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Against Covert A-Movement in Russian Unaccusatives Eric Potsdam University of Florida Maria Polinsky Harvard University

1 Introduction

It is widely accepted that there are displacement operations that show no visible phonological reflex. We use the term covert movement to refer to such operations. Covert movement has been at the forefront of the principles-and-parameters research agenda since Huang 1982 and May 1985, which used it to account for Chinese wh-in-situ and English quantified noun phrases, respectively. In the domain of Ā-movement, there are covert analogues of most overt movement phenomena, including covert wh-movement (Huang 1982, Richards 2001) and covert scrambling (e.g., Mahajan 1990). Within the domain of A-movement, however, the picture is rather different. Overt A-movement phenomena such as subject-to-subject raising, passive, and unaccusative advancement are robustly attested crosslinguistically; however, clear cases of covert A-movement are rare. One instance proposed in the literature is Babyonyshev et al.'s (2001) covert Amovement analysis of Russian unaccusatives. In this squib, we revisit that material and argue against the covert A-movement analysis on empirical grounds. We conclude that Russian unaccusatives do not instantiate covert A-movement.

We would like to thank John Bailyn, Beth Levin, Elena Muravenko, David Perlmutter, Irina Sekerina, and Yakov Testelets for helpful discussions.

2 The Argument for Covert A-Movement in Russian (Babyonyshev et al. 2001)

The A-movement that Babyonyshev et al. (2001) investigate is the movement of the internal argument of an unaccusative predicate to subject position. In English, the theme of an unaccusative predicate begins as an internal argument and moves overtly to the subject position, (1) (Perlmutter 1978, Pesetsky 1982, Burzio 1986, Levin and Rappaport Hovav 1995). In some languages, such as Italian, this movement is optional (e.g., Perlmutter 1983, Burzio 1986).

(1) $[_{TP} \text{ snow } [_{VP} \text{ melted } \frac{}{snow}]]$

Russian has several unaccusativity diagnostics (Chvany 1975, Pesetsky 1982), among them the genitive of negation (GN). GN is a phenomenon in which an underlying direct object may appear in the genitive case when licensed by negation. To illustrate, genitive is impossible on the direct object in (2a) because there is no negation but, in the negative (2b), the accusative and the genitive alternate.¹

(2) a. Ja uvidel ptic-u/*ptic-y.

1sg saw bird-ACC/*bird-GEN

'I saw a/the bird.' (GN impossible)

b. Ja ne uvidel ptic-u/ptic-y.

1sg not saw bird-ACC/bird-GEN

GN is impossible on subjects of transitive verbs, (3), and some intransitive verbs, (4), even in the presence of negation.

'I did not see a/any/the bird.' (GN possible)

- (3) a. Ni-kak-ie mal´cik-i ne polučili podarki.

 NEG-kind-*NOM*.PL boy-*NOM*.PL not received gifts

 b. *Ni-kak-iv mal´cik-ov ne polučilo podarki
 - b. *Ni-kak-ix mal'čik-ov ne polučilo podarki.

 NEG-kind-GEN.PL boy-GEN.PL not received gifts
 'No boys received gifts.'
- (4) a. Ni-kak-ie devočk-i ne tancevali.

 NEG-kind-*NOM*.PL girl-*NOM*.PL not danced
 - b. *Ni-kak-ix devoček ne tancevalo.

 NEG-kind-GEN.PL girl-GEN.PL not danced

 'No girls/None of the girls were dancing.'

In contrast, GN is possible with subjects of intransitive verbs that are canonically analyzed as unaccusatives. In this case, GN alternates with the nominative. We illustrate this alternation with the subject of a simple unaccusative verb, (5); the alternation is also possible on subjects of passive verbs and raising verbs.²

¹ Abbreviations used in glossing: ACC-accusative, COMP-complementizer, GEN-genitive, INF-infinitive, IPFV-imperfective, NEG-negation, NOM-nominative, NTR-neuter, PFV-perfective, PL-plural, PRES-present, SBJV-subjunctive.

² In addition to the case difference, there is a difference in agreement: verbal and adjectival predicates agree with the nominative, but verbs and adjectives assume default agreement with the genitive.

(5) a. Ni-kak-ie grib-y zdes' ne NEG-kind-*NOM*.PL mushroom-*NOM*.PL here not rast-ut.

grow-pres.3pl

 Zdes´ ne rast´-ot ni-kak-ix here not grow-PRES.SG NEG-kind-GEN.PL grib-ov.

mushroom-GEN.PL

'No mushrooms/None of the mushrooms grow here.'

Generalizing over these data and others, Babyonyshev et al. propose the following conditions on GN licensing:

- (6) a. "[GN] is restricted to underlying direct objects."(Babyonyshev et al., (7))
 - b. GN is licensed by negation under m-command.
 - c. GN is licensed across infinitival clause boundaries.
 - d. GN on a DP must be licensed at the DP's highest position in an A-chain.
 - e. GN licensing is checked at LF.

Babyonyshev et al. assign the following derivation to the GN example in (5b):

(7) $[_{TP} \frac{\text{nikakix gribov}}{\text{mere not grow Neg-kind-gen.pl.}}$ $[_{VP} \frac{\text{rast'ot ni-kak-ix}}{\text{grib-ov}}]$

mushroom-gen.pl 'No mushrooms grow here.'

On the surface, the GN is in the direct object position. At LF, the GN moves to the matrix subject position, Spec,TP. We represent this covert movement using a crossed-out copy in the higher position. The highest link in the chain is licensed as required by (6) by being m-commanded by negation.

The argument for covert A-movement comes from the following claim: when an unaccusative verb is embedded under a raising verb, the genitive theme argument of that verb can be licensed by matrix negation, but not by embedded negation.

(8) a. Ne dolžno [pojavit'sja ni-kak-ix not must.ntr appear.nf.pfv neg-kind-gen.pl mal'čik-ov v klasse].

boy-gen.pl in class
'There don't have to appear any boys in class.'
(Babyonyshev et al., (20a))

b. *Dolžno [ne pojavit'sja ni-kak-ix must.ntr not appear.inf.pfv neg-kind-gen.pl mal'čik-ov v klasse].
 boy-gen.pl in class ('There must not appear any boys in class.') (Babyonyshev et al., (20b))

The GN in (8a) is licensed by matrix negation according to the licensing conditions in (6). Whether or not the GN moves to the matrix

subject position, it will be m-commanded by the matrix negation. The ungrammaticality of (8b), in contrast, requires the following explanation: the GN undergoes covert A-movement to the matrix subject position, yielding the LF representation in (9).

(9) ni-kak-ix mal'čik-ov dolžno [ne pojavit'sja must.ntr not appear.inf.pfv ni-kak-ix mal'čik-ov v klasse]

NEG-kind-*GEN.*PL boy-*GEN.*PL in class

('There must not appear any boys in class.')

The embedded negation does not license GN because the GN has moved out of its m-command domain at LF. The highest link in the A-chain is thus not licensed, in violation of (6d). If the GN did not undergo covert A-movement, it would be licensed in its base position, contrary to fact, because it is m-commanded by the embedded negation. Thus, Babyonyshev et al. conclude that Russian unaccusatives instantiate covert A-movement.

3 Evidence against Covert A-Movement in Russian

The main argument against the covert A-movement analysis is empirical. The crucial example, (8b), is unacceptable for independent reasons not related to the licensing of GN. Structurally similar examples, with different lexical items, are fully acceptable. Three further arguments against covert A-movement come from coordination, long-distance scrambling, and scope.³

3.1 Graded Judgments: Semantic and Pragmatic Factors

Speakers' judgments on the crucial example, (8b), repeated as (10), vary depending upon several nonsyntactic factors: aspect of the embedded verb, choice of raising verb, animacy of the theme, and word order. None of these factors individually makes such examples unacceptable; however, violating all four factors results in the significant degradation seen in (8b).⁴

To begin with, speakers judge the example much more acceptable if the embedded verb is imperfective (all other items are held constant), (11). To quantify this difference, 10 native speakers were asked to rate these two examples on a scale of 1 to 5, with 1 being completely unacceptable and 5 being fully acceptable.⁵ The example with the

³ Additional arguments, which we have omitted for reasons of space, come from binding and control into gerund clauses.

⁴ Some of the grammatical examples below are in fact nonoptimal with respect to one or more of these factors. The degradation caused by the various factors is not linearly cumulative, however, a result familiar from the literature on sentence processing (e.g., Keller 2001).

⁵ The native speakers' average age was 29. Seven speakers were interviewed in Russia; 3 other speakers, interviewed in the United States, had been in the country 1 or 2 years.

perfective had an average rating of 1.8, while the example with the imperfective had an average rating of 3.75. Where relevant, additional judgments determined in this way are given below in square brackets. Changes from Babyonyshev et al.'s original example are glossed in boldface.

- (10) *Dolžno [ne pojavit'sja ni-kak-ix must.ntr not appear.inf.PFV neg-kind-gen.PL mal'čik-ov v klasse].
 boy-gen.PL in class
 ('There must not appear any boys in class.')
 (Babyonyshev et al., (20b)) [1.8]
- (11) ?Dolžno [ne pojavljat'sja ni-kak-ix must.ntr not appear.Inf.IPFV NEG-kind-GEN.PL mal'čik-ov v klasse].
 boy-GEN.PL in class
 'There must not appear any boys in class.' [3.7]

From a syntactic perspective, this contrast is unexpected. Aspectual differences do not otherwise affect A-movement. For instance, passives in Russian form equally well with perfective and imperfective verbs. The alternative we would like to propose is nonsyntactic: the perfective aspect on the verb and the genitive on the internal argument in (10) are semantically mismatched. Slavic perfective typically entails completion and telicity; the imperfective does not have such entailments (e.g., Comrie 1976, Filip 1999, Partee and Borschev 2007). Turning now to the genitive, it differs from the cases it alternates with (the accusative and the nominative) in that it can denote a referent that is less or not at all affected by the event in question (Benigni 2006). This interpretation is more compatible with the general meaning of the imperfective (Pereltsvaig 1999 and references therein) and may be seen as conflicting with the perfective, which contributes to the reduced acceptability of the critical example.

The second relevant factor is the modality of the raising verb. Babyonyshev et al.'s example uses the deontic modal 'must'. With a different modal, the example becomes more acceptable even if the aspect remains perfective. We illustrate this improvement with the past tense modal, *mog*- 'could' in (12). The average rating of 4.1 from native speakers should be contrasted with the 1.8 rating of Babyonyshev et al.'s example, (10).

(12) Moglo [ne pojavit'sja ni-kak-ix could.ntr not appear.inf.pfv neg-kind-gen.pl mal'čik-ov v klasse].
boy-gen.pl in class
'There could have not appeared any boys in class.' [4.1]

Again, this change in acceptability is unexpected under a purely syntactic analysis but looks reasonable if we take into consideration simple interpretive effects. The choice of the modal 'must' in Babyonyshev et al.'s original example predisposes the example toward a reading that

is incompatible with unaccusative lexical semantics. *Dolžno* 'must' is often associated with a volitional agent or 'performer,' whereas subjects of unaccusatives are typically nonvolitional (Dowty 1991, Levin and Rappaport Hovav 1995, Partee and Borschev 2007). This creates a semantic mismatch. There is no semantic conflict with the modal in (12), which does not have a bias toward volitionality, and the example becomes more acceptable.

If this explanation is on the right track, then we expect that the critical example will improve, even with the modal *dolžno* 'must', if we make the theme compatible with typical unaccusative semantics. One way to do this is to make the embedded theme inanimate. First, in such a case there is no possibility of interpreting the inanimate theme as a volitional entity bound by the obligation expressed by 'must'. Second, subjects of unaccusatives are more typically inanimate. (13) keeps the modal constant but changes the theme of the unaccusative from 'boys' to the inanimate 'difficulties', and the judgment improves significantly, from 1.8 to 4.0.

(13) Dolžno [ne pojavit'sja ni-kak-ix must.ntr not appear.inf.pfv neg-kind-gen.pl zatrudnen-ij v klasse].

difficulty-gen.pl in class

'There must not appear any difficulties in class.' [4.0]

The relevant examples in Babyonyshev et al. have animate themes with unaccusative verbs. This may contribute to their unacceptability, but the source of that unacceptability is not syntactic.

If we look at the native speakers' judgments above, the judgments for the more acceptable examples hover around 4.0, still not reaching the higher end of the scale. We hypothesize that a final source for the reduced acceptability is word order. Although Russian word order is quite flexible, verb-initial orders are dispreferred outside of purely presentational structures (Babby 1975, 1980, Partee and Borschev 2002, 2007). If the relevant examples above begin with a scene-setting adverbial expression, their acceptability improves even further, even with the crucial example that Babyonyshev et al. rely on.

(14) Vo vremja vstuplenija na scene dolžno ni
in time introduction on stage must.ntr neg
v koem slučae [ne pojavit'sja ni-kak-ix
in any case not appear.INF.PFV NEG-kind-GEN.PL
mal'čik-ov].
boy-GEN.PL
'During the introduction there must absolutely not appear
any boys on the stage.' [4.5]

The graded judgments can all be explained by taking into account semantics and information structure. The purely syntactic account is at best incomplete and at worst unnecessary since it cannot account for the variation. Given this conclusion, the crucial example given by Babyonyshev et al., (8b), does not provide an argument for covert

A-movement. It is unacceptable owing to the confluence of several nonsyntactic factors: marked verb-initial word order, an animate theme with a modal biased toward volitionality, and a mismatch between the semantics of the perfective verb and the unmarked interpretation of the genitive of negation.

3.2 Coordination

Even if we accept the judgments given in Babyonyshev et al., there are independent arguments against covert A-movement in unaccusatives. The first comes from coordination. Two infinitival clauses, each containing a genitive of negation, bracketed in (15), can be coordinated under a single raising verb.

(15) Pora priznat´ čto ne možet [pojavit´sja nov-yx time admit.INF that not can.3sG appear.INF new-GEN.PL idej] ili [pribavit´sja vdoxnoveni-ja]. idea.GEN.PL or increase.INF inspiration-GEN
'It is time to admit that new ideas cannot appear and inspiration cannot get better.'

This should be impossible because both GNs cannot undergo covert A-movement to the matrix subject position. Moving either one alone would violate the Coordinate Structure Constraint (CSC).⁶ Moving both XPs in an across-the-board-like derivation would also be illicit because across-the-board movement must apply to the same constituent in both conjuncts (e.g., Ross 1967, Williams 1978). Franks (1995) shows that morphological identity is in fact required in Russian across-the-board movement. Such movement would also target one landing site, Spec,TP, with two distinct constituents. Bošković and Franks (2000) argue that covert across-the-board movement does not exist; if their argument is correct, such a derivation is independently ruled out.

3.3 Long-Distance Scrambling

A second argument comes from scrambling. Russian has long-distance scrambling of arguments and some adjuncts, typically in colloquial, spoken registers (e.g., Bailyn 2001, Testelets 2006).

(16) ja mašin-u xotel [čtoby oni kupili mašin-u 1sg car-ACC wanted COMP.SBJV they bought v Moskve] in Moscow
'I wanted them to buy a car in Moscow.'

⁶ See Lin 2001 for evidence that A-movement is subject to CSC effects.

Such scrambling, however, is not acceptable for subjects under normal intonation (Bailyn 2001, Glushan 2006, Testelets 2006).⁷

(17) *Petja mne xočetsja [čtoby Petja zašol]
Petya me want COMP.SBJV stopped.by
('Petya I want to stop by.')

This also holds for passive subjects and dative subjects and thus is not tied to a particular surface case form. Bailyn (2001:647) proposes that Russian long-distance scrambling is Ā-movement and that the subject-object asymmetry follows from the *that*-trace effect, which is independently attested in Russian.

If the GN theme of an unaccusative verb undergoes covert movement to the subject position, we expect that it should be barred from long-distance scrambling. There are two scenarios to consider. If the GN theme were to undergo early A-movement to Spec,TP as part of the scrambling derivation, this would result in an illicit extraction from subject position, on par with (17). On the other hand, if the GN theme were to scramble directly from object position, without stopping in Spec,TP, it would be licit from a long-distance scrambling perspective but would violate whatever forces the covert A-movement to Spec,TP. However, the GN theme of an unaccusative verb turns out to successfully undergo long-distance scrambling, (18a), just as objects do. Compare that with the unacceptability of such scrambling with a nominative subject, (18b). We conclude that scrambling restrictions also argue against covert A-movement.

- (18) a. xuliganov mne xočetsja [čtoby zdes´ hooligan.gen.pl me want comp.sbjv here ne pojavljalos´ xuliganov] not appeared.3sg.ntr
 - 'I want no hooligans to appear here.'
 - b. *xuligany mne xočetsja [čtoby zdes´ hooligan.NOM.PL me want COMP.SBJV here xuligany ne pojavljalis´]
 not appeared.3PL

3.4 Scope

A final argument comes from scope considerations. Russian subjects interact scopally with clausemate negation. The following example illustrates the resulting ambiguity:

Müller and Sternefeld (1993) give several examples of long-distance scrambling of subjects (from Zemskaja 1973), including scrambling out of an adjunct clause; however, these examples all involve questions and are unacceptable without a strong intonation break before and after the scrambled DP.

(19) Vse obidy ne zabyvajutsja.
all.NOM hurts.NOM not be.forgotten.3PL
'All hurts do not disappear from memory.'
all > neg, neg > all

Assuming that the GN theme of an unaccusative verb undergoes covert movement to the subject position, we expect to see the same ambiguity. Example (20a) should have the same two interpretations as example (19) because it will have the LF representation in (20b), identical in structure to (19). This expectation is not borne out, however. (20a) is unambiguous and allows only the reading in which negation takes scope over the GN theme, as would be expected from an LF representation in which no A-movement takes place, (20c).

- (20) a. Na sobranii ne prisutstvovalo vsex on meeting not be.present.PAST.NTR all.GEN.PL sotrudnikov.
 employee.GEN.PL
 'Not all employees were present at the meeting.' neg > all
 *'All employees were not present at the meeting.'
 *all > neg
 b. all employee not [be present]
 - covert A-movement LF

 c. not [be present all employee]

 no movement

4 Conclusions

On the basis of categorical evidence from coordination, scrambling, and scope, as well as the graded judgments on the crucial supporting examples—which vary with word order, aspect, choice of raising verb, and animacy—we conclude that the proposal that Russian unaccusatives involve covert A-movement is incorrect. While covert A-movement may exist, it is not found in Russian unaccusative structures. If this is correct, two important questions arise for future research. First, what is the correct syntax for Russian unaccusatives, independent of whether or not the theme is genitive? We propose that such themes do not undergo A-movement, covert or overt. The central theoretical issue then is the status of the Extended Projection Principle and Spec,TP in Russian. Second, what accounts for the acquisition patterns

⁸ The low scope behavior of GN is well known (see Harves 2002 for an overview, and references therein). A number of researchers account for this pattern (Pesetsky 1982, Brown 1999, Pereltsvaig 1999, Harves 2002, Kagan 2007), but they do not simultaneously raise the GN above negation, either overtly or covertly.

reported in Babyonyshev et al. 2001? It was shown there that children have difficulty with unaccusative verbs that allow or require a GN theme. The explanation given in Babyonyshev et al. is that children who have difficulty with the required A-chain do not yet represent A-chains in their grammars. Given that unaccusative verbs with GN themes do not involve A-movement, that explanation for the acquisition data will need to be rethought.

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