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- Hayashi, Midori. 2011. The Structure of Multiple Tenses in Inuktitut. Doctoral dissertation, University of Toronto.
- Heinämäki, Orvokki. 1974. Semantics of English Temporal Connectives, Doctoral dissertation, University of Texas, Austin.
- Kaufmann, Stefan and Misa Miyachi. 2011. On the Temporal Interpretation of Japanese Temporal Clauses. *Journal of East Asian Linguistics* 20:33-76.
- Kusumoto, Kiyumi. 1999. Tense in Embedded Contexts. Doctoral dissertation, University of Massachusetts, Amherst.
- Landman, Fred. 1991. *Structures for Semantics*. Kluwer. Dordrecht.
- Larson, Richard, K. 1990. Extraction and Multiple Selection in PP. *The Linguistic Review* 7: 169-182.
- Ogihara, Toshiyuki. 1995. Non-factual before and adverbs of quantification. Proceedings of *Semantics and Linguistic Theory V*: 273-291.
- Rizzi, Luigi. 2004. Locality and left periphery. In *Structures and Beyond. The Cartography of Syntactic Structures*, Vol. 3, ed. Adriana Belletti, 223-251. New York: Oxford University Press.
- Schlenker, Philippe. 2005. The Lazy Frenchman's Approach to Subjunctive. Proceedings of *Going Romance 2003*, 269-309.
- Sharvit, Yael. 2013. On the Universal Principles of Tense Embedding: The Lesson from *Before*. *Journal of Semantics*:1-51.
- Speas, Margaret. 2004. Evidentiality, Logophoricity and the Syntactic Representation of Pragmatic Features. *Lingua* 114: 255-276.
- Starke, Michal. 2001. Move Dissolves into Merge: A Theory of Locality. Doctoral dissertation, University of Geneva.
- Tomaszewicz, Barbara. 2009. Subjunctive Mood in Polish. Proceedings of *FDSL* 7:221-234.
- Tomaszewicz, Barbara. 2012. The Syntactic Position of Slavic 'by' and Its Effect on Main Clause Phenomena. In *Main Clause Phenomena*, ed. L. Aelbrecht, L. Haegeman, and R. Nye, 257-277. John Benjamins.
- Valencia, Victor Sánchez, Ton van der Wouden, and Frans Zwarts. 1992. Polarity and the Flow of Time. *Language and Cognition* 3: 209-218. Groningen, Uitgeverij Passage.
- Villalta, Elisabeth. 2008. Mood and Gradability: An Investigation of the Subjunctive Mood in Spanish. *Linguistics and Philosophy* 31: 467-522.
- Yoon, Suwon. 2010. 'Not' in the Mood: The Syntax, Semantics, and Pragmatics of Evaluative Negation. Doctoral dissertation, University of Chicago.

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## AGREE-dependent A-movement and Low Copy Pronunciation in Russian\*

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### 1 Introduction

Among the different types of movement found across languages, we observe that they differ, among other things, in whether they are accompanied by agreement in  $\phi$ -features ( $\phi$ -AGREE). For example, A-movement as seen in passive, unaccusative, and raising constructions in many languages is accompanied by the realization of the  $\phi$ -features of the moving element on the head that attracts it. On the other hand, other kinds of A-movement (e.g. A-scrambling) and  $\bar{A}$ -movement (e.g. *wh*-movement) do not involve  $\phi$ -AGREE. In this paper, we demonstrate that for certain types of movement, whether  $\phi$ -AGREE is involved will have

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direct consequences for the pronunciation of movement copies. We contrast  $\phi$ -AGREE-based movement in Russian A-chains with one type of non- $\phi$ -AGREE-based movement—in this case, the movement of certain oblique preverbal arguments. We demonstrate that in  $\phi$ -AGREE-based movement, either the highest or lowest copy can be pronounced;<sup>1</sup> this has been referred to as “covert movement” if the lowest copy is the one pronounced. Further, we demonstrate that this option is not available for the other type of movement; instead, for non- $\phi$ -AGREE-based movement, only the higher copy can be pronounced.

Empirical support for this claim comes from variably case-marked internal arguments. In Russian, internal arguments may be structurally case-marked accusative (ACC) or nominative (NOM); they may also be case-marked genitive (GEN) under negation. This includes surface objects of transitives (1b), surface subjects of unaccusatives (2b), and surface subjects of passives (3b), but not subjects of transitives or unergatives (Peškovskij, 1956; Pesetsky, 1982).<sup>2</sup> Note that default agreement (third person singular neuter) appears when the sole argument of the verb is case-marked genitive under negation (2b,3b).

- (1) a. Ja ne videl èti filmy.  
I NEG saw<sub>3SG.M</sub> these<sub>ACC</sub> films<sub>ACC</sub>  
'I didn't see these movies.'  
b. Ja ne videl ètix fil'mov.  
I NEG saw<sub>3SG.M</sub> these<sub>GEN</sub> movies<sub>GEN</sub>  
'I didn't see these movies.'

- (2) a. Otvet ne prišel.  
answer<sub>NOM</sub> NEG came<sub>3SG.M</sub>  
'The answer didn't come.'  
b. Otveta ne prišlo.  
answer<sub>GEN</sub> NEG came<sub>3SG.M</sub>  
'An answer didn't come.'

<sup>1</sup> Our assumption throughout is that the Y-model may permit situations in which a syntactic object moves in the narrow syntax but is pronounced in its base position in accordance with the copy theory of movement (Chomsky, 1993).

<sup>2</sup> Although Babby (1980, 2001) documents a limited set of examples in which unergatives are also able to take the genitive of negation.

- (3) a. Gazety ne byli polučeny.  
newspapers<sub>NOM</sub> NEG were<sub>PL</sub> received<sub>PL</sub>  
'The newspapers were not received.'  
b. Gazet ne bylo polučeno.  
newspapers<sub>GEN</sub> NEG was<sub>3SG.N</sub> received<sub>3SG.N</sub>  
'The newspapers were not received.'

Importantly for us, the GEN argument in unaccusatives and passives may appear preverbally (4a,5a) or postverbally (4b,5b).

- (4) a. Gribov zdes' ne rastët.  
mushrooms<sub>GEN</sub> here NEG grow<sub>3SG.N</sub>  
'No mushrooms grow here.'  
b. Zdes' ne rastët gribov.  
here NEG grow<sub>3SG.N</sub> mushrooms<sub>GEN</sub>  
'No mushrooms grow here.'  
(5) a. Segodnja gazet ne bylo polučeno.  
today newspapers<sub>GEN</sub> NEG was<sub>3SG.N</sub> received<sub>3SG.N</sub>  
'No newspapers were received today.'  
b. Segodnja ne bylo polučeno gazet.  
today NEG was<sub>3SG.N</sub> received<sub>3SG.N</sub> newspapers<sub>GEN</sub>  
'No newspapers were received today.'

The structural position of the preverbal GEN argument (4a,5a) (and other oblique preverbal arguments) is a matter of some debate (Lavine & Freidin, 2002; Babyonyshev et al. 2001; Bailyn, 2004; Slioussar, 2011, inter alia); we return to this debate in Section 4.2. Instead, our focus here is on cases in which the sole argument is postverbal (4b,5b). We follow Pesetsky (1982) and Harves (2002), among many others, in taking the postverbal GEN (and NOM) arguments of unaccusatives and passives to be merged initially as sisters to the verb.<sup>3</sup> There is the theoretical possibility

<sup>3</sup> This is an important starting point, because there is an alternative analysis in which the NOM argument may right extrapose to a high position. That analysis could potentially account for the binding, scope, and control data without necessitating any of our conclusions. There is some agreement that postverbal transitive and unergative subjects are extraposed (Sekerina, 1997; Slioussar,

that these arguments undergo movement to some left-peripheral position even when they are pronounced postverbally; that is, low copy pronunciation. Potsdam and Polinsky (2011) demonstrate (contra Babyonyshev et al., 2001) that the postverbal GEN argument does not undergo syntactic movement in conjunction with low copy pronunciation (4b,5b). Here, we argue that when the *in situ* argument of the unaccusative or passive is NOM (6b), it *does* undergo movement, in conjunction with pronunciation of the lower copy.

- (6) a. **Griby** zdes' ne rastut.  
 mushrooms<sub>NOM</sub> here NEG grow<sub>3PL</sub>  
 'Mushrooms don't grow here.'  
 b. Zdes' ne rastut **griby**.  
 here NEG grow<sub>3PL</sub> mushrooms<sub>NOM</sub>  
 'Mushrooms don't grow here.'

Evidence for this claim comes from binding, control, and scope diagnostics in  $\phi$ -AGREE-based A-chains (passive and unaccusative). We use these diagnostics to demonstrate that (a) the postverbal NOM arguments occupy a high position in syntactic structure, even though they are pronounced low, and (b) postverbal GEN arguments do not occupy this high position. We attribute this to the observation that NOM arguments enter into a  $\phi$ -AGREE relation with T, while GEN arguments do not. Our hypothesis is that movement chains predicated on a  $\phi$ -AGREE relation in Russian permit pronunciation of a low copy; movement that is not predicated on  $\phi$ -AGREE does not.<sup>4</sup>

2011), while arguments of unaccusatives are generated as internal arguments and are not extraposed (Polinsky et al., 2013; Slioussar, 2011). For evidence that the postverbal NOM arguments investigated here are not extraposed, see [web.stanford.edu/~bkrejci/KGH\\_FASL25\\_AppendixA.pdf](http://web.stanford.edu/~bkrejci/KGH_FASL25_AppendixA.pdf).

<sup>4</sup> One might expect that, in the case of nominative arguments, the argument will receive the same interpretation, whichever copy is pronounced; in fact, a reviewer points out that the two surface orders differ with respect to the definiteness of the nominative argument. We understand the difference to be a result of the discourse interpretive properties of the relevant arguments in their pronounced positions. How such interpretations arise is a large and important question, not addressable here. We suppose, however, that this information could either be read off of the surface structure or that there might be featural

## 2 Diagnostics for Low Copy Pronunciation in Movement

We consider three diagnostics which indicate that  $\phi$ -AGREE-dependent movement can involve low copy pronunciation, while at least one other kind of non- $\phi$ -AGREE-based movement cannot. We contrast the behavior of two kinds of sole arguments of unaccusative and passive predicates in postverbal position: NOM arguments, which trigger verbal agreement, and GEN arguments, which do not. All of the diagnostics are predicated on the idea that syntactic height (in terms of c-command) is relevant for binding, control, and scope interpretation.<sup>5</sup>

### 2.1 Binding

One way to test whether an argument has moved to a higher structural position, despite being pronounced in its *in situ* position, is to determine whether it has the ability to bind an anaphor located high in the syntax. Arguments that do not have the option of movement in conjunction with low copy pronunciation should not be able to bind high anaphors.

Our hypothesis is that NOM arguments pronounced in their *in situ* position enter into a  $\phi$ -AGREE relation with T and undergo movement to [Spec, TP]. We expect them to bind anaphors located high in the structure, even when they are pronounced low. In contrast, GEN arguments pronounced in their *in situ* position will not enter into a  $\phi$ -AGREE relation, will not move, and will not be able to bind anaphors located high in the structure from their low position (Babyonyshev et al., 2001; Polinsky & Potsdam, 2013).

specifications associated with the relevant arguments which partially drive the choice about which copy (low or high) to pronounce (as suggested in Stjepanović 1996).

<sup>5</sup> What is necessary for us is that the high position of the NOM argument be high enough to e.g. bind a high anaphor. This is true of NOM arguments of unaccusatives pronounced in preverbal position (i), which may bind an anaphor in a phrase adjoined to TP.

- (i) Na svoëm jubilee sam imeninnik tak i ne pojavilsja.  
 at self's party EMPH birthday-boy so and NEG appeared<sub>3SG,M</sub>  
 'The birthday boy never even appeared at his own party.'

We use the possessive anaphor *svoj* to test the binding possibilities of the NOM and GEN arguments. *Svoj* requires a clause-mate binder (7) (Rappaport, 1986; Bailyn, 2007) in [Spec, TP].

- (7) a. Ivan<sub>i</sub> ljubit svoju<sub>i</sub> sobaku.  
Ivan love<sub>3SG</sub> self<sub>ACC</sub> dog<sub>ACC</sub>  
'Ivan loves his dog.'

- b. Vanja znaet, čto Volodja<sub>i</sub> ljubit svoju<sub>i</sub> sestru.  
Vanja know<sub>3SG</sub> that Volodja love<sub>3SG</sub> self<sub>ACC</sub> sister<sub>ACC</sub>  
'Vanja<sub>i</sub> knows that Volodja<sub>i</sub> loves his<sub>i/y</sub> sister.' (Rappaport, 1986)

Binding of *svoj* is crucially not limited to NOM arguments. DAT (and presumably other oblique) arguments may bind *svoj*, given the right configuration (Babyonyshev et al., 2001; Chvany, 1975, 67). This tells us that position, not just case, is relevant for binding *svoj*.

- (8) Ivanu<sub>i</sub> bylo žal sebja<sub>i</sub> i svoju<sub>i</sub> sobaku.  
Ivan<sub>DAT</sub> was<sub>3SG.N</sub> sorry.for self<sub>ACC</sub> and self<sub>ACC</sub> dog<sub>ACC</sub>  
'Ivan was sorry for himself and his dog.'

Looking first at unaccusatives, *in situ* NOM arguments (9a) can bind high anaphors. We take this as evidence that syntactic movement has taken place. In contrast, *in situ* GEN arguments (9b) cannot bind high anaphors. We take this as evidence that movement has not taken place.

- (9) a. Na svoëm jubilee tak i ne pojavilsja sam  
at self's anniversary so and NEG appeared<sub>3SG.M</sub> EMPH<sub>NOM</sub>  
imeninnik.  
birthday-boy<sub>NOM</sub>  
'The birthday boy never even appeared at his own party.'  
b. \*Nasvoëm jubilee tak i ne pojavilos' samogo  
at self's anniversary so and NEG appeared<sub>3SG.N</sub> EMPH<sub>GEN</sub>  
imeninnika.  
birthday-boy<sub>GEN</sub>

Analogously, for passives, *in situ* NOM arguments (10a) may bind anaphors in a high position, while *in situ* GEN arguments (10b) cannot.

We take this as indicating that syntactic movement has taken place in the first case, but not in the second.

- (10) a. V svoej berloge ne byl najden ni odin medved'.  
in self's lair NEG was<sub>3SG.M</sub> found<sub>3SG.M</sub> not one<sub>NOM</sub> bear<sub>NOM</sub>  
'Not one bear was found in his own lair.'  
b. \*V svoej berloge ne bylo najdeno ni odnogo medvedja.  
in self's lair NEG was<sub>3SG.N</sub> found<sub>3SG.N</sub> not one<sub>GEN</sub> bear<sub>GEN</sub>

The evidence presented in this subsection shows that, for the purposes of anaphor binding, sole NOM arguments of passives and unaccusatives can act as if they have moved even in their *in situ* positions, while sole GEN arguments of passives and unaccusatives act as if they have not moved from their *in situ* positions.<sup>6</sup>

## 2.2 Control

Next, we use control as a diagnostic for determining whether an argument may appear high in the syntax despite being pronounced in its *in situ* position. If the relevant argument has moved to a high position, it should be able to control a structurally high PRO. Arguments that do not have the option of movement in conjunction with low copy pronunciation should not be able to control a high PRO.

Our hypothesis is that NOM arguments pronounced in their *in situ* positions undergo movement; therefore, we expect them to be able to control a PRO located high in the structure, even when they are

<sup>6</sup> One might wonder whether preverbal GEN arguments, having undergone movement to the left periphery, can do all the things that low GEN arguments (we claim) cannot—e.g., bind high anaphors. This is a question with a long history, originating in Bailyn's (1995) and King's (1995) early work on word order and discourse configurability in Russian. As discussed in Section 4.2, our analysis is compatible with the idea that GEN internal arguments move to a preverbal position that is either a second specifier of TP or a specifier of a separate discourse-associated functional head; in either case it is an open question whether that landing site is an A-position. The same question goes for DAT experiencer arguments, especially if there is a second argument that is a NOM: whether we expect the NOM argument to scope over or under the DAT argument will depend on our ideas about where its landing site is with respect to the position of the DAT.

pronounced low. In contrast, GEN arguments pronounced in their *in situ* position will not enter into a  $\phi$ -AGREE relation, will not move, and will not be able to control a PRO located high in the structure from their low position (Polinsky & Potsdam, 2013).

Crucially for us, NOM and (in spoken registers) DAT 'subjects' can control PRO (Pesetsky, 1982; Kozinskij, 1983; Moore & Perlmutter, 2000, *inter alia*), in this case in the gerundive. In (11a), a canonical NOM subject controls a high PRO, and in (11b) a dative experiencer argument controls a high PRO (Polinsky & Potsdam, 2013). This suggests that position, not just case, is relevant for control.<sup>7</sup>

- (11) a. PRO<sub>i</sub> načavšis' iz-za erundy, ix ssory<sub>i</sub> uže  
 PRO begun because-of nonsense their<sub>NOM</sub>spats<sub>NOM</sub> already  
 ne prekraščalis'.  
 NEG stop<sub>3PL</sub>  
 'Having started out of nothing, their quarrels would never stop.'
- b. PRO<sub>i</sub> putešestvuja, vam<sub>i</sub> udastsja uznat' mnogo  
 PRO traveling YOU<sub>PL.DAT</sub> manage<sub>3SG.FUT</sub> learn<sub>INF</sub> much  
 novogo.  
 new  
 'As you travel you will be able to learn many new things.'

For unaccusatives, *in situ* NOM arguments (12a) can control a high PRO. In contrast, *in situ* GEN arguments (12b) cannot control a high PRO. We take this as evidence that the NOM argument has moved high in the structure, despite *in situ* pronunciation, while the GEN argument has not moved higher than its *in situ* position.

- (12) a. PRO<sub>i</sub> načavšis' iz-za erundy, uže ne  
 PRO begun because-of nonsense already NEG

<sup>7</sup> A reviewer has pointed out that certain examples with dative controllers sound better than others; this seems in line with previous characterizations of such constructions as conversational in nature. It is clear, though, that dative arguments can be controllers in a variety of contexts; see (18). The reviewer has pointed out that the modal flavor of (11b) may be contributing to a higher level of acceptability. We leave further investigation of why this might be to future work.

prekraščalis' ix ssory<sub>i</sub>.  
 stop<sub>3.PL</sub> their<sub>NOM</sub> quarrels<sub>NOM</sub>  
 'Having started out of nothing, their quarrels would never stop.'

- b. \*PRO<sub>i</sub> načavšis' iz-za erundy, uže ne  
 PRO begun because-of nonsense already NEG  
 prekraščalos' ix ssory<sub>i</sub>.  
 stop<sub>3SG.N</sub> their<sub>GEN</sub> quarrels<sub>GEN</sub>

Similarly, for passives, *in situ* NOM arguments (13a) can control a high PRO, while *in situ* GEN arguments (13b) cannot. We take this to indicate that the nominative arguments have moved to a higher position, whereas the genitive arguments have not.

- (13) a. PRO<sub>i</sub> popavšis' na spisyvanii, ne byl dopuščen k  
 PRO caught on cheating NEG were<sub>3PL</sub> permitted<sub>3PL</sub> to  
 začetu ni odin provinivšijsja student<sub>i</sub>.  
 test not one<sub>NOM</sub> guilty<sub>NOM</sub> student<sub>NOM</sub>  
 'Having been caught cheating, not a single guilty student was permitted to take the test.'
- b. \*PRO<sub>i</sub> popavšis' na spisyvanii, ne bylo dopuščeno  
 PRO caught on cheating NEG was<sub>3SG.N</sub> permitted<sub>3SG.N</sub>  
 k začetu ni odnogo provinivšegosja studenta<sub>i</sub>.  
 to test not one<sub>GEN</sub> guilty student<sub>GEN</sub>

This evidence tells us that, for the purposes of control of a highly positioned PRO, sole NOM arguments of passives and unaccusatives can act as if they have moved even in their *in situ* positions; in contrast, sole GEN arguments of passives and unaccusatives act as if they have not moved to a higher syntactic position from their *in situ* positions.

### 2.3 Scope

For our final diagnostic, we examine the scope-taking possibilities of the relevant arguments. An *in situ* argument that has moved high in the narrow syntax should have expanded scope possibilities, while an *in situ* argument that has not moved should exhibit a more limited range of scopal interpretations. We expect a quantified NOM argument to move to a high position and be able to scope over negation from its high position



or under negation from its low position. In contrast, we expect a GEN argument to scope under negation only.<sup>8</sup>

First, it is important to show that a canonical preverbal NOM subject can scope above or below negation (14). We expect that nominative arguments of unaccusatives and passives, because they are also in a high syntactic position, will also have both scope possibilities.

- (14) Vse ne prišli.  
 all NEG come<sub>3PL</sub>  
 'Everyone didn't come.' ALL >> NEG  
 'Not everyone came.' NEG >> ALL

As expected, *in situ* nominative arguments of unaccusative verbs do take both scopes (15a). *In situ* genitive arguments, on the other hand, take only narrow scope (15b).<sup>9</sup> Similar judgments are reported in Potsdam & Polinsky (2011) and Polinsky & Potsdam (2013).

- (15) a. V čemodan ne pomestilis' vse neobxodmye dlja menja  
 in suitcase NEG fit<sub>3PL</sub> all<sub>NOM</sub> necessary<sub>NOM</sub> to me  
 jubki.  
 skirts<sub>NOM</sub>  
 'All the skirts necessary to me did not fit into the suitcase.'  
 'Not all the skirts necessary to me fit into the suitcase.'

<sup>8</sup> Scope judgments for (14)-(16) were collected by asking speakers if the relevant sentences were compatible with particular contexts, e.g. *There were five skirts and only four fit in the suitcase*; or *There were five skirts and all five did not fit in the suitcase*.

<sup>9</sup> Slioussar (2011) finds that the NOM argument in examples like (15a) can take only narrow scope, in contrast to the postverbal NOM argument of an unergative predicate, which she shows may take wide or narrow scope. She takes this as evidence that internal nominative arguments do not raise to [Spec,TP]; on our analysis, however, internal NOM arguments must have the option of moving to a higher position even when they are pronounced *in situ*. The judgments we collected support this prediction.

- b. V magazine ne okazalos' vse neobxodimyx dlja menja  
 at store NEG appeared<sub>3SG.N</sub> all<sub>GEN</sub> necessary<sub>GEN</sub> for me  
 produktov.  
 groceries<sub>GEN</sub>  
 # 'At the store all the groceries I needed turned out not to be there.'  
 'At the store not all the groceries I needed turned out to be there.'

With passives, *in situ* NOM arguments (16a) take both scopes, as expected if syntactic movement has taken place. *In situ* GEN arguments (16b), however, are unfortunately not possible when the genitive is a quantifier. This means we cannot formulate the right kind of example to test the scope possibilities.

- (16) a. Na ètom kompjutere ne byli najdeny vse fajly.  
 on this computer NEG were<sub>PL</sub> found<sub>3PL</sub> all<sub>NOM</sub> files<sub>NOM</sub>  
 'All the files were not found on this computer.'  
 'Not all the files were found on this computer.'  
 b. ?/\* Na ètom kompjutere ne bylo najdeno vse fajlov.  
 on this computer NEG was<sub>3SG.N</sub> found<sub>3SG.N</sub> all<sub>GEN</sub> files<sub>GEN</sub>

Taken together, the evidence presented here shows that sole NOM arguments of passives and unaccusatives can take wide scope; that is, they act as if they have moved even when pronounced in their *in situ* positions. In contrast, sole GEN arguments of unaccusatives cannot take wide scope, which suggests that they have not moved to a higher syntactic position.

### 3 Comparison with *In Situ* Datives

In this section we compare the behavior of *in situ* NOM and GEN internal arguments to the behavior of *in situ* datives. This comparison is called for because the difference between GEN of negation and NOM may be one of size rather than of height. For example, Pereltsvaig (2006) found that certain quantified noun phrases (e.g. *pjat' devoček* 'five girls'), when they do not trigger agreement (3SG.N), also cannot bind anaphors, co-

refer with PRO, or take wide scope, even when they are preverbal subjects.<sup>10</sup>

This is relevant for us because the GEN assigned under negation could also be structurally different from NOM nominals (along the lines of Pesetsky 1982 and its descendants)—with corresponding non-referential semantics. On this alternative account, regardless of whether GEN arguments move, they cannot bind, control PRO, or take wide scope for entirely independent reasons. The evidence in Section 2 still points to movement for postverbal NOM arguments of unaccusatives, but the contrast with GEN arguments is potentially lost.

One solution to this issue involves dative direct objects. Our  $\phi$ -AGREE account predicts that any non-NOM postverbal argument will behave just like the GEN arguments of unaccusatives under negation, including DAT direct objects of transitive verbs. First, it is important to show that morphological DAT case does not prevent binding by a DAT argument (Babyonyshev et al., 2001; Chvany, 1975, 67) (8), wide scope of a DAT argument over negation (17), or control by a DAT argument (Pesetsky, 1982; Kozinskij, 1983; Moore & Perlmutter, 2000) (11b), as long as the argument is high enough in the structure. This suggests that structural position, not just case, is relevant for these diagnostics.

- (17) Vsem devočkam ne nraivitsja èta kniga.  
 all<sub>DAT</sub> girls<sub>DAT</sub> NEG please<sub>3SG.F</sub> this<sub>NOM</sub> book<sub>NOM</sub>  
 'All the girls don't like this book.' ALL>>NEG  
 ?'Not all the girls like this book.' NEG>>ALL

DAT direct objects can also control a lower PRO (18).

- (18) On pomog devočke, [PRO<sub>i</sub> najti sobaku].  
 he<sub>NOM</sub> helped<sub>3SG.M</sub> girl<sub>DAT</sub> PRO find<sub>INF</sub> dog<sub>ACC</sub>  
 'He helped the girl find the dog.'

<sup>10</sup> In addition, genitive arguments are said to be "property-denoting expressions that lack existential commitment" (Kagan, 2013); a difference in semantic type may contribute to the contrasting behavior of nominative and genitive arguments presented in Section 2.

These two facts suggest that DAT direct objects are an appropriate test case; we can compare their behavior with respect to binding, control, and scope with that of the nominative and genitive internal arguments of unaccusatives and passives.

In fact, DAT direct objects follow the expected pattern: they cannot control a high PRO (19a), take wide scope (19b), or bind a high anaphor (19c) from a VP-internal position.

- (19) a. PRO<sub>i/y</sub> possorivšis iz-za erundy, Vasja, ne  
 PRO having-argued because.of nonsense Vasja<sub>NOM</sub> NEG  
 zavidoval devočkam.  
 envy<sub>3SG.M</sub> girls<sub>DAT</sub>  
 'Having argued because of nonsense, Vasja didn't envy the girls.'  
 b. Učitel'nica ne verit vsem učenikam.  
 teacher<sub>NOM</sub> NEG believe<sub>3SG</sub> all<sub>DAT</sub> students<sub>DAT</sub>  
 # 'For all of the students, the teacher does not believe them.'  
 'The teacher believes not all of the students.'  
 c. \*Na svoëm jubilee samomu imeninniku nikto ne  
 at self's anniversary EMPH<sub>DAT</sub> birthday-boy<sub>DAT</sub> no-one<sub>NOM</sub> NEG  
 pomogal.  
 helped<sub>3SG.M</sub>

This is predicted by our hypothesis that any non-NOM postverbal argument should not be able to move to a high position while being pronounced in its *in situ* position.

At the start of this section, we raised the question: is the oblique argument's inability to bind, control, and take wide scope a fact about syntactic height or about its internal structure (its case or size)? It is difficult to tell in the case of GEN arguments of unaccusatives under negation, but data from direct object DAT arguments demonstrates that the generalization is about syntactic height, not internal structure (case or size). Movement in conjunction with low copy pronunciation is not a possibility for arguments that do not agree (i.e. non-NOM arguments).

#### 4 Analysis

Our analysis attempts to account for the observation that NOM *in situ* arguments always enter into an AGREE relation and may move, though

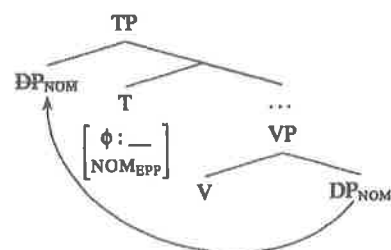


there is an option to pronounce the lower copy in the chain; and, if the GEN argument remains *in situ*, it has not moved (i.e. there is no option of movement and low copy pronunciation).

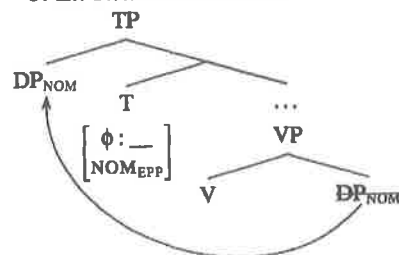
We take on a number of assumptions. We assume that the relevant type of GEN case is assigned first, although we leave underspecified the mechanism by which this takes place. Then, finite T looks for a DP in its c-command domain to agree with. We assume that only caseless DPs are visible to the search procedure, and the probe agrees with the highest eligible goal. If T agrees successfully, it gets the  $\phi$ -feature values of the DP and assigns its case feature to the DP. If T cannot agree (e.g. because there are no visible DPs in its c-command domain), it gets the default  $\phi$ -feature values (per Preminger, 2014), in this case third person singular neuter. The EPP subfeature forces syntactic movement (and is not a phonological requirement).<sup>11</sup>

(20) Nominatives (unaccusatives, passives)

a. *In situ* nominatives

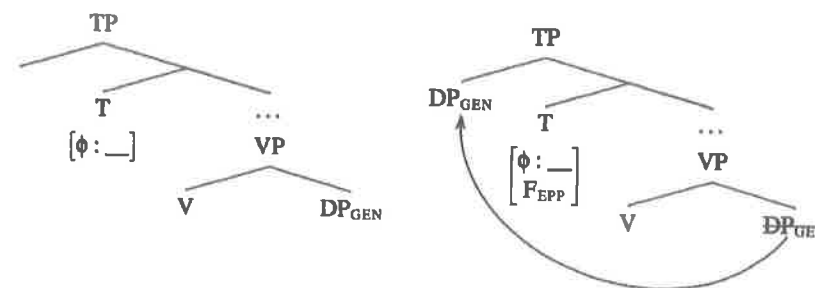


b. *Ex situ* nominatives



(21) Genitives (unaccusatives, passives)

a. *In situ* genitives of negation    b. *Ex situ* genitives of negation



For NOM arguments, T [ $\phi$ : \_; NOM<sub>EPP</sub>] probes for an appropriate nominal with which to agree and to which it can assign case. It finds the sole argument of a passive or unaccusative if that argument has not been assigned GEN under negation. The features on T force both agreement and movement, capturing the effects documented in Section 2. According to our hypothesis, the  $\phi$ -AGREE relation facilitates pronunciation of either the low (20a) or the high (20b) copy of the nominal. For GEN arguments, T [ $\phi$ : \_] probes for an appropriate nominal with which to agree, but finds nothing—the argument bearing GEN of negation is not an appropriate target for  $\phi$ -agreement. Default agreement results. Movement does not take place, capturing the effects documented in Section 2 (21a). If T also has a feature associated with it that has an EPP subfeature (F<sub>EPP</sub>), the GEN argument will move (21b). Because this movement is not predicated on  $\phi$ -AGREE, there will not be an option to pronounce the low copy in such configurations.

4.1 Why Does  $\phi$ -AGREE Facilitate Low Copy Pronunciation?

The proposal developed thus far raises the important question of why low copy pronunciation should be facilitated by the establishing of a  $\phi$ -AGREE relation (in addition to movement triggered by the EPP). The direction of this approach contrasts with an existing account (Nunes 2004), in which the choice of which copy to pronounce is determined by the number of formal features that each copy carries. Because PF will have to delete any formal features that it cannot interpret, it is more economical to pronounce the copy with the smallest number of uninterpretable features. Under normal circumstances, this will be the highest copy. The question of what Nunes (2004) predicts for our case study depends largely on the mechanism one chooses for the assignment of case. If we adopt his account of case assignment, case is an

<sup>11</sup> We have shown that NOM internal arguments *may* move to [Spec, TP]; one may ask whether they *must* do so. We assume for concreteness here that the movement is an obligatory one, but leave open the possibility of the other option as well.

uninterpretable feature, and the lower copy of a nominative argument will not have its case features checked, whereas the higher copy will. Under these circumstances, the prediction is that the higher copy must be pronounced, counter to the facts laid out here.

As an alternative way of explaining low copy pronunciation, we propose that Russian has a requirement that, when movement takes place, the syntactic dependency between the probe and the goal must be expressed at PF overtly. Specifically, if a phrase XP satisfies the EPP feature associated with a head Y, then either XP is pronounced in [Spec, YP] or there is a phonetic realization of a  $\phi$ -AGREE relation between Y and XP. Because NOM arguments trigger verbal agreement, the second condition is satisfied and any of the copies may be pronounced; because GEN arguments do not trigger verbal agreement, the only way to satisfy the requirement is for the highest copy to be pronounced.

#### 4.2 Preverbal Non-nominatives in Russian

Our analysis connects to a larger debate about word orders in Russian in which the preverbal argument is not a nominative. This includes unaccusative constructions in which an argument bearing genitive of negation appears in first position (4a); OVS word order in (22b), where the accusative object appears in first position; the adversity impersonal construction, in which an accusative or instrumental argument appears in first position (23); and raising constructions, in which any argument can precede the matrix verb (24).

- (22) a. **Ivan** čitaet ètu knigu.  
Ivan<sub>NOM</sub> reads this book<sub>ACC</sub>  
'Ivan reads this book.'
- b. **Ètu knigu** čitaet Ivan.  
this book<sub>ACC</sub> reads Ivan<sub>NOM</sub>  
'Ivan reads this book.'
- (23) a. **Soldata** ranilo pulej.  
soldier<sub>ACC</sub> wounded<sub>3SG.N</sub> bullet<sub>INSTR</sub>  
'A soldier was wounded by a bullet.'
- b. **Pulej** ranilo soldata.  
bullet<sub>INSTR</sub> wounded<sub>3SG.N</sub> soldier<sub>ACC</sub>  
'A soldier was wounded by a bullet.'

- (24) a. **Yaša** možet stroit' dom.  
Yaša<sub>NOM</sub> can<sub>3SG</sub> build<sub>INF</sub> house<sub>ACC</sub>  
'Yasha can build the house.'
- b. **Livnem** možet zatopit' kvartiry.  
rain<sub>INSTR</sub> could<sub>3SG</sub> flood<sub>INF</sub> apartments<sub>ACC</sub>  
'Rain could flood the apartments.'
- c. **Kvartiry** možet zatopit' livnem.  
apartments<sub>ACC</sub> could<sub>3SG</sub> flood<sub>INF</sub> rain<sub>INSTR</sub>  
'The apartments could flood from the rain.'

There are two major hypotheses about the data above. The first is that there is a designated A-position [Spec, TP] that hosts a diverse array of arguments (Bailyn, 2004; Lavine & Freidin, 2002). Under this hypothesis, the bold arguments in (22) through (24) are in [Spec, TP]. The second is that only arguments that have agreed with T land in this A-position, with all others landing in a designated  $\bar{A}$ -position (Baker, 2008; Citko & Germain 2016; Slioussar, 2011). Under this hypothesis, only the bold arguments in (22a) and (24a) are in [Spec, TP]; the others are in another position.

There are two ways of understanding these hypotheses in light of our findings. One possibility is that the second hypothesis is correct; only NOM arguments, agreeing with finite T, are attracted via EPP to the [Spec, TP] position. Other arguments (e.g. preverbal GEN) do not enter into a  $\phi$ -AGREE relation with T and are attracted to the left periphery by EPP on some other functional head.

Alternatively, the first hypothesis can be maintained if we allow for the possibility of multiple specifiers of T; in a transitive clause with a NOM and a GEN argument, the first specifier hosts the NOM argument and the second hosts the GEN argument. The NOM argument has the option of being pronounced low. Neither of these hypotheses makes any claims about the A- or  $\bar{A}$ -status of the landing site. What they have in common is that if there is a nominative argument, it will be in [Spec, TP].

#### 5 Conclusions and Consequences

In this paper, we have contrasted the behavior of NOM arguments of unaccusative and passive verbs with that of corresponding oblique arguments. Using diagnostics from binding, control, and scope, we have

demonstrated that such NOM arguments move to a high structural position even when pronounced *in situ*, but that oblique arguments do not. We attribute this contrast to a distinction between movement predicated on a  $\phi$ -AGREE relation and movement that is not  $\phi$ -AGREE-based. We have proposed that Russian has a requirement that, when movement takes place, the syntactic dependency between the probe and the goal be expressed at PF overtly. This requirement is met when the highest copy in a movement chain is pronounced or when an overt exponent of  $\phi$ -AGREE is realized. The effect of the requirement is that low copy pronunciation is permitted for agreeing (NOM) arguments, but not for non-agreeing (non-NOM) arguments.

If our proposal is correct, we may wonder to what extent this is a Russian-specific pattern. Do we expect to find evidence of low copy pronunciation in e.g. A-scrambling in other languages? For example, Stjepanović (1996) argues that, in Serbo-Croatian, both structurally case-marked direct objects and inherently case-marked direct objects raise to [Spec, AgrOP], the position responsible for object-shift, despite being pronounced postverbally. Seen in light of our proposal, Stjepanović's findings may indicate that low copy pronunciation is possible for all Serbo-Croatian objects, meaning that low-copy pronunciation in Serbo-Croatian is not limited to NOM (agreeing) arguments, contrary to our findings for Russian. In the short term, the contrast between Russian and Serbo-Croatian may suggest that the PF requirement that movement have an overt exponent may be language specific; in the longer term, further investigation of such patterns in the Slavic languages and more broadly will be required in order to shed light on such contrasts, to the extent they are found.

Finally, our proposal makes a prediction about  $\bar{A}$ -movement in Russian. Because  $\bar{A}$ -movement is not predicated on a  $\phi$ -AGREE relation, we do not expect low copy pronunciation to be permitted in  $\bar{A}$ -movement. This means we do not expect to find evidence of covert  $\bar{A}$ -scrambling or covert *wh*-movement in Russian. What kinds of predictions our proposal makes for  $\bar{A}$ -movement in other languages is an open question, one that is largely dependent on whether the restriction on low copy pronunciation is specific to Russian. If  $\bar{A}$ -movement is governed by the same principles as A-movement, and if a language shares Russian's restriction on low copy pronunciation, then we predict

the language should have covert *wh*-movement only in case it also has *wh*-agreement, all other things being equal.

## References

- Babby, Leonard. (1980). *Existential sentences and negation in Russian*. Ann Arbor, MI: Karoma.
- Babby, Leonard. (2001). The genitive of negation: A unified analysis. In Steven Franks, Tracy Holloway King, & Michael Yadoff (Eds.), *Formal Approaches to Slavic Linguistics, the Bloomington meeting 2000* (pp. 39–55). Ann Arbor, MI: Michigan Slavic Publications.
- Babyonyshev, Maria, Ganger, Jennifer, Pesetsky, David, & Wexler, Kenneth. (2001). The maturation of grammatical principles: Evidence from Russian unaccusatives. *Linguistic Inquiry*, 32, 1–43.
- Bailyn, John. (1995). *A configurational approach to Russian "free" word order*. Doctoral dissertation, Cornell University, Ithaca, NY.
- Bailyn, John F. (2004). Generalized inversion. *Natural Language and Linguistic Theory*, 22(1), 1–49.
- Bailyn, John F. (2007). A derivational approach to micro-variation in Slavic binding. In Richard Compton, Magdalena Golezdzinowska, & Ulyana Savchenko (Eds.), *Annual workshop on formal approaches to Slavic linguistics 15* (pp. 25–41). Ann Arbor, MI: Michigan Slavic Publications.
- Baker, Mark. (2008). *The syntax of agreement and concord*. Cambridge: Cambridge University Press.
- Chomsky, Noam. (1993). A Minimalist Program for linguistic theory. In Ken Hale & Jay Keyser (Eds.), *The view from building 20* (pp. 1–52). Cambridge, Massachusetts: MIT Press.
- Chvany, Catherine V. (1975). *On the syntax of BE-sentences in Russian*. Bloomington, IN: Slavica.
- Citko, Barbara and Germain, Allison. (2016). If you can't agree, move on! Paper presented at LSA 90, Washington, D.C. 9 January.
- Harves, Stephanie. (2002). *Unaccusative syntax in Russian*. Doctoral dissertation, Princeton, Princeton, NJ.
- Kagan, Olga. (2013). *Semantics of genitive objects in Russian*. Dordrecht, Springer.

- King, Tracy H. (1995). *Configuring topic and focus in Russian*. Stanford, CA: Center for the Study of Language and Information.
- Kozinskij, Isaac. (1983). *O kategorii "podležaščee" v Russkom jazyke* [The category of "subject" in Russian]. Moscow: Institute of the Russian Language. (Project on Experimental and Applied Linguistics, Preprint 156)
- Lavine, James E., & Freidin, Robert. (2002). The subject of defective T(ense) in Slavic. *Journal of Slavic Linguistics*, 10, 253–289.
- Moore, John, & Perlmutter, David. (2000). What does it take to be a dative subject? *Natural Language and Linguistic Theory*, 18(2), 373–416.
- Nunes, Jairo. (2004). *Linearization of chains and sideward movement*. Cambridge, MA: MIT Press.
- Pereltsvaig, Asya. (2006). Small nominals. *Natural Language and Linguistic Theory*, 24, 433–500.
- Pesetsky, David Michael. (1982). *Paths and categories*. Doctoral dissertation, MIT, Cambridge, MA.
- Peškovskij, Alexandr M. (1956). *Russkij sintaksis v naučnom osveščeenii* (7th ed.). Moscow: Gos. Učebno-Pedagogičeskoe Izdatel'stvo Ministerstva Prosveščeniija RSFSR.
- Polinsky, Maria, Gallo, Carlos G., Graff, Peter, Kravtchenko, Ekaterina, Morgan, Adam Milton, & Sturgeon, Anne. (2013). Subject islands are different. In Jon Sprouse & Norbert Hornstein (Eds.), *Experimental syntax and island effects* (pp. 286–309). Cambridge: Cambridge University Press.
- Polinsky, Maria, & Potsdam, Eric. (2013). Diagnosing covert A-movement. In Lisa Lai-Shen Cheng & Norbert Corver (Eds.), *Diagnosing syntax* (pp. 210–234). Oxford: Oxford University Press.
- Potsdam, Eric, & Polinsky, Maria. (2011). Against covert A-movement in Russian unaccusatives. *Linguistic Inquiry*, 42(2), 345–355.
- Preminger, Omer. (2014). *Agreement and its failures*. Cambridge, MA: MIT Press.
- Rappaport, Gilbert C. (1986). On anaphor binding in Russian. *Natural Language and Linguistic Theory*, 4(1), 97–120.
- Sekerina, Irina A. (1997). *The syntax and processing of scrambling constructions in Russian*. Doctoral dissertation, CUNY, New York.
- Slioussar, Natalia. (2011). Russian and the EPP requirement in the Tense domain. *Lingua*, 121, 2048–2068.

- Stjepanović, Sandra. (1996). Is inherent case structural? In Martina Lindseth & Steven Franks (Eds.), *Annual workshop on formal approaches to Slavic linguistics 5* (pp. 295–311). Ann Arbor, MI: Michigan Slavic Publications.

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