TWO CHALLENGES FOR EXISTENTIALIST APPROACHES TO STRICT NEGATIVE CONCORD

Pavel Rudnev

Abstract
I present two challenges for the popular approach to the meaning of negative concord items, or neg-words, as existential quantifiers or indefinites. The first challenge concerns the interaction of that analysis with the approaches to fragment answers as instances of clausal ellipsis. The second challenge stems from the ability of multiple neg-words within one clause to be modified by almost, which is unexpected if they are existentials or indefinites.

Keywords: strict negative concord, clausal ellipsis, negative polarity, quantification, Russian

1. Neg-words as nonnegatives: two approaches

Given the logical equivalence, defined in (1) below, between a negated existential proposition (e.g. ‘it is not the case that someone came’) and a universally quantified proposition ranging over a negated formula (‘every $x$ is such that $x$ did not come’), there are two possible options for achieving a theoretical understanding of the semantic properties of negative concord items, or neg-words, in languages displaying negative concord, on the assumption that they do not effect semantic negation.
TWO CHALLENGES FOR EXISTENTIAL APPROACHES TO STRICT NEGATIVE CONCORD

One option is to treat neg-words such as *nikto* ‘no one’ in the Russian example (2) below as an existential (or indefinite) in the scope of negation (Erschler, 2023; Gribanova, 2017; Merchant, 2013; Penka, 2011; Szabolcsi, 2018; Zeijlstra, 2004). The other option is to treat it as a nonnegative universal quantifier scoping above negation (Abels, 2005; Giannakidou, 2000; Rossyaykin, 2020; Shimoyama, 2011; Szabolcsi, 1981). Since both approaches predict identical truth conditions, the choice between them must be determined by additional argumentation.

(2) Nikto *(ne) prishël.
    no.one not came
    ‘No one came.’

Because one observation at the heart of the present contribution is syntactic and the other semantic, I choose Zeijlstra (2004) as the most explicit syntactico-semantic approach against which to evaluate the facts to be demonstrated. According to that approach, semantic negation in strict negative concord languages (e.g. Russian) is the interpretational correlate of an interpretable formal feature, \([iNeg]\), hosted by an abstract operator. Neg-words and the markers of sentential negation (*ne* ‘not’ in (2) and its counterparts in other negative concord languages), in contrast, carry uninterpretable \([uNeg]\) features that must establish a syntactic Agree relation with the operator’s \([iNeg]\) feature. The LF for example (2) is given in (3), and the accompanying syntactic details are illustrated in (4). Neg-words are, on this approach, existentials/indefinites obligatorily scoping below negation.

(3) \(Op\neg[iNeg] nikto[uNeg] ne[uNeg] prishël\)

(4) \([\text{NegP } Op\neg[iNeg] \text{ Neg}^0[uNeg] [\text{vP } V^0[uNeg] [\text{VP } V[uNeg] ]]]\)

The approach illustrated above is argued by Zeijlstra (2004) *et seq.* to be superior to the neg-words-as-universal-quantifiers approach on several grounds. Firstly, Zeijlstra (2004) claims that the neg-words-as-existentials approach is better suited to model the ability of neg-words to...
serve as fragment answers because it dissociates negative semantics from negative morphology. Secondly, Zeijlstra (2004) observes that the existentialist approach predicts that no more than one neg-word per clause should be able to be modified by *almost*, deeming this to be a correct prediction.

The present contribution aims to show that both of these arguments are without force. I show, in Section 2, by using data from Russian, that the approach summarised above, when combined with the most influential analysis of fragment answers as remnants of clausal ellipsis (Merchant, 2004), makes wrong predictions. I then demonstrate, in Section 3, that the prediction about the unavailability of multiple neg-words modified by *almost* is incorrect by providing naturally occurring examples of such multiple *almost*-modified neg-words from Belarusian, Bulgarian, Czech, Hungarian, Polish, Russian, Serbo-Croatian and Ukrainian. Section 4 summarises the discussion.

2. Fragment answers and clausal ellipsis

Merchant’s (2004) ‘move-and-delete’ approach remains the most influential approach to fragment answers. According to it, fragment answers such as B’s response in (5) are formed by moving the constituent that serves to answer the question — *Masha* ‘Masha’ in the fragment answer — to the left periphery followed by clausal ellipsis.

(5) A: Kogo tȳ videl? — B: Mashu [ ya videl ]. [Russian]

who.ACC you saw Masha.ACC I saw

‘Who did you see? — (I saw) Masha.’

Now, as is known, neg-words can appear as fragment answers without the otherwise obligatory negation (Giannakidou, 2000; Haegeman & Zanuttini, 1996; Vallduví, 1994; Watanabe, 2004; Zeijlstra, 2004). Example (6) is a case in point:
In order to ensure that the elided constituent in the answer is identical in some way (syntactically or semantically) with the antecedent, for clausal ellipsis to be licensed at all, and to maintain the analysis of negative concord in (3) above, the semantically contentful negation operator $Op^-\neg[i\text{Neg}]$ must be positioned outside of the ellipsis site (Zeijlstra, 2004: 271). No such move is possible on the competing approach to neg-word meaning whereby they are universal quantifiers scoping above negation: if they scope above negation and are the only surviving remnants of ellipsis, then negation must be included in the ellipsis site, resulting in a polarity mismatch that should make the elided negation unrecoverable. Assuming that neg-words are licensed, in terms of derivational timing, before the ellipsis remnant moves to the left periphery and that $Op^-\neg[i\text{Neg}]$ occupies Spec,NegP (which dominates vP, see Zeijlstra, 2004), the two candidate structures underlying B’s fragment answer in (6) are given in (7) and (8).

(7) Nikogo $ya\ Op^-\neg[i\text{Neg}]\ ne\ videl$ nobody.ACC I $Op$ not saw

(8) Nikogo $Op^-\neg[i\text{Neg}]\ ya\ ne\ videl$ nobody.ACC $Op$ I not saw

The two structures above differ in the positions of the negation operator and the subject relative to one another: in (7), the operator is situated lower than the subject, whereas in (8), the operator is situated higher than the subject. As I argue below, neither structure is compatible with the Russian facts.

2.1 Low Op and ‘move-and-delete’

I begin by briefly stating some of the core properties of the Russian clause that any successful analysis must take into account. Firstly, the general consensus in the literature is that sentential subjects in Russian are in Spec,TP (Bailyn & Bondarenko, 2019; Gribanova, 2017; Slioussar,
2011) or a higher position with topic-like properties, cf. Scott’s (2012) Spec, HO P. Secondly, the verb is pronounced low in the structure, in v/Asp, in non-polarity-focus environments (Bailyn, 2011; Gribanova, 2017; Slioussar, 2011). There is thus no V-to-T or T-to-C movement in these environments. When a sentence contains negation, traditionally analysed as projecting a NegP, the verb moves to Neg, exactly as we have seen in (4). The subject, in the absence of ellipsis, is linearised to the left of NegP, which includes both the operator in Spec, NegP and the negated verb.

Recall that, in order to make the elided constituent in the answer semantically identical to an overt constituent in the question, the operator in Spec, NegP must not constitute a part of the ellipsis site. For the low-Op structure in (7) this entails that only the material to the right of $Op \rightarrow \lbrack iNeg \rbrack$ will be elided, as schematised in (9) below. This string, however, is not an acceptable fragment answer.

(9) *Nikogo $\left[ TP \ y_{A} \ \left[ T \left[ NegP \ y_{A} \ y_{I} \ \left[ Op \ y_{A} \ y_{I} \ \neg \ y_{I} \ \text{vedel} \right] \right] \right] \right]$

nobody ACC I Op not saw

Eliding the constituent that is in a sisterhood relationship with $Op \rightarrow \lbrack iNeg \rbrack$ results in the pronunciation of not only the neg-word intended to serve as a fragment answer but also the sentential subject, $y_{A} \ ‘I’$ in (7). I conclude that the low position of the operator with respect to the subject, the necessity of keeping the operator outside of the ellipsis site and the concomitant pronunciation of the subject alongside the neg-word make the low-operator version of the ‘move-and-delete’ analysis unable to derive the most basic facts.

2.2 High Op and ‘move-and-delete’

At first glance, positioning the negation operator higher than the subject, as schematised in (8) above, and eliding its sister constituent, as schematised in (10) below, appears to overcome the challenge formulated in Section 2.1 above.

(10) Nikogo $\left[ TP \ y_{A} \ \left[ T \left[ NegP \ \neg \ y_{I} \ \text{vedel} \right] \right] \right]$

nobody ACC Op not saw
Because the sentential subject in Russian occupies Spec,TP, as mentioned above, the high-operator structure in (10) entails that the negation operator responsible for the licensing of neg-words must be situated above TP. This conclusion makes an empirical prediction. Recall that for Zeijlstra (2004) and subsequent variations on that analysis the negation marker ne ‘not’ in the examples above (and its counterparts in other languages displaying strict negative concord) is dissociated from the negation operator and appears lower than it in the structure, and, just like neg-words, carries an uninterpretable [uNeg] feature. Consequently, any constituent that is demonstrably smaller than TP should be unable to contain either ne or any of the neg-words because their [uNeg] features would remain unchecked, since there would be no negation operator in the structure against which to check them. As I now show, this is a wrong prediction.

It is accepted as a fact that Russian eventive nominalisations are smaller than TP (Pazel’skaya, 2006; Pazel’skaya & Tatevosov, 2008; Pereltsvaig et al., 2018; Rudnev & Volkova, 2020; Tatevosov, 2015, to name just a few works), being formed on the basis of vP/VoiceP or AspP. In a similar vein, deadjectival nominalisations are also most plausibly analysed as not containing a TP. Contrary to the prediction of the high-operator analysis formulated above, both eventive nominalisations, illustrated in (11) and (12), and deadjectival nominalisations, illustrated in (13) and (14), can contain the negation marker ne ‘not’ as well as the neg-words.

(11) Absolyutnoe ne-vladenie nikakimi yazȳkami ei voobshche ne meshaet
    absolute NEG-command no languages her at.all not hinders
    v puteshestviyakh
    in travels
   ‘Her absolute lack of knowledge of any languages does not interfere with her travels at all.’

Example (11) features the negated deverbal noun nevladenie, derived from vladet’ ‘possess’, and its internal argument contains a neg-word determiner, nikakimi ‘no’, in the inherent instrumental case assigned by this verb to its internal argument.
Example (12) also features a negated deverbal noun, *nezhelanie* ‘not wishing’, formed from the verb *zhetat* ‘wish’. The verbal constituent, when nominalised, preserves its core argument structure in such a way as for the inherent dative case assigned to the experiencer argument to be preserved in the eventive nominalisation. In this particular example, it is this dative experiencer argument, *nikomu* ‘to no one’, that is realised as a neg-word.

Deadjectival nominalisations such as (13) and (14) display the same pattern.

(13) Pravdivost’ i ne-sposobnost’ ni k kakim kompromissam delali ego truthfulness and NEG-ability no to which compromise.PL made him vsegda v zhizni plokhim diplomat always in life bad diplomat ‘His truthfulness and inability to compromise always made him a poor diplomat.’

(14) Blokirovka, kak pravilo, oznachaet ne-vozmozhnost’ nikakikh dvizhenii blocking as rule means NEG-possibility no movements po schetu by account ‘(Account) freezing means, as a rule, the impossibility of any transactions.’

The two deadjectival nouns, *nesposobnost’* ‘inability’ in (13) and *nevozmozhnost’* ‘impossibility’ in (14), are formed from the adjectives *sposobnȳĭ* ‘able’ and *vozmozhnȳĭ* ‘possible’ via the addition of the nominalising suffix -*ost’* and the negation marker *ne*, and both license neg-word-containing complements. I remain agnostic as to the order of composition (‘Neg+Adj, then -*ost’,* or ‘Adj+-*ost, then Neg’), since the reasoning is valid in either case: given the high-operator analysis, the negation operator cannot be a part of either structure.
Before concluding this subsection, I would like to briefly mention how the facts in this subsection could be explained if neg-words were nonnegative universals scoping above negation, as proposed by Abels (2005) and Rossyaykin (2021) specifically for Russian. That analysis requires no abstract negation operators and takes the negation marker ne to be effecting semantic negation and carrying an [iNeg] feature in the syntax, and utilises movement in order to position the [uNeg]-carrying neg-words above negation, yielding the correct $\forall \neg$ scope relation. Extending that analysis to nominalisations requires postulating an additional movement step that takes the negated verb from the nominalised vP in (11) and (12), or of the negated adjective in (13) and (14), to morphosyntactically compose with the nominaliser (-nie and -ost'), deriving the correct word order. That extra movement step is independently necessary (see Pereltsvaig et al., 2018 for some discussion and references).

I conclude that the high-operator analysis cannot be correct and must be abandoned. The facts in this subsection are, however, compatible with the low-operator analysis. The low-operator analysis, on the other hand, makes wrong predictions with respect to the licensing of negative fragment answers, as detailed in Subsection 2.1 above. The only way to derive the correct fragment-answer facts and neg-words inside nominalisations on the existential analysis would be to adopt the low-operator analysis and allow the inclusion of negation inside the ellipsis site, which has been argued to be possible on independent grounds (Kroll, 2020; Kroll & Rudin, 2017; Landau, 2023; Ranero, 2021; Rudín, 2019). This creates complications for approaches capitalising on the distinction between the predictions of the neg-words-as-universals and neg-words-as-existentials approaches with respect to fragment answers, since the predictions would then be indistinguishable and the existential analysis deprived of any advantage.

2.3 Fragment answers: summary

I have argued in this section that, upon closer inspection, the NCIs-as-existentials approach as formalised in Zeijlstra (2004) does not interact well with Merchant’s (2004) ‘move-and-delete’ approach to fragment answers. Since that approach makes use of an abstract operator, it is the position of that operator that poses the biggest challenge with respect to accounting for two sets of facts: (i) what can appear as an ellipsis remnant in fragment answers and (ii) which nonsentential constituents can license neg-words. If the operator attaches low, it makes wrong predictions with respect to (i). If the operator attaches high, it makes wrong predictions with respect to (ii). To get both (i) and (ii), the existential approach must abandon the requirement...
of semantic identity, thus losing any advantage over the universal approach. I conclude that fragment answers are incapable of settling the debate between the two approaches (see for additional discussion of polarity mismatches in negative-concord fragment answers).

3. Multiple modified neg-words

This section presents the second challenge to the NCIs-as-existentials approach. I first summarise the logic of Zeijlstra’s (2004) argument in Subsection 3.1, and then present naturally-occurring data from a selection of strict negative concord languages that are problematic for that approach but follow straightforwardly from the NCIs-as-nonnegative-universals approach.

3.1 Multiple modified neg-words: the logic

Multiple scholars have argued that the ability of neg-words to be accompanied by almost, as in the Russian example (15), makes them more similar to universal quantifiers, as in (16), and rather dissimilar to the existential quantifiers, which cannot co-occur with almost, see (17).

(15) Pochti nikto ne prishël.
    almost no.one not came
    ‘Almost no one came.’

(16) Almost everyone came.

(17) *Almost someone came.

Accepting the fact that almost does not compose with indefinites/existentials, as shown in (17), Zeijlstra (2004: §7.4) nevertheless observes that that does not rule out an existential analysis of (15) and provides several arguments against treating neg-words as nonnegative universals. In particular, he argues that, since almost-modification can plausibly be restricted to endpoints on a scale, existentials/indefinites could be argued to denote minimal amounts, thus being compatible with almost-modification. What is required, however, is for almost to undergo
covert movement to a higher position to semantically compose with the clause, since it is by
definition incapable of composing with existentials. The resulting meaning of (15) would then
be paraphrasable as ‘the situation was close to no one coming but minimally different from it’.
This entails that multiple neg-words should be unable to each be modified by almost, as all
instances of almost would have to move higher than negation:³

On the other hand, if the universal quantifier analysis is correct, two multiple n-
words can each be modified by almost. If n-words are existentials/indefinites
almost cannot occur more than once in the clause since it cannot modify
existentials/indefinites, but only the first almost can scope over the negation,
yielding the order ALMOST > ¬∃, yielding the correct reading. Movement of the
second almost to a position dominating negation would make the sentence ill-
formed. (Zeijlstra, 2004: 239–240)

The prediction above is quite clear: if we find, within a single scope domain, multiple
instances of neg-words accompanied by almost, then that should be interpreted as an argument
against the existentialist analysis as well as an argument for the universalist analysis. The
crucial difference between the two analyses is that the universalist analysis, by treating neg-
words as universal quantifiers, makes use of the pattern in (16) and allows almost to compose
with the neg-words directly. I test Zeijlstra’s prediction in the next subsection.

3.2 Multiple almost-modification

This subsection demonstrates, by using naturally occurring examples mined from the web, that
sentences with multiple neg-words modified by almost are attested in West Slavonic (Czech
and Polish), East Slavonic (Belarusian, Russian and Ukrainian) and South Slavonic languages
(Bulgarian, Serbo-Croatian), and in Hungarian, being used in a variety of registers and with a
variety of positions with respect to negation.

In the Belarusian example (18), the two neg-words, the subject nichto ‘no one’ and the
directional adverbial nidzie ‘nowhere’ are accompanied by amal ‘almost’, and both precede the
negated verb nie naminuje ‘does not nominate’.
(18) Ja spačatku siadziela zahanialasía, što mianie amal nichto amal
I initially sat worried that me almost nobody almost
nidzie nie naminuje.
anywhere not nominates
‘At first, I sat there, worried that almost no one would nominate me anywhere.’
(Belarusian, http://livejournal.com)

The Bulgarian example (19) is parallel to the Belarusian one in that both neg-words accompanied by almost — the external argument pochti nikoy ‘almost no one’ and the negative temporal adverbial pochti nikoga ‘almost never’ precede the marker of sentential negation ne.

(19) Pochti nikoy pochti nikoga ne si svarshva rabotata v tazi
almost nobody almost never not REFL complete work.DEF in DEM
country
‘Almost no one ever gets their work done in this country.’
(Bulgarian, https://clubz.bg)

The Czech example (20) differs from its Belarusian and Bulgarian counterparts in displaying the information-structurally motivated VSO order, and the negated verb neumí ‘cannot/is unable to’ linearly precedes the subject and the object, both of which are modified by skoro ‘almost’. As far as can be ascertained, the interpretation of skoro-modified neg-words remains the same irrespective of the preverbal or postverbal placement.

(20) Na starších vozech dneska neumí skoro nikdo skoro nic.
on older cars currently cannot almost nobody almost nothing
‘Almost nobody can do almost anything on older cars these days.’
(Czech, https://forum.ladaklub.com)

Example (21) from Polish contains three, rather than two, neg-words, all of them modified by prawie ‘almost’: the nominative subject nikt ‘no one’, and two negative adverbials, nigdy ‘never’ and nigdzie ‘nowhere’. As is typical of Slavonic languages (Bošković, 2009; Brown, 2005; Filonik, 2014), the neg-words precede the negated verb nie dopuszcza ‘does not allow’. 
(21) Chwała Bogu że prawie nikt prawie nigdy prawie nigdzie tego thank God that almost nobody almost never almost nowhere that typu ludzi do władzy nie dopuszcza.
type people to power not lets
‘Thank God almost no one ever allows such people to have power anywhere.’

(Polish, [https://joemonster.org](https://joemonster.org))

The Russian example (22) features two neg-words, nikto ‘no one’ and nikogda ‘never’, both modified by pochti ‘almost’, and both preceding the negated verb ne delaet ‘does not do’.

(22) Ètot výbor pochti nikto pochti nikogda ne delaet osoznanno.
this choice almost nobody almost never not makes consciously
‘Almost no one ever makes this choice consciously.’

(Russian, [https://livejournal.com](https://livejournal.com))

The Serbo-Croatian example (23) is a close naturally occurring structural parallel to Zeijlstra’s (2004) allegedly unacceptable example (113). In it, the subject neg-word nitko ‘no one’ is modified by skoro ‘almost’ and precedes the negated periphrastic verb nije napravio ‘hasn’t made’; the neg-word internal argument ništ, also modified by skoro ‘almost’, occurs postverbally.

(23) od kojih skoro nitko nije napravio skoro ništ toliko
of whom almost nobody NEG.AUX done almost nothing as
iskreno.
sincere
‘of whom almost no one has made anything nearly as sincere.’

(Serbo-Croatian, [https://infozona.hr](https://infozona.hr))

Finally, the same facts are found in Ukrainian, another East Slavonic language, as can be glimpsed from example (24). In it, mayzhe ‘almost’ modifies both the external and the internal argument realised as neg-words.
(24) I ye shche yakas’ «tayemnycha» vehetatyvna nervova systema, pro and is yet some mysterious vegetative nervous system about yaku mayzhe nikhto mayzhe nichoho ne chuv. which almost nobody almost nothing not heard ‘And then there’s this “mysterious” vegetative nervous system which almost no one has heard anything about.’

(Ukrainian, https://alexus.com.ua)

The Slavonic languages are not the only ones to demonstrate strict negative concord; the same pattern of multiple occurrences of _almost_-modified neg-words also characterises Hungarian, as example (25) illustrates. In it, _szinte_ ‘almost’ modifies both the nominative subject _senki_ ‘no one’ and the accusative object _semmit_ ‘nothing’; both appear before the negated verb, as is common in Hungarian (Puskás, 2012).⁴

(25) Azóta szinte senki szinte semmit nem adott erre a since.then almost nobody almost nothing not gave for.this DEF célra nekem for.purpose me.DAT ‘Since then, almost no one has given me almost anything for this purpose.’

(Hungarian, https://forum.index.hu)

We have seen in this subsection multiple examples from a range of strict negative concord languages that strongly suggest that the predictions of Zeijlstra’s (2004) analysis of neg-words as indefinites/existentials are incorrect: multiple neg-words within one sentence can be modified by _almost_. While these facts are difficult to explain for the indefinite/existential approaches to the semantics of neg-words, which effectively analyse _almost_ as a sentential modifier, they follow straightforwardly if neg-words in these languages are nonnegative universal quantifiers. After all, there is no prohibition on _almost_ combining directly with universal quantifiers, and by extension no expectation that there should be only one _almost_ per clause. Indeed, as shown in (26) from Russian, regular universal quantifiers such as ‘every’ and ‘always’ can co-occur in one sentence when both are modified by _almost_.

⁴ We have left the Hungarian examples in their original order in (21)–(24) to preserve the logical sequence of the sentence. Translation is not always possible or desirable in such cases.
I conclude from the patterns above that the prediction of the existentialist analysis is incorrect, and the patterns themselves constitute an argument in favour of the universalist analysis of neg-words whereby they are nonnegative universal quantifiers scoping above negation.

4. Concluding remarks

I have argued in this contribution that the approach to the meaning of neg-words in negative concord languages treating them as existentials/indefinites in the scope of negation does not have the properties attributed to it in the literature when it comes to its interaction with fragment answers. Far from being decisive evidence against the competing neg-words-as-universals approach, fragment answers are therefore at most inconclusive. I have also adduced empirical evidence from a representative selection of strict negative concord languages showing that almost-modification constitutes an argument for the neg-words-as-universals approach, since multiple neg-words in these languages can simultaneously be modified by almost, a prediction the existentialist approach is unable to accommodate.

Endnotes

1 When I submitted my application for the University of Groningen doctoral programme in linguistics in 2010, one of the topics I intended to address was the interaction of negation with quantifiers. Even though this topic never made it into my 2015 dissertation, I never stopped thinking about it, and my interest in it has since resurfaced in the bigger context of agreement-like phenomena. I am grateful to Jack for his numerous contributions to the study of negation, scope and polarity, and, on a personal basis, for the profound influence on me during my time at the RUG. One truly does stand on the shoulders of giants. The present study was supported by RFBR and GACR, project number 20-512-26004.

2 Some of those arguments, such as the alleged inability of universal quantifiers to scope above negation, have since been invalidated (Fitzgibbons, 2014), which is why I do not discuss them here in any detail.

3 In a sense, this argument appears to be related to the question of the syntactic position of almost as either an NP-modifier or a clausal modifier. Penka (2011) argues, in particular, that, if the approximative semantics of almost follows from the clausal modification analysis, then the correct truth conditions of negated sentences containing
almost-modified neg-words also follow. If almost is a clausal modifier, then it should be impossible to find clauses with multiple instances of almost within one and the same scope domain. As observed by Rossyaykin (2020, 2021), however, Penka (2011)’s ((2011)) approach yields unattested interpretations in negated sentences without the neg-words.

In the interest of full disclosure, I have been unable to find comparable examples of multiple almost-modified neg-words in Hebrew, another language argued to have strict negative concord. I am also excluding Modern Greek from consideration, since its neg-words are homonymous with NPIs (Giannakidou, 2000), which is bound to create complications for the application of the multiple almost-modification test.

References


Bošković, Željko. (2009). Licensing negative constituents and negative concord. In Anisa Schardl, Martin Walkow, & Muhammad Abdurrahman (Eds.), *Proceedings of NELS 38* (pp. 125–139). GLSA.


Scott, Tatiana V. (2012). *Whoever doesn’t HOP must be superior: The Russian left-periphery and the emergence of superiority* [PhD thesis]. Stony Brook University.


