, we adapt the technical details of the account to fit a modern framework.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

domination or c-command intervention, we conclude that object-control infinitives are structurally or featurally more complex than subject-control infinitives.

The second property distinguishing subject- and object-control infinitives concerns adjectival components of the infinitival predicate (Lyutikova 2010). In finite clauses, the adjectival predicate can appear in short or long form (6a). Much debate continues to this day surrounding both the derivational and interpretational discrepancies of the two variants, and the source of the instrumental case marking of the long form (see Chvany 1975; Nichols 1981; Babby 1985; Franks 1995; Bailyn 2001; 2012; Madariaga 2007; Pereltsvaig 2007; Matushansky 2008, 2010; Grashchenkov 2018). Analytical passive constructions employ passive participles, which appear in the short form and can be interpreted as either dynamic or stative; the long form supports only the stative interpretation of the passive construction, or signals conversion of the passive participle into an adjective (6b).

(6) a. *On byl sčastliv / sčastlivym.*
he.NOM was happy.SHORT / happy.INSTR
'He was happy.'

b. *On byl ubit / ubitym.*
he.NOM was killed.SHORT / killed.INSTR
'He was killed.'

In infinitival clauses, adjectival and passive predicates take different forms in subject- and object-control configurations. In subject-control infinitives, there is a choice between short form and instrumental long form, exactly as in finite clauses (7a–b). In object-control infinitives, the short form is ruled out, and the only option is the instrumental long form (8a–b).

(7) a. *Ja ne hoču byt' sčastliv / sčastlivym,*
I.NOM NEG want be happy.SHORT / happy.INSTR
ja hoču byt' svoboden / svobodnym!
I.NOM want be free.SHORT / free.INSTR
'I don't want to be happy, I want to be free!' RNC

b. *Možet byt', ja hoču byt' ubit / ubitym.*
maybe I.NOM want be killed.SHORT / killed.INSTR
'Maybe I want to be killed.' RNC

(8) a. *Ja prosil ee byt' gotovoj / *gotova vzjat'*
I.NOM asked her.ACC be ready.INSTR / ready.SHORT take
vsju ceremoniju na sebja.
all.ACC ceremony.ACC on herself.ACC
'I asked her to be ready to take the lead on the ceremony.' RNC

b. *V takom slučae, ot duši želaju vam*
in this case from the heart wish you.DAT
*byt' ubitym / *ubit!*
be killed.INSTR / killed.SHORT
'In this case, I wish you to be killed!' RNC

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

Again, it is evident that availability of the short form depends crucially on the presence of the nominative subject (which is unsurprising, considering that the Modern Russian short form goes back to the Old Russian nominative short form). Therefore, the explanations invoked to account for the nominative case marking of floating quantifiers in subject-control infinitives can be effectively used for predicting short-form distribution. Below we present our analysis of the structural asymmetry between subject- and object-control infinitives, and show how this analysis explains both phenomena.

We propose that subject- and object-control infinitives differ as to the amount of clausal structure projected by them. In line with previous formal analyses (Greenberg and Franks 1991, Franks 1995, Babby 1998, Testelets 2001, Landau 2004), we assume that object-control infinitives are full-fledged CPs, which contain a subject PRO controlled out of the matrix clause. This hypothesis is not only a natural default assumption regarding the syntactic category of a clause-like constituent (Stowell 1982, Chomsky 1986), but is also corroborated by a number of syntactic properties that object-control infinitives share with infinitival clauses with overt C / Spec,CP. These include purpose clauses introduced by the complementizer *čtoby* (9a) and non-finite indirect *wh*-questions (9b).

(9) a. *No tebe nado postarat'sja, čtoby polučit' horošij attestat.*
but you.DAT need endeavour to receive good.ACC diploma.ACC
'However, you have to work hard to receive a diploma with honours.' RNC

b. *Daže ne znaju, čto posovetovat'.*
Even NEG know what.ACC advise
'I am not sure what to advise.' RNC

Crucially, all the diagnostics distinguishing between subject- and object-control infinitives produce identical results with infinitival clauses in (9) and object-control infinitives. Thus, floating quantifiers in such clauses are dative (10), and adjectival predicates cannot employ the short form (11).

(10) a. *Ljuba priexala, čtoby pokupat' maslo samoj / * sama.*
Ljuba.NOM arrived to buy butter.ACC herself.DAT / herself.NOM
'Ljuba arrived to buy butter herself.' Franks 1990: 244

b. *Ljuba znaet, kak pokupat' maslo samoj / * sama.*
Ljuba.NOM knows how buy butter.ACC herself.DAT /herself.NOM
'Ljuba knows how to buy butter herself.'

(11) a. *No čtoby byt' konkurentosposobnymi / *konkurentosposobny, my dolžny*
but to be competitive.INSTR / competitive.SHORT we must
dobit'sja real'noj tseny.
achieve real.GEN price.GEN
'However, to be competitive we need to get the appropriate price.' RNC

b. *V obychnoj dokrizisnoj zhizni vy znali, kogda byt'*
in usual.PREP pre-crisis.PREP life.PREP you.NOM knew when be
*dovol'nym /*dovolen soboj i svoimi rezul'tatami.*
content.INSTR /content.SHORT oneself.INSTR and own.INSTR results.INSTR
'In usual pre-crisis life you knew when to be content with yourself and your results.' <lifehacker.ru/semya-v-samoizolyacii>

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

We therefore conclude that object-control infinitives are CPs headed by an empty complementizer which selects for a non-finite TP. A further necessary component of the analysis is the source of the dative case assigned to PRO. Two options are worth discussing: first, that PRO is case-marked by a specific T, defective with respect to tense or ϕ-agreement (Greenberg and Franks 1991, Chomsky and Lasnik 1993, Landau 2004), and second, that PRO is case-marked by a specific C, much like the overt infinitival subject is case-marked by the prepositional complementizer *for* in English (Vergnaud 2007 [1977], Chomsky 1981). Though both accounts can be adapted to account for the Russian data, we argue for the second. The ability to assign case should be considered a property of a lexical item; accordingly, the corresponding case should be available in any configuration where this lexical item appears. The question is, then, whether object control C or non-finite T appears in other configurations and if so, whether they demonstrate their case-assigning properties in those configurations. Object control C can be identified as a specific lexical item independently of its case-assigning properties: it selects for a non-finite TP and introduces the obligatory *de se* reading (Landau 2015). This combination of characteristics is unique for object-control configurations. On the contrary, T in object-control infinitives cannot be reasonably distinguished from T in subject-control infinitives. Therefore, if PRO received dative from T in object-control configurations, we would expect dative be equally available for PRO in subject-control configurations. Yet, subject-control infinitives disallow dative floating quantifiers, see (12).

(12) *On* *ljubit* *ezdit'* *tuda* *odin* */ *odnomu.*
he.NOM loves go there alone.NOM / alone.DAT
'He likes to go there alone.'

In light of those considerations, we assume that the object control C assigns dative case to PRO. This hypothesis explains why dative is only attested in subjects of object-control infinitives, but not in subject-control infinitives or other non-finite verbal constituents (gerunds or participles). Thus, our analysis of object-control infinitives is similar to that of Babby (1998), Testelets (2001) or Landau (2004).

As for subject-control infinitives, we propose that they involve a kind of size restructuring in the sense of Wurmbrand (2014). Specifically, we claim that subject-control infinitives are truncated structures lacking the A-bar domain over TP. Accordingly, they are similar to object-control infinitives in that they project the A-domain of the clause, including TP which hosts PRO in its specifier, as well as other functional projections under TP. However, they differ from object-control infinitives in that they do not project a CP layer, meaning A-dependencies may cross the infinitive's boundary.

We believe that size restructuring is a viable (and superior) alternative to Babby's VP analysis of subject-control infinitives for several reasons. Firstly, subject-control infinitives, much like object-control infinitives, exhibit properties associated with the presence of verbal and clausal projections above VP: they support aspectual oppositions relevant to the outer aspect, allow their own agent-oriented adverbial modification and can host their own interpretable sentential

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

negation (13). Negation is especially indicative of the rich functional structure in subject-control infinitives if the presence of NegP implies the presence of TP (Zanuttini 1991). Consequently, subject-control infinitives cannot involve Voice restructuring, whichever analysis one chooses – bare VP (Babby 1998, Wurmbrand 2001), restructuring *v* (Wurmbrand 2014) or restructuring Voice (Wurmbrand and Shimamura 2017). Furthermore, if sentential negation implies TP, as Zanuttini (1991) claims, Russian subject-control infinitives are not only bigger than a VoiceP – they are as big as TPs.

(13) *V Moskve, voobražaja ohotu, on mečtal*
In Moscow dreaming.PART hunt.ACC he.NOM wished
nikuda ne toropit'sja…
nowhere NEG rush
'In Moscow, when dreaming of hunting, he wished not to rush anywhere…' RNC

Secondly, subject-control infinitives should involve PRO, which implies, in its turn, a specific syntactic position – Spec,TP – for it to be licensed (Sigurðsson 1991, 2008; Marantz 1991; Chomsky and Lasnik 1993; Roger 2001, a.m.o.). Russian subject-control infinitives differ radically from constructions involving Voice restructuring (and lacking PRO), as is the case in German, in that the infinitive's subject can correspond to the internal argument of passive or unaccusative infinitives (14).

(14) a. *Vy, verojatno, želaete byt' dopuščeny k*
you.PL.NOM probably want.2PL be accepted.SHORT.PL for
konkursnomu ekzamenu i podavali prošenie?
competitive.DAT examination.DAT and filed request.ACC
'You probably want to be accepted for the competitive examination and have iled the request?' RNC

b. *V naše vremja damy privykli byt' priglašaemy v bar.*
in our times ladies.NOM used.PL be invited.SHORT.PL to bar
'Nowadays, ladies are used to being invited to a bar.' RNC

c. *Doč, naprimer, poedaja lipkij snežok*
daughter.NOM for example eating.PART sticky.ACC snowball.ACC
s zemlej, dejstvitel'no mečtala zabolet' i sdelat'sja nesčastnej
with soil.PREP indeed dreamed get ill and become unhappy.COMP
bespomoščnoj materi.
helpless.GEN mother.GEN
'The daughter, for instance, while eating the sticky snowball with soil, indeed dreamed of getting ill and becoming even unhappier than her mother.' RNC

Finally, if Wurmbrand (2014) is right that the possibility of the "future" temporal interpretation of the infinitive distinct from that of the matrix verbal form is a hallmark of a TP projection within the infinitival phrase, then Russian subject-control infinitives are at least TPs (15).

(15) *Borodankov skazal mne, čto ty hočeš' vypisyvat'sja zavtra.*
Borodankov.NOM told me.DAT that you.NOM want check out tomorrow
'Borodankov told me that you want to check out tomorrow.' RNC

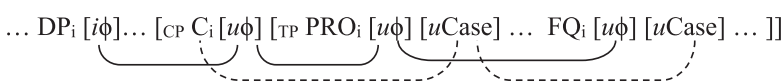
https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

We conclude that size-restructuring analysis of Russian subject-control infinitives as involving TP and controlled PRO is justified. Now we can use this structural asymmetry between subject and object-control infinitives to explain their different behaviour with respect to licensing nominative floating quantifiers and the short form of adjectives and participles.

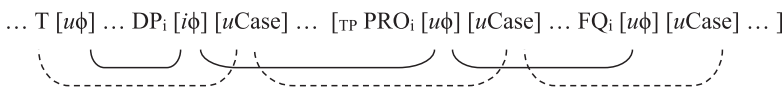
Let us start with the case properties of floating quantifiers. We build on the general idea that floating quantifiers are copying the case of their controller DP and, consequently, inform us of the case properties of PRO (Sigurðsson 1991, Babby 1998). In object-control infinitives, which are CPs, PRO is uniformly dative[9]; accordingly, floating quantifiers show up in dative, too.

In subject-control infinitives, there is no CP boundary and no source for the second dative (which, we assume, is assigned by the infinitival C in object-control infinitives). Accordingly, the case feature of PRO, as well as its ϕ-features, gets identified with the features of the controller DP in the matrix clause. When the case feature of the controller DP gets valued as nominative, the case feature of PRO is thereby valued, too. Thus, the absence of the CP-shell in subject-control infinitives entails, on the one hand, that PRO cannot be assigned case within its infinitival phrase and, on the other hand, that the clause boundary is transparent for A-dependencies, including ϕ-agreement and case assignment.

(16) a. object-control infinitives: ϕ-agreement mediated by C, dative case assignment by C



b. subject-control infinitives: ϕ-agreement and case assignment across the TP boundary



Now let us turn to the distribution of the short form of adjectives and passive participles in infinitives.

We follow Geist (2010) and Grashchenkov (2018) in assuming that short forms of adjectives project their subject and license it thematically; that is to say, passive participles project the subject as their internal argument, in the thematic position. Importantly, case is marked only on long forms of adjectives and participles in Modern Russian; short forms bear gender and number features, but not a case feature. Accordingly, they need not be case-licensed. Short forms combine with the auxiliary to build a legitimate predicate; the subject DP/PRO raises to Spec,TP and its case feature can be valued as nominative by the finite T. This is represented schematically in (17).

[9]The ϕ-features of PRO in object-control infinitives are bound by the local operator in C, along the lines of Landau (2015).

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

(17) a. short form of the adjective in the predicative position
[$_{TP}$ DP/PRO$_i$ T [$_{AuxP}$ Aux [$_{AP}$ t$_i$ A] $_{[u\text{Gen}]}$ $_{[u\text{Num}]}$]]

b. short form of the passive participle in the predicative position (passive)
[$_{TP}$ DP/PRO$_i$ T [$_{AuxP}$ Aux [$_{PartP}$ Part$_{PASS}$ [$_{vP}$ *v* [$_{VP}$ V t$_i$]]] $_{[u\text{Gen}]}$ $_{[u\text{Num}]}$]]

Long form adjectives/passive participles in predicative position have a more articulated structure. We adopt the hypothesis argued for in Bailyn (2001, 2012), Madariaga (2007), Matushansky (2008, 2010), Grashchenkov (2018), which identifies instrumental case assignment in adjectival predicates with the functional head Pred (which take an adjectival/participial phrase as their complement) and introduces the subject DP as the external argument. We assume Graschchenkov's (2018) approach to long forms of adjectives (and participles) as involving an additional functional layer, adjP, which introduces the unvalued uninterpretable case feature into the adjectival/participial constituent. The adjP is construed semantically as a predicate over individuals, due to the adjP layer which triggers λ-abstraction over an individual variable corresponding to the internal argument of the adjective/passive participle. Importantly, this operation converts the participle into a stative predicate, which excludes its dynamic interpretation available in the short form. Our assumptions about the structure of instrumental long forms in predicative position are represented schematically in (18).

(18) a. Long form of the adjective in the predicative position (instrumental case)
[$_{TP}$ DP/PRO$_j$ T [$_{PredP}$ t$_j$ Pred [$_{adjP}$ *Op*$_i$ adj [$_{AP}$ *pro*$_i$ A]$_{[u\text{Gen}]}$ $_{[u\text{Num}]}$]$_{[u\text{Case}]}$]]

b. Long form of the passive participle in the predicative position (instrumental case)
[$_{TP}$ DP/PRO$_j$ T [$_{PredP}$ t$_j$ Pred [$_{adjP}$ *Op*$_i$ adj [$_{PartP}$ Part$_{PASS}$ [$_{vP}$ *v* [$_{VP}$ V *pro*$_i$]$_{[u\text{Gen}]}$ $_{[u\text{Num}]}$]$_{[u\text{Case}]}$]]

The last thing to be taken into account is that short forms are heavily restricted in their distribution. There are just two licit configurations for short forms: the predicate of the finite clause, or the complement of the adj head creating the long forms. We tentatively suggest that short forms have to discharge their *u*Fin(ite) feature, which can be checked against the finite T head or discharged by the adj head.[10]

Now we are in the position to discuss distribution of long and short forms of adjectives/passive participles in control infinitives.

Long forms marked with instrumental case are available in both subject- and object-control infinitives, since they are licensed locally, within the predicate's internal structure. Short forms, however, require an accessible finite T to be licensed. Subject-control infinitives lack the CP layer and, accordingly, the finite T in the main clause is accessible to the elements of the infinitival clause. In object-control infinitives, however, short forms cannot be licensed: within the infinitival clause,

[10]We leave the technical implementation of this analysis for future research. For our current purposes, whichever technique allowing the association of the licensing of the short form in the predicative position with the accessibility of the finite T / nominative subject would suit.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

finite T / nominative subject are not available, and the functional structure of the main clause is inaccessible due to the CP boundary, that is opaque for A-domain agreement processes.

Hence, the distribution of both nominative floating quantifiers and short form adjectives / passive participles supports the generalization drawn above: object-control infinitives are more opaque than subject-control infinitives, and this difference can be captured by the assumption that the former involve a more complex structure than the latter. Specifically, they differ as to the presence of the A-bar domain of clausal functional structure, instantiated by the CP layer (and, possibly, other functional projections associated with this domain).

It is reasonable to expect that this difference might impact the availability of long-distance licensing of *ni*-pronouns. However, we need first to investigate options accounting long-distance licensing in existing theoretical models. It is worth noting that the theories of negative concord (NC) only draw a distinction between the two degrees of locality – monoclausal configurations, and finite embedding. Therefore, investigating intermediate levels instantiated by non-finite complement clauses of various sizes is an important challenge. In the next section, we present our overview of the three syntactic approaches to negative concord, special attention being paid to locality issues.

3. Theoretical approaches to negative concord

There are three main approaches to negative concord that we consider in this paper: the binding approach (Progovac 1994), the operator movement approach (Haegeman and Zanuttini 1991, Haegeman 1995) and the agreement approach (Zeijlstra 2004). We first consider the details of each analysis and then suggest what predictions the three approaches make about negative concord and *ni*-pronouns licensing in Russian.

3.1. Binding approach

The binding approach (Progovac 1994) considers the relation between the licensor and licensee to be similar to the relation between the binder and the anaphor. Negative concord items (NCIs) like Russian *ni*-pronouns are regarded as negatively-polarized items (NPIs). The approach captures successfully many of their properties, including clause-level locality of licensing, obligatory c-command by the licensor, conditions on the potential licensor (negative I, truth-conditional operator in C), the one-way conditionality of the licensing relation (the licensee needs the licensor, the licensor is independent of the presence of the licensee), the mutual independence of several licensing relations with the same licensor, as well as obviation from a local antecedent exhibited by positive polarity items (PPIs) and non-local NPIs (PPIs and non-local NPIs take a wide scope with respect to the local licensor).

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

The local domain for licensing is always as large as a minimal IP containing the NPI.[11] Consequently, the theory predicts that NPIs are licensed by the clausemate negation. This is indeed so for *ni*-pronouns in Serbo-Croatian: they need a local negator as a licensor (19a) and cannot be licensed by either truth-conditional operator in C (19b) or a superordinate negator (19c).

(19) a. *Milan *(ne) vidi ni(t)ko-ga.*
Milan no sees no-one-ACC
'Milan cannot see anyone.'

b. **Da li Milan voli ni(t)ko-ga ?*
that Q Milan loves no-one-ACC
Intended: 'Does Milan love anyone?'

c. **Milan ne tvrdi* [*da Marija poznaje ni(t)ko-ga*].
Milan no claims that Mary knows no-one-ACC
Intended: 'Milan doesn't claim that Mary knows anyone.'

There is an option in Progovac's system to analyze long-distance licensing of NPIs normally licensed in the local (clausemate) domain, like English *anyone* (20a–c).

(20) a. Mary didn't insult anyone.

b. Did Mary insult anyone?

c. I do not say that Mary insulted anyone.

The idea is that long-distance licensing results from the (LF) raising of NPIs that need to be licensed. This raising may proceed through adjunction to IP, movement to Spec, CP, or both. Accordingly, the raised NPI can enter the local licensing configuration with the truth-conditional operator in C, with the superordinate negation, or with any of them, as English *anyone* does.

(21) LF representation:

a. [$_{IP}$ Mary didn't insult anyone].

b. [$_{CP}$ Did [$_{IP}$ anyone [$_{IP}$ Mary insult ~~anyone~~]]]?

c. [$_{IP}$ I don't say [$_{CP}$ anyone that Mary insulted ~~anyone~~]].

To sum up, long-distance licensing under a binding approach is crucially dependent on the ability of an NPI to raise to the higher licensing domain. This ability might be restricted by general constraints on movement (i.e., island conditions) or by properties of specific NPIs. Thus, small clause (SC) *ni*-pronouns do not raise at all, and this is why they can only be licensed by the clausemate negation.

[11]If for some reason a (defective) I cannot host negation, the logic behind the binding approach requires an extension of the local domain (for NPIs that are subjects to principle A) to the inclusion of the first element that could potentially serve as a licensor. This adjustment is not relevant for our data, since both subject and object-control infinitives may host negation on their own.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

3.2. Operator-movement approach

The operator-movement approach (Haegeman and Zanuttini 1991, Haegeman 1995) assumes that NCIs like Russian *ni*-pronouns or West Flemish *nie*-pronouns are negative quantifiers (NEG-phrases), not NPIs. As such, they represent a special case of affective operators, the class that includes *wh*-phrases as well. The relation between NEG-phrases and negation follows from the generalized Affective criterion (Klima 1964), which determines well-formedness conditions for affective elements. For negation, the criterion takes the form of (22).

(22) NEG-criterion Haegeman 1995: 134

a. A NEG-operator must be in a Spec-head configuration with an X°[NEG];

b. An X°[NEG] must be in a Spec-head configuration with a NEG-operator;
where NEG-operator is a NEG-phrase in a scope position, and scope position is defined as a left-peripheral A′-position (an XP-adjoined position or a specifier position).

It should be noted that negative quantifiers are not NPIs, hence in principle do not need licensing. Negative quantifiers only become NEG-operators (and subject to the NEG-criterion) in a left-peripheral A′-position, but lack operational force in *situ*, in the argument position, see example (23a–b) from West Flemish.

(23) a. NEG-phrase in argument position, no NC, double negation interpretation
da *Valere* *woarschijnlijk* *nie* *niemand* *(en)-kent*
that Valere probably not nobody X°[NEG]-knows
'That Valere probably doesn't know nobody', (i.e., Valere knows someone)

b. NEG-phrase in scope position, NC
da *Valere* *woarschijnlijk* *niemand*$_i$ *nie* t_i *(en)-kent*
that Valere probably nobody not X°[NEG]-knows
'That Valere probably does not know anyone'

However, in languages like Russian where *ni*-pronouns are licit only in negative contexts,[12] the functional definition of the NEG-operator might be overridden by the intrinsic definition – Russian *ni*-pronouns are intrinsically NEG-operators, and

[12]We set aside a number of idiomatic expressions exhibiting *ni*-pronouns which do not need negation, like *byt' ni k čemu* 'no need in', *ostat'sja ni s čem* 'end up with nothing', *byt' ni pri čem* 'have nothing to do with', etc.:

(i) *I* *opjat'* *ostalsja* *Semjon* *ni s čem.*
and again ended up Semjon.NOM with nothing.PREP
'Again, Semjon ended up with nothing.' RNC

A reviewer suggested that *ni*-pronouns used in such expressions are negative quantifiers that have not become NEG-operators. If this were the case, we would expect that *ni*-pronouns could be licensed without sentential negation outside of these idioms. However, this contradicts the empirical data. By contrast, these idiomatic expressions are the only case when sentential negation is not needed. See Fitzgibbons (2008) for more detail.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

this is why they need to assume the specifier position of X°[NEG]. In this way, the relation between negation and *ni*-pronouns becomes a licensing relation.[13]

The NEG-criterion states that clauses involving NC are not so different from simple negative clauses like *Mary didn't come*. In both cases the clause contains a Neg head (or whatever functional head whose specifier counts as an A′-position) equipped with the feature [NEG]; in the specifier of this head, at least one NEG-operator is located. In simple negative clauses, the NEG-criterion is satisfied by a base-generated operator (overt, like French *pas*, or non-overt). In negative clauses exhibiting NC, negative quantifiers undergo overt or covert (LF) movement to this position, and multiple negative specifiers undergo NEG-absorption so as to be interpretable as one single specifier.

The NEG-criterion applies at LF, but in languages with overt NEG-operator movement, for instance West Flemish, it might be satisfied at earlier stages of the derivation. This conjecture makes a reasonable parallel to the overt or covert movement of *wh*-operators, which should take their scope position at LF at the latest stage, but which in many languages undergo obligatory or optional movement before spell-out. Similarly, covert movement of NEG-operators obeys constraints on movement, for example island constraints or a *that*-trace filter. For instance, in the French example (24a), the object negative pronoun in the embedded clause can raise to the matrix X°[NEG] at LF, whereas in (24b), raising of the subject negative pronoun produces a *that*-trace effect, which results in ungrammaticality (Haegeman 1995: 80). The effect is thus parallel to the contrast in (24c–d), where extraction of the *wh*-object is licit, whereas extraction of the *wh*-subject produces violation of the *that*-trace filter.

(24) a. *Je ne demande que tu dises rien.*[14]
I *ne* demand that you say.SUBJ nothing
'I don't ask that you say anything'. Haegeman 1995: 80

b. **Je ne demande que personne dise cela.*
I *ne* ask that no one say.SUBJ that
Intended: 'I don't ask that anybody say that'. Haegeman 1995: 80

c. *Qui a-t-il dit que Marie voulait voir __?*
who has-he said that Marie wanted to see
'Who did he say that Marie wanted to see?' Perlmutter 1971: 99

d. **Qui a-t-il dit que __ voulait voir Marie?*
who has-he said that wanted to see Marie
'Who did he say wanted to see Marie?' Perlmutter 1971: 99

[13]It is easy to see that the link between the sentential negation marker and NCIs within NC configurations might be more complex than a binary relation. This depends on the characteristics of the element spelling out sentential negation. If this is an X°[NEG], as West Flemish *en*, then phrasal negative elements should move to its specifier. If, on the other hand, it spells out the NEG-operator and is accordingly located in the specifier position, as West Flemish *nie* or French *pas*, then NCIs are attracted by the distinct constituent, X°[NEG].

[14]We are aware of the fact that many French speakers perceive this sentence as ungrammatical. Here we reproduce judgments from Haegeman (1995).

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

Another example of the parallelism of the (covert) NEG-operator movement and *wh*-movement is provided in (25). It shows that in Italian, both licensing of negative pronouns and extraction of *wh*-phrases is restricted by the adjunct island.

(25) a. **Non* fa questo lavoro [per aiutare *nessuno*].
NEG do.3SG this work to help.INF no one
Intended: 'He does not do this work in order to help anyone.' Zanuttini 1991: 166

b. *Quale ragazzo$_i$ fa questo lavoro [per aiutare t_i]?
which boy do.3SG this work to help.INF
Intended: *'Which boy does he do this work in order to help?'

As (24a) clearly shows, NEG-operator movement is not restricted by the clausemate condition. Apparently, locality constraints on NEG-movement might be computed as regular A′-movement constraints, where subjacency restrictions are adjusted to the two parameters distinguishing NEG-movement from *wh*-movement: (i) the target position is Spec,NegP, not Spec,CP (hence the number of bounding nodes to cross differs); and (ii) the type of available intermediate positions (it is not clear whether the intermediate Spec,CP, or the intermediate Spec,NegP, should serve as a landing site for successive cyclic movement).

It is important to note that the island conditions produce more restrictions for the operator-movement approach than for the binding approach: for instance, the former bans NCIs in adjunct clauses when the licensor is in the matrix clause, whereas the latter tolerates them.[15] This is because the binding approach only requires that the NPI enters the same domain as the licensor, which can be achieved through movement within the adjunct clause. On the other hand, the operator-movement approach requires that the NEG-operator moves to the specifier of the licensor, which can only be achieved through movement out of the adjunct clause.

3.3. Agreement approach

The agreement approach (Zeijlstra 2004), couched in the framework of minimalism, argues that negative concord is an agreement phenomenon. NCIs in NC configurations are semantically non-negative indefinites, and as such do not introduce semantic negation. Interpretable negation is forced syntactically, through the assumption that NCIs are equipped with a [uNEG] feature. This means that for the derivation to converge there has to be a constituent with a [iNEG] feature to "defuse" the [uNEG] feature through agreement/checking. In this way, the licensing relation between semantic negation and NCIs is shaped in the form of one-way

[15]Certainly, both the operator movement approach and the binding approach allow NCIs to be licensed **within** the adjunct clause if it contains the NEG-operator; this prediction is borne out for Russian, too:

(i) *No net, oni prohodjat mimo, nikuda ne gljadjat, nikogo *(ne) ožidaja vstretit'*
But no they go by nowhere NEG look nobody NEG expect.PART meet
'But no, they go by, do not look anywhere, do not expect to meet anybody.' RNC

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

agreement: elements bearing [uNEG] need an element bearing [iNEG], but not vice versa.

The difference between strict NC languages (e.g., Czech or Russian) and non-strict NC languages (e.g., Italian) concerns the interpretation of the negative marker. In strict NC languages, the negative marker bears [uNEG] as well, and requires a covert negative operator *Op* in Spec,NegP bearing [iNEG]. Therefore, in strict NC languages, the position of NegP is not associated with the position of the negative marker, and can be assumed to be situated high enough to outscope the negative marker and all the NCIs; see example (26) from Czech.

(26) a. *Nikdo ne-volá.*
nobody NEG-calls
'Nobody is calling.'

b. [$_{NegP}$ $Op_{[iNEG]}$ Neg [$_{vP}$ nikdo$_{[uNEG]}$ [v' nevolá$_{[uNEG]}$]]]

In non-strict NC languages, the negative marker itself carries [iNEG]. Accordingly, NCIs cannot move to the left of the negative marker, because of the LF constraint on variables which have to be c-commanded by their binder.[16] Therefore, only the NCIs to the right of the negative marker can enter NC; see examples (27)–(28) from Italian.

(27) a. *Non ha telefonato nessuno.*
NEG has called nobody
'Nobody called.'

b. [$_{NegP}$ non$_{[iNEG]}$ [$_{TP}$ ha telefonato [$_{vP}$ nessuno$_{[uNEG]}$ …]]]

(28) a. **Nessuno non ha telefonato.*
nobody NEG has called
Intended: 'Nobody called.'

b. *[nessuno$_{[uNEG]}$ [$_{NegP}$ non$_{[iNEG]}$ [$_{TP}$ ha telefonato]]]

It is worth noting that the agreement approach to NC requires very specific assumptions about the possible shapes of the Agree operation. First of all, since the number of NCIs is not limited, multiple Agree should be an option. Secondly, the c-command relation between interpretable and uninterpretable occurrences of the feature is reversed. Standard Agree, as proposed in Chomsky (2000), is driven by an unvalued uninterpretable feature on the Probe, and the search for its valued interpretable counterpart (Goal) is performed in the Probe's c-command domain. The relation between the Probe and the Goal thus can be dubbed a "downward search, upward valuation". The agreement approach to NC requires direction reversal, namely, "upward search, downward valuation", which has been argued for on independent grounds in Wurmbrand (2012a, b, 2017) and in Zeijlstra (2012). Thirdly, agreement in [NEG]

[16]If the the NCI were to raise over the negative operator Op, the individual and event variable in its argument would be bound by a lower quantifier (an unselective existential quantifier introduced by negation), which is illicit:

(i) *[$_{TP}$ [P(x) & Q(e, x)] [$_{NegP}$ ¬∃$_{e,x}$]]

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

feature should never be accompanied by movement, since movement would produce an illicit LF configuration extracting existential quantifiers out of the scope of the negative operator.

The locality issues are not addressed in Zeijlstra (2004); however, they are mentioned in passing in Zeijlstra (2012) arguing that negative concord may not apply across the finite CP boundary, as example (29) from Italian shows.

(29) **Gianni non ha detto che ha telefonato a nessuno.*
Gianni NEG has said that has called nobody
Intended: 'John didn't say that he called anybody.'

The reason for this, Zeijlstra suggests, is that the C head responsible for the locality violation carries no [uNEG] feature. Reverse Multiple Agree, in general, is said to apply across phase boundaries only if the phase edge itself also participates in the Agree relation. Accordingly, in (29) where C is not equipped with [uNEG], the agreement relation between [iNEG] on *non* and [uNEG] on *nessuno* cannot be established. Remarkably, in cases like this, Agree could be enabled if NCI enters the local domain of [iNEG] as the result of another syntactic movement operation. A similar scenario is observed with the binding of anaphors. For example, *himself* is not locally bound in (30a)–(31a), which results in ungrammaticality, whereas *wh*-movement of the DP containing the anaphor, or A-movement of the antecedent, results in configurations that satisfy Condition A in (30b) and (31b) respectively.

(30) a. **Mary$_i$ thinks Bill likes best these pictures of herself$_i$.*
b. *Mary$_i$ wonders [which pictures of herself]$_i$ Bill likes best t$_i$.*

(31) a. **It seems to himself$_i$ that Bill$_i$ is liked t$_i$ by Mary.*
b. *Bill$_i$ seems to himself$_i$ to be liked t$_i$ by Mary.*

In this way, the agreement approach becomes similar to the binding approach in that it assumes clause-level locality of the licensing relation which can be overridden by movement.

3.4. Predictions for Russian NC

In this section, we sum up the predictions of the three approaches regarding the locality of licensing *ni*-pronouns in Russian. We are especially interested in licensing *ni*-pronouns in infinitival complements by the matrix negation, as in (32a) for subject control, and (32b) for object control.

(32) a. *Ja ne pytajus' ničego istolkovyvat' v ego puti.*
I.NOM NEG try nothing.ACC interpret in his way.PREP
'I don't try to interpret anything in his way.' RNC

b. *Kolduny ... ne veljat rabotnikam ničego*
sorcerers.NOM NEG allow workers.DAT nothing.ACC
est' vo vremja lovli.
eat during fishing.GEN
'Sorcerers do not allow workers to eat anything while pearl fishing. RNC

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

The first thing we need to ensure is that *ni*-pronouns are indeed licensed out of the matrix clause. As a matter of fact, local NPIs can seem to be long-distance-licensed due to the Neg(ative) raising (see example (33)) – a derivational or interpretational reconstruction of semantic negation in the embedded clause (Horn 1978, 1992; Collins and Postal 2012).

(33) I don't think he'll come.

(i) (unlikely) surface scope of negation: 'It is not the case that I think that he'll come.'

(ii) (likely) reconstructed/narrow scope of negation: 'I think that it is not that case that he'll come.'

An argument for a syntactic account of Neg-raising is that NPIs requiring a local licensor are licit in clauses embedded under Neg-raising predicates with a Neg-raising predicate like *believe*, as in (34a) and non-licit, as in (34b), with a non-Neg-raising predicate like *claim*,

(34) a. Calvin did not believe that Mona would move in until June.

b. *Calvin did not claim that Mona would move in until June.

Going back to the Russian examples in (32), we observe that (32b) is preferably interpreted as involving Neg-raising, but (32a) is not. Therefore, the long-distance licensing of *ni*-pronouns can in principle result from Neg-raising, but, importantly, is also attested in non-Neg-raising configurations.

The next thing to observe is that Russian *ni*-pronouns allow long-distance licensing only in non-finite complement clauses. Examples (35a–b) with non-Neg-raising matrix predicates are judged unacceptable by native speakers.[17]

(35) a. * *Advokat ne nastaival, čtoby ego klient otvečal nikomu*
lawyer.NOM NEG insist that his.NOM client.NOM respond nobody.DAT
na neobosnovannye obvinenija.
to unsubstantiated.ACC accusations.ACC
Intended: 'The lawyer did not insist that his client respond to anybody's unsubstantiated accusations.'

b. * *Prodjuser ne bespokoilsja, čto veduščaja podskazyvala nikomu*
producer.NOM NEG worry that host.NOM tell nobody.DAT
otvety na voprosy viktoriny.
answers.ACC to questions.ACC quiz.GEN
Intended: 'The producer didn't worry that the host was telling anyone the answers to the quiz questions.'

This is expected, if we consider Russian *ni*-pronouns to be universal NCIs (or universal n-words). Along with other diagnostics for universal n-words, Giannakidou and Zeijlstra (2017) mention that the long-distance licensing of such elements is allowed only through a transparent domain: an infinitival clause (as in Russian

[17] In the pilot study with 81 native speakers, these examples scored 1–2 out of 7 on the Likert scale.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

example (32)), or a subjunctive clause (as in French (36a), repeated from example (24), or Italian (36b)).

(36) a. *Je ne demande que tu dises rien.*
I *ne* demand that you say (subj) nothing
'I don't ask that you say anything'. Haegeman 1995: (27a)

b. *Non pretendo che tu dica niente.*
non I-ask that you say (subj) nothing
'I don't ask that you say anything'. Haegeman 1995: (32a)

In view of the above, we only consider long-distance *ni*-licensing in infinitival complements of non-Neg-raising subject and object-control verbs.

We start with identifying three linear positions available for *ni*-pronouns in these configurations. As was shown in section 2.1, *ni*-pronouns in simple clauses appear in two positions: in the base position, where the corresponding non-negative argument / adjunct belong, and in the position in front of the preverbal negative particle *ne* 'not'. In infinitival complementation constructions, one additional position seems to be available for *ni*-pronouns: preceding the infinitive. The three options are shown in (37)–(38): the base position (a), the position in front of the infinitive (b) and the position in front of the matrix verb and negation (c).

(37) Žurnalist {**nikomu (c)**} ne proboval {**nikomu (b)**}
journalist.NOM nobody.DAT NEG try nobody.DAT
vozražat' {**nikomu (a)**} v kommentarijah k stat'e.
object nobody.DAT in comments to article
'The journalist did not try to object to anyone in the comments to the article.'

(38) Lektor {**nikomu (c)**} ne vynuždal assistenta {**nikomu (b)**}
lecturer.NOM nobody.DAT NEG force assistant.ACC nobody.DAT
rekomendovat' {**nikomu (a)**} novyj učebnik po statistike.
recommend nobody.DAT new.ACC textbook.ACC on statistics.DAT
'The lecturer did not force his assistant to recommend to anyone the new textbook on statistics.'

Now let us move on to the possible accounts of (37)–(38).

Under the binding approach, *ni*-pronouns are subject to principle A and should be licensed by the local negative T or by the superordinate negative T; in the latter case, they should be able to raise overtly or covertly to the local vicinity of the superordinate T. In section 2.2 we proposed an analysis of subject- and object-control infinitives and suggested that the two types project different amounts of clausal structure, but both include TP. Accordingly, the T head of the infinitival clause is the nearest eventual antecedent of the *ni*-pronouns located within this clause. Since it is not negative in the examples under discussion, the *ni*-pronouns cannot be licensed locally. The question is, then, whether Russian *ni*-pronouns in their base position can be licensed through covert raising. If Russian *ni*-pronouns are unlike SC *ni*-pronouns in that they can raise covertly and in this way get licensed by the superordinate negation, the theory predicts that this raising proceeds through Spec,CP in object-control infinitives; whereas in subject-control infinitives, which lack the CP layer, they can be suggested to adjoin to TP. If so, *ni*-pronouns in their base position should be

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

licensed not only in whatever infinitival clause, but also in whatever finite clause. However, this prediction contradicts the data, as we see in (35).

The derived position of *ni*-pronouns before the matrix verb (position (c)) clearly cannot correspond to the position the long-distance-licensed NPI should raise to overtly. Consequently, the movement of *ni*-pronouns to the derived position (c) is motivated independently of *ni*-licensing. However, it can have impact on *ni*-licensing by raising the pronoun to the local domain of the matrix licensor.[18] Therefore, the binding approach predicts the positive impact of the overt raising of *ni*-pronouns into the matrix clause. As for the intermediate position, it can in principle be associated with Spec,CP (or whatever edge position of the infinitival clause), which would allow the *ni*-pronoun to be licensed. On the other hand, it can equally be analogous to the position of the *ni*-pronoun in the finite clause, and in this case, it is lower than the subject. As a result, we cannot make specific predictions on the possibility of *ni*-licensing in this position.

The predictions of the binding approach for *ni*-licensing in Russian control infinitives under our assumptions about the structure of subject- and object-control infinitives are represented in Table 1.

	before matrix verb (c)	before infinitive (b)	base position (a)
subject-control infinitives	+	?	-
object-control infinitives	+	?	-

Table 1: Predictions of grammaticality under the binding approach

The operator-movement approach provides a straightforward explanation for the three positions available for *ni*-pronouns. The position before the matrix verb is the specifier position of NegP, the target position of the negative operator movement. The position before the infinitive can be identified with the embedded NegP (or Pol(arity)P, Laka 1990), an intermediate landing site for negative operator movement. Both subject- and object-control infinitives allow extraction of operators (e.g. *wh*-movement, see (Lyutikova 2009, 2010)), hence we expect that *ni*-pronouns will be licit in both subject- and object-control infinitives. The differences in grammaticality can only be attributed to the restrictions on the level of representation at which the NEG-criterion should be satisfied. It is clear that the negative operator's position before the matrix verb allows the application of the NEG-criterion already at the spellout. The acceptability of the two other positions depends on whether checking of the NEG-criterion can be postponed until LF. If Russian *ni*-pronouns have to move overtly, as *nie*-phrases do in West Flemish, then the theory predicts

[18]Continuing the analogy with syntactic binding, we expect that principle A should be satisfied at whatever stage of the derivation, (see example (26) above.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

the degraded grammaticality of (a) and (b) positions for both types of infinitives. Otherwise, all the three positions are expected to be equally licit.[19] The predictions of the operator-movement approach are summed up in Table 2.

	before matrix verb (c)	before infinitive (b)	base position (a)
subject-control infinitives	+	(+)	(+)
object-control infinitives	+	(+)	(+)

Table 2: Predictions of grammaticality under the operator-movement approach

Finally, the agreement approach makes predictions very similar to those of the binding approach. We suggested in section 2.2. that the differences between subject-control and object-control infinitives arise from the fact that the former have reduced functional structure lacking a CP layer. As subject-control infinitives do not contain a phase boundary, the Agree operation can apply. In object-control infinitives, this is only possible if the phase head C carries a [uNEG] feature and participates in Multiple Agree.

Let us consider derived positions (b) and (c) of *ni*-pronouns. As mentioned in section 3.3, NEG agreement is never accompanied by movement: firstly, because the movement would extract the bound variable out of the scope of the binder, and secondly, because the movement would disable the Reverse Agree ("upward search, downward valuation"). Consequently, the derived positions of *ni*-pronouns have nothing to do with the Agree operation licensing them. However, eventual movement of *ni*-pronouns to the matrix clause motivated by some other reason creates a local configuration for Agree to apply. Recall also that the negative operator carrying [iNEG] that *ni*-pronouns agree with is located high enough in the clause (higher than the subject position). Therefore, *ni*-pronouns in front of the matrix verb are in the same phase with the negative operator and c-commanded by it, a prerequisite for NEG agreement.

The predictions of the agreement approach under various assumptions are represented in Tables 3 and 4.[20]

[19]In this case, considerations of economy (e.g., Procrastinate) or the Earliness principle can come into play. Importantly, they should affect subject and object-control infinitives in a similar way.

[20]The critical flaw of the agreement approach as developed in Zeijlstra (2004) is that it is unable to predict the obligatory presence of the negative particle *ne* 'not' in the clauses containing *ni*-pronouns. Preverbal negative particles in strict NC languages are considered as yet another type of constituents bearing a [uNEG] feature and forcing semantic negation and the negative operator with [iNEG]. Consequently, *ni*-pronouns are predicted to be licensed independently of the presence of *ne* 'not', which is not the case. This problem, however, is orthogonal to the locality issues we are concerned with here.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

	before matrix verb (c)	before infinitive (b)	base position (a)
subject-control infinitives	+	+	+
object-control infinitives	+	—	—

Table 3: Predictions of grammaticality under the agreement approach if infinitival C lacks [uNEG]

	before matrix verb (c)	before infinitive (b)	base position (a)
subject-control infinitives	+	+	+
object-control infinitives	+	+	+

Table 4: Predictions of grammaticality under the agreement approach if infinitival C carries [uNEG]

In the next section, we test, experimentally, the theoretical predictions discussed above.

4. Experiment

To formalize the test of theoretical predictions about locality of *ni*-pronouns licensing, we ran an acceptability judgments study. The experiment tested the acceptability of *ni*-pronouns occupying different positions in a clause with an embedded infinitive.

4.1. Materials

We constructed a 2 × 3 factorial design that crossed the factors Infinitive type and Ni-pronoun position. We used seven non-Neg-raising subject-control verbs (*načinat'* 'begin', *probovat'* 'try', *toropit'sya* 'hurry', *riskovat'* 'risk', *starat'sya* 'endeavor', *pytat'sya* 'seek', *perestavat'* 'cease') and six non-Neg-raising object-control verbs governing acc (*ugovarivat'* 'reason', *upraševat'* 'blandish', *prosit'* 'ask', *zastavlyat'* 'force', *ubeždat'* 'persuade', *vynuždat'* 'compel'). For infinitives, we used verbs that govern dat, which means that in case of object control, matrix verb and infinitive assign different cases. This was done to avoid the garden-path effect in case of object control: otherwise when a *ni*-pronoun is before the matrix verb, it could be parsed as an argument of this matrix verb (see example (39)). Both target and filler sentences were constructed using the following basic structure leaving out *ni*-pronouns: subject + negative particle + matrix verb in past form + (object) + infinitive + continuation (i.e., direct object or prepositional phrase). We used imperfective forms of both matrix verb and infinitive. The length of continuation was balanced for all target sentences and fillers. The stimuli set is exemplified in (40)–(41).

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

(39) a. *Učitel'* *nikogo* *ne* *ubeždal* *učenika* *draznit'*
teacher.NOM nobody.ACC NEG persuade apprentice.ACC tease
na *škol'noi* *lineike.*
on school.PREP assembly.PREP
Intended: 'The teacher did not persuade the apprentice to tease anyone during the school assembly.'
Possible garden-path effect: 'The teacher did not persuade anyone …'

b. *Učitel'* *nikomu* *ne* *ubeždal* *učenika* *podmigivat'*
teacher.NOM nobody.DAT NEG persuade apprentice.ACC wink
na *škol'noi* *lineike.*
on school.PREP assembly.PREP
'The teacher did not persuade the apprentice to wink at anyone during the school assembly.'

(40) a. subject control, base position (a)
Konsul'tant *ne* *proboval* *pomogat'* ***nikomu***
adviser.NOM NEG try.PST.IMPF help.INF **nobody.DAT**
v razvitii *biznes-proekta.*
in developing.PREP business project.GEN

b. subject control, before infinitive (b)
Konsul'tant *ne* *proboval* ***nikomu*** *pomogat'*
adviser.NOM NEG try.PST.IMPF **nobody.DAT** help.INF
v razvitii *biznes-proekta.*
in developing.PREP business project.GEN

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

(41) a. object control, base position (a)
Alina *ne* *uprašivala* *Nikitu* *kljast'sja* ***nikomu***
Alina.NOM NEG persuade.PST.IMPF Nikita.ACC claim **nobody.DAT**
v *večnoj* *ljubvi.*
in undying.PREP love.PREP

b. object control, before infinitive (b)
Alina *ne* *uprašivala* *Nikitu* ***nikomu*** *kljast'sja*
Alina.NOM NEG persuade.PST.IMPF Nikita.ACC **nobody.DAT** claim
v *večnoj* *ljubvi.*
in undying.PREP love.PREP

c. object control, before matrix verb (c)
Alina ***nikomu*** *ne* *uprašivala* *Nikitu* *kljast'sja*
Alina.NOM **nobody.DAT** NEG persuade.PST.IMPF Nikita.ACC claim
v *večnoj* *ljubvi.*
in undying.PREP love.PREP
'Aline wasn't persuading Nikita to claim his undying love to anyone.'

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

We created four tokens for each condition, for a total of 24 target sentences. The target items were distributed across three lists using a Latin Square design and interspersed with 24 filler items that span the range of acceptability. Grammatical fillers included sentences that contained *-libo* pronouns, instead of *ni*-pronouns and matrix or embedded negation (42a–b). Ungrammatical fillers included sentences with *ni*-pronouns and no negative particle so that the pronoun was not licensed (42c–d). We created two pseudorandom orders per list, which results in six lists in total. The survey also included four practice items, two grammatical and two ungrammatical, which were used to check the respondent's competence in completing a rating task. The task was to give acceptability judgments on a 7-point Likert scale. Respondents were instructed that the task has no correct answers and has nothing to do with what is advocated in prescriptive grammars or the plausibility of the described event.

(42) a. *Akademik ne ubeždal kollegu komu-libo ustupat'*
academician.NOM NEG persuaded colleague.ACC somebody.DAT give up
mesto v pervom rjadu
seat.ACC in first.PREP row.PREP
'The academician was not persuading his colleague to give up a seat in a first row to anybody.

b. *Psiholog uprašival patsienta ne priznavat'sya komu-libo*
psychologist.NOM begged patient.ACC NEG confess somebody.ACC
v sobstvennoi slabosti
in own.PREP weakness.PREP
'The psychologist was begging the patient not to confess to anybody his weakness'.

c. *Literator želal posvyaščat' nikomu svoe poslednee stihotvorenie*
writer.NOM wanted vow nobody.DAT own.ACC last.ACC poem.ACC
Literally: 'The writer wanted to vow to nobody his last poem'. (ungram.)

d. *Trener nikomu zastavlyal sportsmena želat' uspeshnogo*
coach.NOM nobody.DAT make sportsman.ACC wish successful.GEN
vystupleniya v finale
performance.GEN in final.PERP
Literally: 'The coach made the sportsman wish a successful performance in the final to nobody'. (ungram.)

The experiment was implemented via the web-based software Ibex Farm (Drummond 2011). Four grammatical filler sentences were followed by a yes/no comprehension question; the position of these sentences was pseudo-randomized so that one question appeared for every twelve sentences along the list. Sentences were presented one at a time, together with a scale, for at most ten seconds, with a one-second interval between items. In the middle of the experiment, we suggested to respondents that they take a short break. The time a respondent spent on reading a sentence and giving it a rating was recorded.

4.2. Participants

One hundred and fifty-three participants were recruited online via the Yandex.Toloka crowdsourcing platform and social media postings, resulting in 25 participants on

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

average for each list. All participants provided their informed written consent to take part in the study. We treated respondents as outliers when they provided inaccurate ratings for training sentences (e.g., we gave a rating of 6/7 for an ungrammatical sentence or 1/2 for a grammatical one) or when they were 50% or less accurate in answering comprehension questions. Twenty-five participants (16%) were excluded from the data analysis on these grounds. For each participant we also examined whether the ratings provided for filler items were significantly different from the mean ratings; however, no participants were eliminated on this basis. The analysis was performed on the data from 128 respondents (78 females; mean age 34, min 15, max 73, SD 14).

4.3. Results

The results of each participant were z-score transformed to eliminate potential scale bias. Figure 1 and Table 5 report the mean ratings of all six conditions. ANOVA revealed significant main effect for both INFINITIVE TYPE ($df = 1$, $F = 737.46$, $p << 0.05$) and NI-PRONOUN POSITION ($df = 2$, $F = 44.84$, $p << 0.05$) and interaction between these two factors ($df = 2$, $F = 113.44$, $p << 0.05$). Post-hoc pairwise comparisons demonstrate that in subject-control infinitives, the base position is significantly less acceptable than the two other positions. In object-control infinitives, the position before the matrix verb is the least acceptable; the base position is more acceptable, and the position before the infinitive the most acceptable.

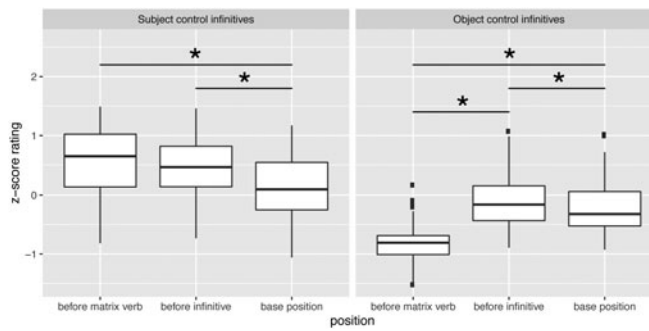


Figure 1: Acceptability ratings (z-score transformed) for ni-pronouns in clauses with embedded infinitives. All significant differences marked with * between the relevant boxes.

The analysis further shows that sentences with subject-control infinitives generally receive higher scores than sentences with object-control infinitives (Figure 2). This difference is maintained throughout the three positions. Mean ratings for the least acceptable condition (object control, before matrix verb (c)) do not differ from ratings produced for univocally ungrammatical fillers, in which *ni*-pronouns are not licensed at all.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

	z-score transformed			raw ratings		
	before matrix verb (c)	before infinitive (b)	base position (a)	before matrix verb (c)	before infinitive (b)	base position (a)
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 5: Mean (raw and z-score transformed) acceptability ratings for the 3 × 2 factorial design

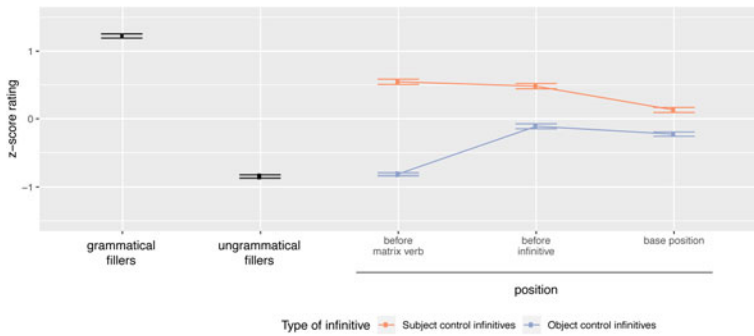


Figure 2: Interaction plot of acceptability ratings (z-score transformed) for target and filler items. Error bars indicate standard error.

The most acceptable position for *ni*-pronouns within object-control infinitives is before infinitives. This position received significantly lower scores than the least acceptable position for subject control, which was the base position (*Tukey's post-hoc test*, $p << 0.05$) (mean ratings 3.20 and 3.72, mean z-scores 0.284 and 0.404 respectively).

We also analyzed how much time respondents spent on reading a sentence and producing a judgment (henceforward *rating time*). There was no effect found for INFINITIVE TYPE ($df = 1$, $F = 0.238$, $p = 0.626$; mean times 5487 and 5449 ms, mean z-score transformed times 0.157 and 0.140, respectively). However, an ANOVA revealed a significant main effect for NI-PRONOUN POSITION ($df = 2$, $F = 67.224$, $p << 0.05$) and interaction between the factors ($df = 2$, $F = 12.249$, $p << 0.05$).

In the case of subject control, sentences with *ni*-pronouns before a matrix verb were judged more quickly than sentences with *ni*-pronouns in base position (Figure 3). That is, sentences with the least acceptable position are judged more slowly than sentences with more acceptable ones. In the case of object control, sentences with *ni*-pronouns before a matrix verb were judged significantly faster

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

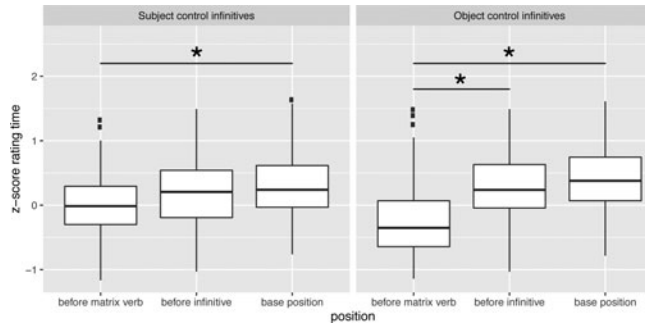


Figure 3: Rating times (z-score transformed) for ni-pronouns in clauses with embedded infinitives. All significant differences marked with * between the relevant boxes.

than sentences with *ni*-pronouns in the two other positions; that is to say, the less-acceptable sentences were judged more quickly than acceptable ones. The filler data shows that respondents were faster at providing judgments for ungrammatical sentences than for grammatical ones (Figure 4). The pattern observed in filler data is found only within the object-control stimuli.

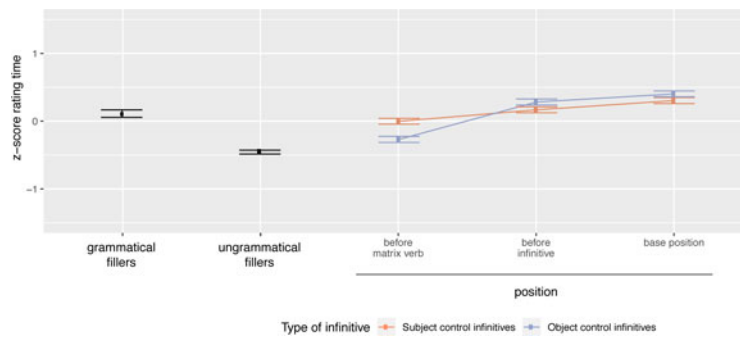


Figure 4: Interaction plot of rating times (z-score transformed) for target and filler items. Error bars indicate standard error.

5. Discussion

In this section, we evaluate the results of the experimental study and propose our account of long-distance licensing in infinitival complements.

5.1. Predictions and results

The results of the experimental study do not seem to definitively support any of the predictions outlined in section 3.4.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

First, long-distance licensing is generally more felicitous in subject-control infinitives than in object-control ones. This result is in compliance with the overall picture provided by previous studies of infinitival clauses (section 2.2), and strongly supports the idea that subject-control infinitives are more transparent than their object-control counterparts. Moreover, it seems to argue in favour of clause-based locality approaches (i.e, a binding or agreement approach), since they are able to capture the distinction between monoclausal and biclausal configurations. However, the clause boundary, even in object-control infinitives, appears to be not as opaque for *ni*-licensing as it is for case-assignment: nominative floating quantifiers and short-form adjectives or participles are completely illicit in object-control infinitives, while *ni*-licensing (in some positions) is much more acceptable than the baseline formed by ungrammatical fillers (and *ni*-licensing across the board of the finite clause).

Second, the movement of the *ni*-pronoun to the matrix clause has an unexpectedly deteriorating effect in object-control infinitives, that is, exactly in the environment where we expected the movement to enable local licensing and therefore to ameliorate the scores. This means that licensing *ni*-pronouns in object-control infinitives is not clause-bound, and no movement of *ni*-pronouns to the higher licensing domain is required for them to be licensed. It should be noted that the lower acceptability rates for the derived position of *ni*-pronouns in front of the matrix verb in object-control infinitives cannot be attributed to additional costs of processing the filler-gap dependency created by movement: the rating time for this position is not increased but rather decreased, as compared to the rating time for the base position.

As for the operator-movement approach, it is evident that it can capture neither the differences in acceptability scores between subject- and object-control infinitives nor the opposite impact on the acceptability of movement of *ni*-pronouns to the matrix clause in subject- and object-control infinitives.

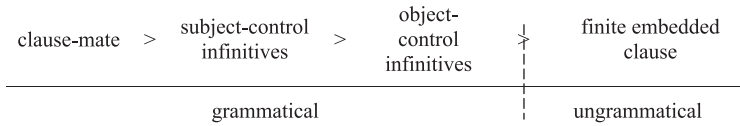
To sum up, none of the approaches are able to derive the picture provided by the experimental scores. In what follows, we attempt at outlining an account which would be compatible with the data.

There are at least three factors that have an impact on the acceptability of long-distance licensing of *ni*-pronouns in control infinitives: (i) locality of licensing; (ii) preverbal/postverbal position of the pronoun and (iii) movement to the matrix clause.

The local domain for licensing *ni*-pronouns is as large as a minimal finite clause. The experimental data show that licensing *ni*-pronouns from the matrix clause is licit not only in subject-control infinitives, but also in object-control infinitives. At the same time, the scores for each of the positions are lower in object-control than in subject-control infinitives, and the highest score for the object-control configuration (before the infinitive, (b)) is significantly lower than the lowest score for the subject-control configuration (base position, (a)). Preliminary comparison with local licensing (provided by fillers involving clause-mate negation) and with long-distance licensing in finite embedded clauses (provided by the pilot experimental study) yields the following hierarchy:

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

(43) locality of *ni*-licensing



The hierarchy in (43) is compatible with several syntactic phenomena of Russian, which distinguish between infinitival and finite embedding. The illustrative example is provided by anaphor binding (Rappaport 1986). Example (44) demonstrates that the locality domain of reflexive binding in Russian is larger than the reflexive's governing category (here: the minimal noun phrase or clause containing an accessible subject) and corresponds to the minimal finite clause containing the reflexive.

(44) On_i ne razrešaet mne_j [PRO_j proizvodit' opyty nad $soboj_{i/j}$].
he NEG allow me perform experiments on self
'He does not allow me to perform experiments on himself/myself'.
Rappaport 1986: 118

A comparison of *ni*-licensing with other locality-sensitive phenomena allows us to identify the ambiguous status of control infinitives: sometimes they pattern with simple clauses, sometimes with finite embedded clauses, and sometimes the subject-control infinitives differ from the object-control infinitives. The relevant generalizations are summarized in Table 6.

	clause-mate	subject-control infinitives	object-control infinitives	finite embedding (*čtoby* clauses)
local anaphor binding (*drug druga* 'each other') (Rappaport 1986)	+	–	–	–
short-form adjectives and participles in predicate (Lyutikova 2010)	+	+	–	(n/a)
agreeing floating quantifiers (*sam* 'himself', *odin* 'alone', *ves'* 'all') (Babby 1998)	+	+	– (+)	–
ni-licensing	+	+	+ (–)	–
reflexive binding (*sebja* 'oneself') (Rappaport 1986)	+	+	+	–
wh-movement (Lyutikova 2009, 2010)	+	+	+	+

Table 6: Locality of ni-licensing in comparison to other phenomena

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

The generalizations represented in Table 6 suggest that long-distance *ni*-licensing is no exception. Rather, it supports the independently-attested variation in locality among different syntactic phenomena. At the same time, if locality type is indicative of the nature of the phenomenon (see relativized minimality, Rizzi 1990), our data clearly refute the hypothesis underlying the operator-movement approach: *ni*-licensing and *wh*-movement differ dramatically with respect to locality.

The second factor affecting acceptability in our experiment is the position of the *ni*-pronoun with respect to the verb. The experimental results show that for both subject- and object-control infinitives, *ni*-pronouns before infinitive are significantly more acceptable than *ni*-pronouns in base position. We suggest that the observed discrepancy in acceptability is independent from *ni*-licensing conditions and represents the general contrast between pronominal and nominal phrase positioning in Russian.

(45) position of the object pronoun
preverbal > postverbal

According to Kholodilova (2013), pronouns in Russian are generally located closer to the beginning of the sentence due to a set of features: higher degree of accessibility, lighter weight of constituent (in terms of Hawkins' (1990) Performance Theory of Order and Constituency), clitization, etc. As for *ni*-pronouns, Bivon (1971) argues that they tend to precede the verbal head. Kholodilova (2013) provides evidence for this observation from the Russian National Corpus (RNC) and from texts found in the Yandex web search engine.

In particular, to study the position preferences for *ni*-pronouns as compared with noun phrases in sentences with negation, Kholodilova (2013) searched for a pronoun *nikto* 'nobody', and for a nominal NPI *ni duši* 'not a soul', which contains a negative particle and a noun, has the same meaning and equal number of syllables in oblique case forms. The corpus study reveals a clear preference for preposition of negative pronouns with respect to the verb (Table 7).

	OV	VO	OV proportion
nikogo (nobody)	46	4	0.9
ni duši (not a soul)	6	44	0.1

Table 7: The frequency of OV vs. VO orders in sentences like: "I … NEG knew / know / saw / see …" (data from Yandex search engine) (Kholodilova 2013: Table 38)

However, the data from matrix predication might not be directly used as evidence for nonfinite clauses. As argued by Isačenko (1966) and Svedstedt (1976), in Russian, nonfinite clausal arguments usually follow the verb, so one would expect *ni*-pronouns to be used in base position. However, this tendency is not supported by the corpus data. Kholodilova (2013) demonstrates that the proportion of preposing vs. postposing of pronominal arguments in nonfinite clauses correlates with the hierarchy of finiteness proposed for Russian verb

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

forms in (Sai 2013), with infinitives being most closely related to indicatives. As shown in Table 8, pronominal arguments are significantly more often used before the infinitive.

	pronominal arguments	nominal arguments
preposition	1033	1380
postposition	769	8535
OV proportion	0,57	0,14

Table 8: The frequency of preposition and postposition of pronominal and nominal arguments in Russian infinitive clauses (Kholodilova 2013: Tables 45-46)

Despite the tendency of *ni*-pronouns to precede infinitives, they are not prohibited from being located in base position; such instances are found in the corpus and considered grammatical by speakers (46).

(46) a. *Sejčas on ne hotel videt' nikogo*
now he.NOM NEG wanted see nobody.ACC
'Now he didn't want to see anybody.' RNC

b. *I ne velel skazat' mne nichego?*
And NEG order tell me.DAT nothing.ACC
'And he hasn't told you to tell me anything?' RNC

Finally, the third factor affecting acceptability is the movement of *ni*-pronoun to the matrix clause. We observe that this movement is allowed in subject-control infinitives but penalized in object-control infinitives, resulting in ungrammaticality of the outcome.

(47) movement of *ni*-pronouns to the matrix clause:
subject-control infinitives >> object-control infinitives

The source of this constraint is far from straightforward. On the one hand, the prohibition on *ni*-pronoun movement to the matrix clause can be related to the structural complexity of object-control infinitives discussed in section 2.2. On the other hand, since *ni*-pronouns in the experiment are argumental noun phrases, it may be the case that the nominal argument of the matrix verb (i.e., the controller) serves as an intervenor and blocks the movement. It is evident that the explanation of the constraint requires identification of the type of movement involved. However, it is also clear that this movement is independent of *ni*-licensing.

The next point to discuss is the difference in reaction times. In section 4 we saw that the stimuli with *ni*-pronouns preceding the matrix verb were rated the most quickly, in spite of the fact that these stimuli were the most acceptable in subject-control infinitives and the least acceptable in object-control infinitives. We suggest that the reason behind this pattern lies in the target sentence structure. The fastest rating times are found within sentences with *ni*-pronouns before matrix verbs. This position is the nearest one to the beginning of the sentence. When there is subject

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

control, the faster rating times may result from the shorter linear distance between the *ni*-pronoun and the negator respondents are faster at recognizing licensing here as compared to other positions where the *ni*-pronoun is further from the negator. What we are observing in the case of object control may be the faster reaction to unacceptability, where as a result, less time is spent on reading the rest of the sentence. To test these suggestions one would need to use more responsive online methods, for example, self-paced reading. For now, we leave this issue for future research.

To sum up, the experimental data show that:

— *ni*-pronouns are long-distance-licensed in both subject- and object-control infinitives;

— long-distance licensing in object-control infinitives is less acceptable than in subject-control infinitives;

— *ni*-pronouns are licensed *in situ* (in base position); movement is not required for long-distance licensing;

— derived positions of *ni*-pronouns are independent of *ni*-licensing.

5.2. Analysis

Given the results of the experimental study summarized above, we propose an analysis consisting of two components: first, an account of the long-distance licensing of *ni*-pronouns able to address lower acceptability of long-distance licensing in object-control infinitives, and second, an account of the derived positions of *ni*-pronouns able to address the difference in acceptability between the local movement (within the control infinitive) and non-local movement (across the clause boundary), which becomes relevant in object-control infinitives.

We begin with the long-distance licensing of *ni*-pronouns, using the general idea behind the agreement approach to NC with a slight adjustment of the analysis of the preverbal negative particle and the locality restrictions on NC.

We assume that NC is an instance of syntactic agreement. NCIs bear valued uninterpretable polarity feature [*u*NEG] and need to agree with an interpretable variant of this feature [*i*NEG] on the polarity operator of the clause. The reason why privative uninterpretable features must enter into the Agree relation is the Radical Interpretability Principle, which requires all syntactic elements to be semantically interpretable somewhere in the syntactic structure built in the derivation (Brody 1997: 143, Pesetsky and Torrego 2007: 274). Since NCIs should be in the scope of the polarity operator, the interaction between them proceeds as Reverse Agree. We use the idea of Multiple Agree (Nevins 2007, Haegeman and Lohndal 2010) shaped in the form of feature sharing (Pesetsky and Torrego 2001, 2004, 2007), which allows multiple NCIs to be licensed by one negative operator. In this way, the presence of an NCI forces the presence of the accessible negative operator. Otherwise, the uninterpretable [*u*NEG] feature of the NCI would remain unchecked, and the derivation would crash.

In Zeijlstra's (2004) theory, the preverbal particle is considered as yet another NCI bearing the [*u*NEG] feature, licensed by the multiple reverse Agree with the

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

negative operator. However, this assumption is only tenable if NC is clause-bound. In Russian, *ni*-pronouns allow long-distance licensing by the matrix negative operator, but the preverbal particle *ne* can only be licensed by the clausemate negative operator. To illustrate, consider example (2d), repeated here as (48).

(48) *Petrov* *pytalsja* *ne* *otvlekat'sja* *ot* *dorogi*
Petrov.NOM tried NEG be_distracted from road.GEN
'Petrov tried to remain focused on the road'
Literally: Petrov tried to not get distracted from the road. RNC
* 'Petrov did not try to get distracted from the road.'

In (48), the negative particle *ne* is in the embedded infinitival clause. As we have seen, *ni*-pronouns in subject-control infinitives can be licensed by matrix negation. Therefore, if the preverbal particle is analyzed in the same way as *ni*-pronouns, as an NCI requiring agreement with an accessible negative operator, then we expect that the negative particle on the verb can be construed with the matrix negation, too:

(49) $[_{\text{NegP}}\ Op_{[i\text{NEG}]}$ Neg …V $[_{\text{TP}}$ *ni*-pronoun$_{[u\text{NEG}]}$ … ne-$_{[u\text{NEG}]}$… *ni*-pronoun$_{[u\text{NEG}]}$]]

This amounts to the expectation that the negative particle in the infinitival clause can correspond to the interpretable negation of the matrix clause, which is not borne out: example (48) cannot be interpreted as involving matrix semantic negation.

The generalization we have to capture in the analysis is that *ni*-pronouns and the negative particle *ne* differ in two parameters: first, *ne* requires a clausemate negative operator, whereas *ni*-pronouns allow long-distance licensing; second, *ne* is obligatory in the presence of the negative operator, whereas *ni*-pronouns are not.

There are various ways in which these properties of *ne* can be implemented in the analysis. The one-to-one correspondence between *ne* and the negative operator can be captured by introducing a complementary formal feature F, with an inverted interpretability or valuation pattern, much like [wh] and [p]eripheral features on *wh*-elements and C (Chomsky 2000). Clausemate condition on agreement for F should be additionally stipulated.

Another way to capture the properties of *ne* is to assume that *ne* is a head of NegP, which hosts the negative operator in its specifier (50). In this case, the preverbal position of *ne* results from the post-syntactic lowering (Embick and Noyer 2001).

(50) $[_{\text{NegP}}\ Op\ [\ ne\text{-}_{\text{Neg}^\circ}\ [_{\text{TP}}$ … *ni*-pronoun … V … *ni*-pronoun …]

Both approaches require stipulations; moreover, they are sensitive to further assumptions about clause structure and feature organization. In view of this, we refrain from choosing a specific option and leave the complete syntactic analysis of negation in Russian for future studies.

Even so, this preliminary sketch allows us to tackle the difference between subject- and object-control infinitives with respect to NCI licensing.

In subject-control configurations, the embedded clause is represented by a truncated structure equivalent to the non-finite TP. We propose that the TP boundary is

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

transparent for feature sharing.[21] Consequently, the [*u*NEG] feature of the *ni*-pronoun can be associated with the [*i*NEG] feature of the polarity operator in the matrix clause.

(51) *Op*$_{[i\text{NEG}]}$ Žurnalist ne_proboval$_{[u\text{NEG}]}$ [$_{\text{TP}}$ vozražat' **nikomu**$_{[u\text{NEG}]}$].

journalist NEG_try object nobody

'The journalist did not try to object to anyone.'

In object-control infinitives, on the other hand, the CP layer is opaque for feature sharing, and the long-distance licensing of *ni*-pronouns in the infinitival clause from the matrix clause is banned. The only option to identify the [*u*NEG] feature of the *ni*-pronoun with the [*i*NEG] feature of the negative operator is by introducing the [*u*NEG] feature in embedded C. This proposal is not unusual, since negative complementizers are found in many languages, including the negative counterparts of various positive complementizers in Celtic languages (McCloskey 1996, McQuillan 2016), the Latin *ne* (Allen and Greenough 2013), and the Basque *enik* (Laka 1990). Crucially, only object-control C (selecting for non-finite TP and assigning dative to PRO) can have a [*u*NEG] feature. Accordingly, *ni*-licensing across CP boundaries of other complementizers is effectively excluded.

(52) a. *Op*$_{[i\text{NEG}]}$ Lektor ne_vynuždal$_{[u\text{NEG}]}$ assistenta [$_{\text{CP}}$ C rekomendovat' **nikomu**$_{[u\text{NEG}]}$

lecturer.NOM NEG-force assistant.ACC recommend nobody.DAT

novyj učebnik]

new.ACC textbook.ACC

'The lecturer did not force his assistant to recommend to anyone the new textbook.'

b. *Op*$_{[i\text{NEG}]}$ Lektor ne_vynuždal$_{[u\text{NEG}]}$ assistenta [$_{\text{CP}}$ C$_{[u\text{NEG}]}$ rekomendovat' **nikomu**$_{[u\text{NEG}]}$

lecturer.NOM NEG-force assistant.ACC recommend nobody.DAT

novyj učebnik]

new.ACC textbook.ACC

'The lecturer did not force his assistant to recommend to anyone the new textbook.'

The contrast in the acceptability of *ni*-licensing in subject- and object-control infinitives can be accounted for if we assume that providing the complementizer with a [*u*NEG] feature comes with processing costs. It creates an additional strain for the computational component, resulting in reduced acceptability scores. This is why *ni*-pronouns can be licensed in both subject- and object-control infinitives, but this process has a costly path in object-control infinitives.

Now we turn to the second issue: the analysis of the derived positions of *ni*-pronouns. We propose that the position where preverbal pronouns are found can be associated with Wurmbrand's (2014) ΣP-hosting climbing argumental clitics

[21]Recall that the negative operator can license a *ni*-pronoun in subject position (see example (2b)); therefore, it should merge higher than TP. Accordingly, the negative concord in simple clauses proceeds through the TP boundary as well.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

and short-scrambled constituents. Wurmbrand argues that languages differ as to the A vs A-bar status of its specifier. In Russian, unlike in the languages Wurmbrand discusses, ΣP is below TP rather than above TP, which explains the standard position of the scrambled pronominal object between the subject and the verb (S O_{PRON} V), as well as its presence in truncated subject-control infinitives.

As its position below TP suggests, ΣP belongs to the A-domain of the clause, and movement to ΣP counts as A-movement.[22] This hypothesis is supported by further empirical evidence. The movement of pronouns into a preverbal position does not trigger standard effects of A-bar movement, such as licensing of parasitic gaps (53). As argued in Ivlieva (2007), parasitic gaps in Russian can be licensed in adjunct clauses by both overt (*wh*-movement, topicalization) or covert (contrastive focus *in situ*) A-bar movement. Example (53c) shows that the movement of *ni*-pronouns to the preverbal position is unlike *wh*-movement in that it does not license the parasitic gap in the adjunct clause.[23] Furthermore, short movement of pronouns does not reconstruct for binding purposes; see (54). This body of evidence supports the A-movement analysis of the pronouns' dislocation to ΣP.

(53) a. *Ja (ne) uznal Valju, horošen'ko razgljadev *?(ego).*
I.NOM NEG recognize Valya.ACC properly looked.GERUND through he.ACC
'I did(n't) recognize Valya after looking at him properly.'

b. *Kogo ty uznal, horošen'ko razgljadev?*
who.ACC you recognized properly looked.PART through
'Whom did you recognize after looking at him properly?'

c. **Ja nikogo ne uznal, horošen'ko razgljadev.*
I.NOM nobody.ACC NEG recognize properly looked.PART through
Intended: 'I didn't recognize anyone$_i$ after looking at him$_i$ properly'.

(54) a. *My$_i$ pokazali naparnikam$_j$ drug druga$_{i,\ j}$.*
we.NOM showed mates.DAT each other.ACC
'We$_i$ showed each other$_i$ to the mates.'
OR: 'We showed the mates$_j$ to each other$_j$.'

b. *My$_i$ drug druga$_{i,\ *?j}$ pokazali naparnikam$_j$.*
we.NOM each other.ACC showed mates.DAT
'We$_i$ showed each other$_i$ to the mates.'
Intended: 'We showed the mates$_j$ to each other$_j$.'

The hypothesis that movement of pronouns to ΣP is an instance of A-movement provides a straightforward explanation of the different acceptability judgements in subject- and object-control infinitives. The position before the infinitive corresponds to the embedded ΣP, available in both subject- and object-control infinitives. Since movement to the local ΣP is preferred for pronouns, in both types of infinitives it

[22]This is unsurprising given the generalization that cross-linguistically, short scrambling has properties of A-movement whereas long-distance scrambling exhibits properties of A-bar movement (Mahajan 1990).

[23]Russian seems to lack weak crossover (WCO) (Testelets 2001), so this diagnostic of the movement type is not applicable.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

yields a statistically significant increase in acceptability scores (see Fig. 1). At the same time, the acceptability judgements when *ni*-pronouns are moved to the matrix ΣP differ dramatically between two types of control infinitives. In subject-control infinitives, the position before the matrix verb is rated as high as the position before the infinitive (the difference between the two derived positions is not statistically significant; see Fig.1). This is unsurprising, since the non-finite TP does not constrain A-movement. However, in object-control infinitives, movement to the matrix ΣP would cross the CP boundary, opaque for A-movement. Accordingly, stimuli with object-control infinitives where the *ni*-pronoun appears before the matrix verb receive the lowest scores comparable with those of the ungrammatical filler sentences.

6. Conclusion

In this article, we addressed locality conditions on negative concord in Russian. In particular, we called into question the clausemate condition on licensing *ni*-pronouns and investigated long-distance *ni*-licensing in both subject- and object-control infinitives. We identified the availability of *ni*-pronouns licensed by negation out of the matrix clause and asked whether the grammaticality of the examples in question was due to the overt or covert raising of *ni*-pronouns to the matrix clause, into the local vicinity of negation.

Using experimental data, we proposed an account of long-distance licensing in infinitival complements. First, we introduced the [*u*NEG] feature, responsible for negative concord. We proposed that the licensing of NCIs is mediated by an Agree relation established between these elements and the negative operator that bears the interpretable feature ([*i*NEG]). Negative pronouns are equipped with the uninterpretable feature [*u*NEG]. This feature is associated with the [*i*NEG] feature of the negative operator in the form of feature sharing. Based on the analysis of Russian infinitival clauses that postulates different functional structures for subject-control and object-control infinitives, we suggest that subject-control infinitives lack a CP layer, and that the TP boundary is transparent for feature sharing. Consequently, *ni*-pronouns can be licensed by the matrix clause operator in subject-control infinitives. On the other hand, in object-control infinitives, *ni*-pronouns can be associated with the polarity operator only if the C head is equipped with the [*u*NEG] feature. However, we suggest that the C head that bears the polarity feature comes with an additional processing cost, which results in decreased acceptability scores.

Second, we modeled the difference in acceptability of the derived positions of *ni*-pronouns by postulating that there is an embedded ΣP projection in the structure, which corresponds to the linear position before the predicate. Although the movement to the embedded ΣP is available in both types of infinitives, movement to the matrix ΣP is unacceptable in object-control infinitives. We suggest that movement of pronouns to ΣP is an instance of A-movement, banned due to the CP boundary in object-control infinitives.

Existing theories of negative concord rely heavily on the movement of NCIs: either as a direct licensing condition (operator-movement approach) or as a prerequisite for entering a local configuration with the licensor (binding approach, agreement

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

approach). Crucially, our data show that *ni*-pronoun movement to the matrix clause has no impact on acceptability in subject-control infinitives and, unexpectedly, yields ungrammaticality in object-control infinitives. We conclude that although *ni*-licensing and movement both obey locality constraints, they still differ as to the type of locality required. Consequently, if negative concord is indeed concord, that is, feature unification among probe(s) and goal(s) subsumed under a general mechanism of agreement, then it appears to be less local than movement.

This conclusion is in line with recent research on locality constraints on movement and agreement. The standard Agree (Chomsky 2000) considers movement as parasitic on agreement: a constituent can only be attracted by a head if it contains a feature that this head agrees with. Therefore, movement is expected to be as local as agreement is. However, a growing body of evidence supports a different approach, namely, that movement and agreement have different properties with respect to locality constraints. Bošković (2007), for example, claims that the locality of Move is radically different from the locality of Agree, Agree being free from several mechanisms such as phases and the Activation Condition, which constrain Move. Similarly, Arano (2017) reports on differences in the experiencer blocking effect between Move and Agree, while Zeijlstra (2012) argues that Move in general may be more local than (multiple reverse) Agree. The present article therefore contributes to this research, providing additional evidence for the independence of agreement and movement.

References

Allen, Joseph H., and James B. Greenough. 2013. *Allen and Greenough's New Latin grammar*. Courier Corporation.

Arano, Akihiko. 2017. On Intervention in Move and Agree: A case of dependencies across experiencers. *Explorations in English Linguistics* 31: 1–29.

Babby, Leonard. 1985. Prepositional quantifiers and the direct case condition. In *Issues in Russian morphosyntax,* ed. Michael S. Flier and Richard D. Brecht, 91–117. Columbus, Ohio: Slavica Publications.

Babby, Leonard. 1998. Subject control as direct predication: Evidence from Russian. In *Annual Workshop on Formal Approaches to Slavic Linguistics. The Connecticut Meeting 1997,* ed. Zeljko Bošković, Steven Franks, and William Snyder, 17–37. Ann Arbor, Michigan: Michigan Slavic Publications.

Bailyn, John Frederick. 2001. The syntax of Slavic predicate case. In *ZAS Papers in Linguistics 22*, ed. Niina Zhang, 1–26. <https://doi.org/10.21248/zaspil.22.2001.99.>

Bailyn, Jonh. 2012. *The syntax of Russian*. Cambridge: Cambridge University Press.

Bivon, Roy. 1971. *Element order. Studies in the Modern Russian language 7*. Cambridge: Cambridge University Press.

Bošković, Željko. 2007. On the locality and motivation of Move and Agree: An even more minimal theory. *Linguistic Inquiry* 38(4): 589–644.

Brown, Sue. 1999. *The syntax of negation in Russian: A minimalist approach*. Stanford: CSLI Publications.

Brody, Michael. 1997. Perfect chains. In *Elements of grammar,* ed. Liliane Haegeman, 139–167. Dordrecht: Kluwer Academic Publishers.

Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

Chomsky, Noam. 1986. *Barriers*. Linguistic Inquiry Monographs 13. Cambridge MA: MIT Press.
Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik,* ed. Roger Martin, David Michaels, Juan Uriagereka, and Samuel Jay Keyser, 89–155. Cambridge, MA: MIT Press.
Chomsky, Noam, and Howard Lasnik. 1993. *The theory of principles and parameters*. Berlin: Walter de Gruyter.
Chvany, Catherine V. 1975. *On the syntax of BE-sentences in Russian*. Cambridge, MA: Slavica.
Collins, Chris, and Paul Martin Postal. 2012. *Imposters: A study of pronominal agreement*. MIT Press.
Comrie, Bernard. 1974. The second dative: A transformational approach. In *Slavic Transformational Syntax, Michigan Slavic Materials, No. 10*, ed. Richard Brecht and Catherine Chvany, 123–150. University of Michigan, Ann Arbor.
Drummond, Alex. 2011. *IbexFarm, Version* 0.2.7. <spellout.net/ibexfarm/>
Embick, David, and Rolf Noyer. 2001. Movement operations after syntax. *Linguistic inquiry* 32(4): 555–595.
Fitzgibbons, Natalia. 2008. Freestanding negative concord items in Russian. *Nanzan Linguistics* 3(2): 51–63.
Franks, Steven. 1990. Case, configuration and argumenthood: Reflections on the second dative. *Russian linguistics* 14(3): 231–254.
Franks, Steven. 1995. *Parameters of Slavic morphosyntax*. New York: Oxford University Press.
Gerasimova, Anastasia. 2015. Licensing negative pronouns in Russian infinitives. In *Tipologiya Morfosintaksicheskikh Parametrov. Materialy Mezhdunarodnoi Konferentsii "Tipologiya Morfosintaksicheskikh Parametrov 2015"* [Typology of Morphosyntactic Parameters. Proceedings of the International Conference "Typology of Morphosyntactic Parameters 2015"], Vol. 2, ed. Ekaterina Lyutikova, Anton Zimmerling, and Maria Konoshenko, 47–61. Moscow: Moscow Pedagogical State University.
Giannakidou, Anastasia. 1998. *Polarity sensitivity as (non) veridical dependency*. Amsterdam: John Benjamins.
Giannakidou, Anastasia. 2020. Negative concord and the nature of negative concord items. In *The Oxford Handbook of Negation,* ed. Viviane Déprez and M. Teresa Espinal, 458–478. New York: Oxford University Press.
Giannakidou, Anastasia, and Hedde Zeijlstra. 2017. The landscape of negative dependencies: Negative Concord and N-Words. In *The Wiley Blackwell Companion to Syntax*, 2nd ed., ed. Martin Evaerert and Henk van Riemsdijk, 1–38. London: Blackwell.
Geist, Ljudmila. 2010. The argument structure of predicate adjectives in Russian. *Russian Linguistics* 34(3): 239–260.
Grashchenkov, Pavel. 2018. *Grammatika prilagatel'nogo. Tipologija atributivmnosti i adjektivnosti* [Grammar of adjective. Typology of adjectivity and attributivity]. Moscow: YaSK Publishing House.
Greenberg, Gerald R., and Steven Franks. 1991. A parametric approach to dative subjects and the second dative in Slavic. *The Slavic and East European Journal* 35(1): 71–97.
Haegeman, Liliane. 1995. *The syntax of negation*. Cambridge: Cambridge University Press.
Haegeman, Liliane, and Terje Lohndal. 2010. Negative concord and (multiple) Agree: A case study of West Flemish. *Linguistic Inquiry* 41(2): 181–211.
Haegeman, Liliane, and Raffaella Zanuttini. 1991. Negative heads and the Neg Criterion. *The Linguistic Review* 8(2–4): 233-252.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

Haspelmath, Martin. 1997. *From space to time: Temporal adverbials in the world's languages*. Newcastle: LINCOM.

Hawkins, John A. 1990. A parsing theory of word order universals. *Linguistic Inquiry* 21(2): 223–261.

Horn, Laurence R. 1978. Remarks on neg-raising. In *Syntax and semantics 9: Pragmatics,* ed. Peter Cole, 129–220. New York: Academic Press.

Horn, Laurence R. 1992. Pragmatics, implicature, and presupposition. In *International Encyclopedia of Linguistics, Vol. 2,* ed. William Bright, 260–266. New York: Oxford University Press.

Isačenko, Alexander. 1966. On grammatical word order. *Voprosy jazykoznaniya* 6: 27–34.

Ivlieva, Natalia. 2007. Parasitic gaps in Russian. *Annual Workshop on Formal Approaches to Slavic Linguistics* 15: 132–140

Kholodilova, Maria. 2013. *Pozicionnye svojstva mestoimenijv russkom jazyke* [Positional characteristics of Russian pronouns]. St. Petersburg: St. Petersburg State University. M.A. thesis.

Klima, Edward. 1964. Negation in English. In *The structure of language,* ed. Jerry A. Fodor and Jerrold Katz, 246–323. Englewood Cliffs, NJ: Prentice Hall.

Kornakova, Elizaveta, Lyutikova Ekaterina, and Pavel Grashchenkov. 2016. Licensing properties of Russian negation. *Rhema* 4: 58–82.

Laka, Itziar. 1990. *Negation in syntax: On the nature of functional categories and projections*. Doctoral Dissertation, Massachusetts Institute of Technology.

Landau, Idan. 2004. The scale of finiteness and the calculus of control. *Natural Language and Linguistic Theory* 22(4): 811–877

Landau, Idan. 2015. *A two-tiered theory of control*. Cambridge, MA: MIT Press.

Lyutikova, Ekaterina. 2009. Relative clauses with the relative pronoun kotoryj 'which': An overview and the properties of movement. In *Korpusnyje issledovanija po russkoj grammatike* [Corpus studies in Russian grammar], ed. Ksenia L. Kiseleva, Vladimir A. Plungian, Ekaterina V. Rakhilina and Sergei G. Tatevosov, 436–511. Moscow: Probel-2000.

Lyutikova, Ekaterina. 2010. On the categorial status of noun phrases in Russian. In *Moscow State University Bulletin. Series 9. Philology* 6: 36–76.

Lyutikova, Ekaterina. 2022. Does Russian attest syntactic raising? Part 1: Infinitival clauses. In *Moscow State University Bulletin. Series 9. Philology* 5: 27–45.

Madariaga, Nerea. 2007. An Economy approach to the triggering of the Russian instrumental predicative case. In *Historical Linguistics 2005 (Current Issues in Linguistics Theory),* ed. Joseph Salmons, and Shannon Dubenion-Smith, 103–117. Amsterdam: John Benjamins Publishers.

Mahajan, Anoop Kumar. 1990. *The A/A-bar distinction and movement theory*. Doctoral Dissertation, Massachusetts Institute of Technology.

Marantz, Alec. 1991. Case and licensing. In *Eastern states conference on linguistics,* ed. Germán Westphal G., Benjamin Ao B., and Hee-Rahk Chae, 234–253. Ithaca, NY: CLC Publications.

Matushansky, Ora. 2008. A case study of predication. In *Studies in formal Slavic linguistics. Contributions from formal description of Slavic languages 6.5*, ed. Franc Marušič and Rok Žaucer, 213–239. Frankfurt am Main: Peter Lang.

Matushansky, Ora. 2010. Russian predicate case, encore. In *Formal studies in Slavic linguistics. Proceedings of FDSL 7.5*, ed. Gerhild Zybatow, Philip Dudchuk, Serge Minor, and Ekaterina Pshehotskaya, 117–135. Frankfurt am Main: Peter Lang.

McCloskey, James. 1996. Subjects and subject positions in Irish. In *The syntax of the Celtic languages: A comparative perspective,* ed. Robert Borsley and Ian Roberts, 241–283. Cambridge: Cambridge University Press.

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press

McQuillan, Peter. 2016. Finite clause complementizers in Celtic. In *Complementizer semantics in European languages*, ed. Petar Kehayov and Kasper Boye, 15–74.
Nevins, Andrew. 2007. The representation of third person and its consequences for person-case effects. *Natural Language and Linguistic Theory* 25(2): 273–313.
Nichols, Johanna. 1981. *Predicate nominals: A partial surface syntax of Russian*. University of California Publications in Linguistics, vol. 97. Berkeley: University of California Press.
Paducheva, Elena V. 1985. *Vyskazyvanie i ego sootnesennost's deistvitel'nost'yu (referentsial'nye aspekty semantiki mestoimeniy)* [The utterance and its relation to reality (referential aspects of the semantics of pronouns)]. Moscow: Nauka.
Paducheva, Elena. 2011. Implicit negation and negative polarity items. *Voprosy jazykoznanija* 1: 3–18.
Paducheva, Elena V. 2015. *Nereferentnye mestoimeniya na -nibud'* [Non-specific -nibud' pronouns]. Materials for the Russian corpus-based grammar description project, Moscow. <http://rusgram.ru>
Pereltsvaig, Asya. 2007. On the universality of DP: A view from Russian. *Studia Linguistica* 61(1): 59–94.
Perlmutter, David M. 1971. *Deep and surface structure constraints in syntax*. New York: Holt, Rinehart and Winston.
Pesetsky, David, and Esther Torrego. 2001. T-to-C movement: Causes and consequences. In *Ken Hale: A life in language,* ed. Michael Kenstowicz, 355–426. Cambridge, MA: MIT Press.
Pesetsky, David, and Esther Torrego. 2004. Tense, case, and the nature of syntactic categories. In *The syntax of time*, ed. Jacqueline Guéron and Jacqueline Lecarme. Cambridge, MA: MIT Press.
Pesetsky, David, and Esther Torrego. 2007. The Syntax of valuation and the interpretability of features. In *Phrasal and clausal architecture. Syntactic derivation and interpretation,* ed. S. Karimi, V. Samiian, and W. K. Wilkins, 262–294. Amsterdam: Benjamins.
Progovac, Ljiliana. 1994. *Negative and positive polarity: A binding approach*. Cambridge: Cambridge University Press.
Rappaport, Gilbert C. 1986. On anaphor binding in Russian. *Natural Language and Linguistic Theory* 4(1): 97–120.
Roger, Martin. 2001. Null Case and the distribution of PRO. *Linguistic Inquiry* 32(1): 141–166.
Rizzi, Luigi. 1990. *Relativized minimality*. Cambridge, MA: MIT Press.
Sai, Sergei. 2013. On the status of combination of Russian nonfinite verb form with particle by. In *Glagol'nye i imennye kategorii v sisteme funktsional'noi grammatiki: Sbornik materialov konferentsii 9–12 aprelya 2013* [Verbal and nominal categories in functional grammar system: Conference Proceedings 9-12 April 2013], ed. Aleksandr V. Bondarko, Maria V. Voeikova, Ekaterina V. Rakhilina, and Elizaveta G. Sosnovtseva, 266–273. St. Petersburg: Nestor-Istoriya.
Sigurðsson, Halldór Ármann. 1991. Icelandic case-marked PRO and the licensing of lexical arguments. *Natural Language and Linguistic Theory* 9(2): 327–364.
Sigurðsson, Halldór Ármann. 2008. The Case of PRO. *Natural Language and Linguistic Theory* 26(2): 403–450.
Stowell, Tim. 1982. The tense of infinitives. *Linguistic inquiry* 13(3): 561-570.
Svedstedt, Dag. 1976. Theme postponement in Russian. *Russian Linguistics* 6(1): 15–39.
Testelets, Yakov. 2001. Distributive quantifier float in Russian and some related constructions. In *Current Issues in Formal Slavic Linguistics (FDSL 3): Proceedings of the 3rd European*

Conference on Formal Description of Slavic Languages, ed. Gerhild Zybatow, 268–279. Frankfurt am Main: Peter Lang.

Vergnaud, Jean-Roger. 2008. Letter to Noam Chomsky and Howard Lasnik on "Filters and control". In *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud,* ed. Robert Freidin, Carlos P. Otero and Maria Luisa Zubizarreta, 3–15. Cambridge, MA: MIT Press. [1977].

Wurmbrand, Susi. 2001. *Infinitives: Restructuring and clause structure*. Berlin: Mouton de Gruyter.

Wurmbrand, Susi. 2012a. The syntax of valuation in auxiliary-participle constructions. In *Coyote Working Papers: Proceedings of the 29th West Coast Conference on Formal Linguistics (WCCFL 29)*, ed. Jihee Choi, 154–162. University of Arizona, Tucson.

Wurmbrand, Susi. 2012b. Parasitic participles: Evidence for the theory of verb clusters. *Taal en Tongval* 64(1): 129–156.

Wurmbrand, Susi. 2014. Restructuring across the world. In *Complex Visibles Out There. Proceedings of the Olomouc Linguistics Colloquium 2014: Language Use and Linguistic Structure,* ed. Ludmila Veselovská and Markéta Janebová, 275–294. Olomouc: Palacký University.

Wurmbrand, Susi. 2017. Feature sharing or how I value my son. In *The Pesky Set: Papers for David Pesetsky*, ed. Claire Halpert, Hadas Kotek, and Coppe van Urk, 173–182. MIT Working Papers in Linguistics.

Wurmbrand, Susi, and Koji Shimamura. 2017. The features of the voice domain: actives, passives, and restructuring. In *The verbal domain,* ed. Roberta D'Alessandro, Irene Franco and Ángel Gallego, 179–204. Oxford: Oxford University Press.

Zanuttini, Raffaella. 1991. *Syntactic properties of sentential negation. A comparative study of Romance languages*. Doctoral Dissertation, University of Pennsylvania.

Zeijlstra, Hedde. 2004. *Sentential negation and Negative Concord*. Doctoral Dissertation, University of Amsterdam.

Zeijlstra, Hedde. 2012. There is only one way to Agree. *The Linguistic Review* 29(3): 491–539.

CORPUS

RNC: Russian National Corpus.,,,,,,,,,, http://ruscorpora.ru/new/

https://doi.org/10.1017/cnj.2022.41 Published online by Cambridge University Press