Backward Pronominalization in Russian: A Syntactic Account

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1. Introduction

One of the interesting ways in which Russian is different from English is the impossibility of backward pronominalization in some of the cases that are grammatical in English. For instance, English sentences such as those in (1) and (2) below (from Lasnik 1976) have a reading on which the structurally higher, non-c-commanding pronoun can be understood as coreferent with a structurally lower R-expression:

(1)  His\textsubscript{i} mother loves John\textsubscript{i}.
(2)  Their\textsubscript{i} maid speaks well of the Smiths\textsubscript{i}.

The corresponding sentences in Russian are consistently judged as ungrammatical by the Russian speakers. Thus, ex. (3), a Russian counterpart of the English ex. (1), does not allow a reading on which the pronoun takes Ivan as its antecedent (or rather, that the pronoun is co-indexed with the referring expression Ivan):

(3)  *Ego\textsubscript{i} mama ljubit Ivan\textsubscript{i}.
     His mother\textsubscript{NOM} loves Ivan\textsubscript{ACC}
     “His\textsubscript{i} mother loves Ivan\textsubscript{i}”

Although this distinction between English and Russian is well-known, there is less work on it than might be expected. The only previously offered accounts of backward anaphora\textsuperscript{1} in Russian that we

\textsuperscript{1} Throughout this paper we use the term “backward anaphora” interchangeably with “backward pronominalization”. “Anaphora” here is thus meant to signify any element
are aware of are Avrutin and Reuland (2004), Kazanina (2005) and Kazanina and Phillips (2001). Interestingly, though, these authors do not treat basic cases like (3) above, but instead focus their attention on the restriction of backward anaphora in Russian temporal clauses, such as (4), to be discussed below:

(4) *Poka onel jel jablko, Ivan
while he ate apple Ivan
smotrel televizor
watched TV
“While he was eating an apple Ivan, watched TV”

In this paper we will attempt to formulate a generalization as to the exact syntactic conditions in which backward pronominalization (henceforth BP) is banned in Russian. We will also show that existing accounts are inadequate in that they neither connect mono-clausal (3) and bi-clausal (4) violations nor do they explain why languages differ with respect to BP the way they do. We will then offer an alternative, syntactic, account of Backward Pronominalization in Russian which reduces the contrast between English and Russian to a single parameter.

2. Backward Anaphora in English and Russian

2.1 Previous Accounts of BP in Russian
Avrutin and Reuland (2004) provides a Discourse Linking Account of BP in Russian according to which the languages differ with respect to which level referential dependencies can be formed at (narrow syntax, broad syntax or discourse). The authors believe that in English, but not in Russian, referential dependencies are formed in “broad” syntax (due to a temporal dependency between matrix and embedded T*, which is taken to be evidenced by tense concord) so that the subject of a subordinate clause can always refer to the subject of the main clause. In Russian, on the other hand, all TP are claimed to be “linked to discourse” due to the lack of such a temporal dependency (evidenced by the lack of tense

that takes an antecedent and not in the narrower way the term is used in Binding Theory (in reference to Condition A), that is, as a cover term for reflexives and reciprocals only.
concord). It is this linking that can sometimes lead to the BP violation on this account.

Avrutin and Reuland (2004) proposes three (strictly ordered) ways of linking a TP to discourse in Russian:

i. By directly valuing the reference time of TP (applies to perfective clauses only)

ii. By directly valuing Spec, TP (e.g., the subject) which causes the BP violation or

iii. By valuing the embedded clause with reference to the matrix clause. The last option is the “last resort” which applies only if the other two have failed to apply.

The following examples in (5-7) demonstrate how the three ways of linking TPs to discourse are taken to account for the BP distribution in Russian.

(5) Kogda oni polnostju razvalili stranu, when he completely destroyed PERF country

prezidenti ušel na pensiju (Option 1)

president went to retirement

“When/as soon as he, completely destroyed the country, the president, retired

According to the authors, “valuing the reference time of TP” applies to perfective clauses since they can be assigned a temporal interpretation.

(6) Poka on el jabloko, Ivan smotrel IMP apple Ivan watched IMP

televizor (Option 2)

TV

“When he, was eating an apple Ivan, watched TV”

Valuing Spec, TP applies to imperfective clauses since no independent temporal point can be assigned. This means that the pronoun must be evaluated immediately so BP is impossible.
While he was warm, Ivan walked undressed.

The last resort option, “valuing the embedded temporal clause with respect to the matrix clause” applies when the pronominal subject in not in Spec, TP (on Avrutin and Reuland’s account this means that the subject is not NOM-case marked). In such cases BP is possible. The Discourse-Linking Account of BP makes a number of predictions, which, when tested, turn out to be unsupported by the empirical data.

Avrutin and Reuland’s Predictions:

a. With NOM subjects, all imperfective temporal clauses should cause BP violations;

b. Case of the main clause (which comes linearly second) subject is irrelevant;

c. Monoclausal BP instances (if they don’t violate Principle C) should be fine

d. Syntactic context (depth of embedding, type of local clause) should not matter.

2.2 Testing Avrutin and Reuland’s Predictions

As demonstrated by the examples in (9) below, prediction (a), which states that with NOM subjects all imperfective temporal clauses should cause BP violations appears to be false:

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2. The authors assume that non-Nominative subjects are not in Spec, TP and therefore, the second option (valuing Spec, TP) is unavailable. However, there is evidence that non-Noms can fill Spec, TP (Lavine and Freidin 2001, Bailyn 2004) which, if true, would wrongly predict (7) to be ungrammatical on A&R account.

3. Because of significant speaker variation, we supplement examples from existing literature and local speakers’ intuitions with the survey of 30 native speakers, mostly from Moscow and St. Petersburg. Results are shown for all examples used in this survey.
(9) a. Poka oni razvalival stranu,  
While he was destroying country

presidenti mnogo pil (Survey: √11, *18)  
“While he was destroying the country, the president drank a lot”

b. Poka [ego studenti] rabotali, professor  
While his students worked professor

spal (Survey: √29, *1)  
“While his students worked, the professor was sleeping”

The two sentences in example (10) below falsify the prediction that the case of the main clause subject is irrelevant:

(10) a. ?Poka oni xorošo učilas, Maša byla  
While she well studied Maša was

dovol’na (Survey: √14, *15)  
satisfied

b. Poka oni xorošo učilas, vse byli  
While she well studied all were

dovol’ny Mašej (Survey: √29, *1)  
satisfied Maša

“While she studied well, everyone was happy with Maša.”

The examples in (10) differ from each other only in terms of case marking on the coreferent R-expression in the main clause, yet the second sentence, in which the R-expression bears an INSTR-case marking is grammatical for virtually all speakers in our survey. Prediction (c) made by the Discourse-Linking Account states that the
monoclausal instances of BP in Russian should be fine. This prediction is falsified by the ungrammaticality of examples such as (11) below:

(11) *Ego, mama ljubit Ivan, (Survey: \( \sqrt{5}, \ast 25 \))
    "His, mother loves Ivan,"

The account further predicts that syntactic context should not matter, whereas the contrast between the following examples proves that this prediction is false as well:

(12) a. *[Ego, sestra] uvažajet Ivan,  
    His sisterNOM respects IvanACC  
    "His, sister respects Ivan,"  (Survey: \( \sqrt{5}, \ast 25 \))

b. *{Muž [ego, sestry]} uvažajet Ivan,  
   Husband his sister respects IvanACC  
   "The husband of his, sister respects Ivan,"
   (Survey: \( \sqrt{5}, \ast 25 \))

c. [Druz’ja muža [ego, sestry]] uvažajut  
   Friends husband his sister respect  
   Ivan,  
   IvanACC  
   "The friends of the husband of his, sister respect Ivan,"

What the examples in (12) show is that the further the pronoun is embedded the more acceptable the sentences become, with (12c) being accepted by virtually all speakers. Why depth of embedding should matter to BP grammaticality is a mystery on the Discourse Linking Account. In the next section we will show that the contrast in (12) receives a natural explanation on the syntactic account of BP.

(13) a. *Poka oni jel jabloko,  
    while he ate IMPF apple  
    Ivan smotrel televizor  
   (Survey: \( \sqrt{5}, \ast 25 \))
   "While he, was eating an apple Ivan, watched TV"
b.  ?Kogda oni polnóstju razvalili stranu,
when he completely destroyed country
prezident, ušel  (Survey: √16, *14)
“When/as soon as he completely destroyed the country, the president left”

president left

“When/as soon as he completely destroyed the country, the president left”

Furthermore, the tense relationship between the two clauses appears to matter as well: as (13) demonstrates, in the bi-clausal cases, BP violations only occur with simultaneous actions.

(14)  a.  Poka Maša čitala emu, gazetu,
While Maša read him a newspaper
Ivan, dremal  (Survey: √28, *2)
Ivan drowsed
“While Maša read him a newspaper Ivan was drowsing”

b.  Kogda oni pel, mnogie slušali
when he sang many listened
Ivana, s vosxiščenjem  (Survey: √22, *8)
Ivan with admiration
“When he sang, many listened to Ivan with admiration”

Finally, case appears to matter for the grammaticality of BP as well: BP is allowed when the pronominal is not the NOM subject of the poka clause (as in (14a)) or when the R-expression is not the NOM subject of the main clause (as in (14b)). The following section provides an account
of BP which provides as explanation for the above-mentioned distribution of BP in Russian.

3. The Current Proposal

3.1 Monoclausal Cases of Backward Pronominalization

In this section we will argue that Backward Pronominalization violations in Russian are a special case of Binding Principle B violation. Below we provide a standard definition of Principle B of the Binding Theory:

(15) Principle B: a pronoun must be free in its domain.
    • ‘Free’ = not bound.
    • ‘Bound’ = c-commanded by a coindexed element in A-position
    • Domain = TP or DP with accessible subject

To account for the monoclausal BP violations as violations of Principle B of the Binding Theory we propose that in Russian the following parameter is at work:

(16) The Parameter: in Russian, R-expressions raise at LF to a local A position thus obtaining c-command of the pronoun and causing the violation.

Example (17b) shows an LF structure for example (3) (repeated here as (17a)). As can be seen from the example, the R-expression has raised to a c-commanding A position, thus accounting for the impossibility of coreference between the R-expression and the pronoun:

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4 A natural question to ask is what allows the raising of R-expression in Russian as opposed to English, for example? One of the possibilities that come to mind is the existence of a left-periphery A-position available for movement of a prominent argument (the “Prominence Position” of Bailyn 1995, see also Miyagawa 2001 for a similar proposal for Japanese).

As to the motivation for this movement, there are several possibilities, for instance, the discourse configurational nature of Russian (Gundel 1974/1988, King 1995, Avrutin and Reuland 2004); alternatively, LF requirement to move definite R-expressions outside the scope of existential closure (Diesing 1992).
   His mother\_{NOM} loves Ivan\_{ACC}  
   “His mother loves Ivan.”

b. *\{TP Ivan\_i [TP[ego\_i mama] ljubit __] \}

c. *\{TP Ivan\_i [VP ljubit ego\_i mamu] \}

There is a striking similarity between this violating LF and the overt principle B violation in (17c). Supporting evidence for our claim comes from the fact that further embedding the pronoun obviates the violation in both regular cases of Principle B violation and in the monoclausal BP cases (which we claim are a special case of Principle B violation) suggesting the issue is indeed one of a domain (ex. (18b)). The striking parallelism is demonstrated in (18) and (19):

18) a. *Ivan\_i kupil [knigi o nem\_i]  
   Ivan bought books about him  
   “Ivan bought books about him” (Survey: √3, *27)

b. *Ivan\_i kupil [ego\_i knigi]  
   Ivan bought his books  
   “Ivan bought his books” (Survey: √6, *24)

c. Ivan\_i kupil [Sašiny knigi o nem\_i]  
   Ivan bought Saša\_{POS} books about him  
   “Ivan bought Saša’s books about him” (Survey: √13, *17)

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5 Another important question that can be raised for our proposal is why the proposed LF raising does not feed anaphor binding, rendering examples such as (i) grammatical:

(i) *Svoja rabota razdražajet Ivana  
   self’s work irritates Ivan  
   “His [self’s] work irritates Ivan”.

We believe the fact that (i) fails does not invalidate the Principle B account of BP since Principles A and B may be sensitive to distinct A-positions in the left periphery (Williams 2006), or apply at distinct stages in the derivation (before or after the LF movement).

6 Following Harbert 1995, we take Binding Domain to be the domain of an accessible subject, where subject = AGR where present, or subject NP otherwise.
The contrast in the acceptability of the two sets of examples in (18) and (19) is expected on our (Binding-theoretic) account of Backward Pronominalization. In (18a) and (19a) the DP has no subject, therefore the DP is not a domain and the examples are ruled out on corefere nt reading. In both (18b) and (19b) the subject of the DP is not accessible which again means that the DP is not a domain, ruling the examples out on coreference. Finally, in both (18c) and (19c) the DP has a subject; with the DP counting as a domain, the violation is not incurred and coreference is allowed. The following is the proposed LF for the example in (19c):

(20)

As can be seen, the R-expression raises at LF, but since the DP counts as a domain in this case no violation is incurred and coreference is allowed. In the following section we will argue that the Principle B violation account of BP can be extended to the bi-clausal examples as well.

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7 Bianchi (2007) proposes (and ultimately rejects) a syntactic account of violating instances of English BP as Weak Crossover violations triggered by Focus movement. There is plenty of evidence that Russian violations of BP cannot be analyzed as WCO violations. Examples in (ii.) provide some evidence against such view of BP in Russian:
3.2 The Bi-Clausal Cases of Backward Pronominalization

Some of the violating cases of BP in bi-clausal structures are provided in (21) and (22) below:

21) *Poka on, rabotal professor, spal
    while he workedIMP professor sleptIMP
    “While he was working, the professor slept” (Survey: √5, *25)

22) *Poka on, jel jabloko, Ivan, smotrel
    while he ateIMP apple Ivan watchedIMP televizor
    TV
    “While he was eating an apple Ivan watched TV”
    (Survey: √4, *26)

Our account of these cases is based on Pesetsky & Torrego (2004) and Antonenko (2007). We propose that in simultaneous poka (or kogda) clauses the Tense features of both clauses are shared, with feature sharing involving the T of both clauses and anything in an AGREE relation with T (Antonenko 2007). Following Pesetsky and Torrego (2001) we take Nominative case to be an instance of T. We propose that the Nominative R-expression bind the Nominative pronoun in the clause it shares Tense features with, thereby violating Principle B of the Binding Theory.

In terms of the technical implementation of our proposal we see two plausible ways of proceeding. One possibility is extended LF movement of the R-expression (on analogy with our monoclausal cases). The proposed LF for example in (21) is provided in (22) below:

(ii) a. Rasskaz, kotoryj ona pročitala, rasstroil Mašu
    story which she readPERF upset Mašu
    “The story which she read upset Maša.”

b. *Rasskaz, kotoryj ona pročitala, rasstroil každuju devočku
    story which she readPERF upset every girl
    *“The story which she read upset every girl.”

As shown by the contrast, a QP-containing example in (b) is ungrammatical whereas the parallel example in (a) which contains an R-expression is grammatical, suggesting WCO is not the right answer.
Another possibility is movement of T to T, bringing formal feature complex of the Nominative element to the higher Nominative. This option would require modifying the formulation of Principle B, specifically it would have to be stated that a pronoun and an R-expression cannot be in an Agree relation with the same element. The suggested LF for (21) under this implementation of the proposal would be as in (24):

(24) *[T[+FF[professor]] [poka oni rabotal [TP ____ smotrel

   televizor]]] TV

Supporting evidence for our proposal comes from the fact that BP is impossible only if there is temporal simultaneity between the two clauses (compare the examples below to the simultaneous examples in (21) and (22) above):

(25) ?Kogda oni polnostju razvalil stranu,
when he completely destroyed country
prezident i ušel (Survey: √16, *14)

president left

“When/as soon as he completely destroyed the country, the
president left”

Note that the actions in the two clauses of (25) are sequential, and the example is considered to be better by the speakers than either of the (simultaneous action) examples in (21) and (22). There is still quite considerable variation in speaker intuitions on this example, as
demonstrated by the survey results. It can be argued though that such variability in judgments is due to the ambiguity inherent in “kogda” adverbials, which can be construed as either simultaneous or sequential. It is arguably this possibility of interpreting the actions as simultaneous due to the use of kogda temporal adverbial that the sentence is bad for some speakers. Further support for this as well as for the claim that BP is impossible if there is simultaneity of actions in the two clauses comes from the fact that if the kogda clause is substituted for the posle togo, kak clause (which is used only with sequential clauses) the judgments become much stronger and the sentence is judged as fully acceptable on coreference:

(26) Posle togo, kak on, polnostju razvalil stranu, after that he completely destroyed PERF country

prezident, ušel
president left

“After he, completely destroyed the country, the president, left”

Finally, under our view of BP as Principle B violation the case requirements fall out. On this account only Nominative case-marked pronouns and R-expressions incur the violation.

(27) Kogda emu, bylo ploxo, Ivan, mnogo
when he, was IMP bad Ivan, much

čital
read

“When he, was sad, Ivan, read a lot”

(28) Kogda im, publicno vosxišcalis’, Ivan, bylo
when he, intrans publicly admired Ivan, was

nelovko
uneasy

“When he, was publicly admired John, was uneasy”

That case does matter is further demonstrated by the contrast in (29):
(29) a. *Poka on, jel jabloko, Ivan, smotrej televizor
While he NOM ate IMP apple Ivan watched IMP TV
“The while he, was eating an apple Ivan watched TV”
(Survey: √4, *26)

b. Poka [ego, druž’ja] eli jabloki, Ivan, smotrej televizor
While his GEN friends ate apples Ivan watched IMP TV
“The while his, friends ate apples, Ivan watched TV

To summarize this section, the feature-sharing account of BP in bi-clausal sentences unifies these sentences with the monoclausal instances of BP and predicts the distribution of BP violations in simultaneous temporal clauses as well as the case requirements.

4. Summary
In this paper we hope to have shown that the Discourse Linking Accounts of BP are empirically inadequate in that they make a number of predictions not supported by the data. We have provided an alternative, syntactic, account that treats the violating instances of Backward Pronominalization as a special case of Binding Principle C violation. Such an account helps explain the distribution of BP in Russian, in particular it naturally explains the syntactic sensitivity of BP as well as unifies mono- and bi-clausal instances of Backward Pronominalization violations as essentially the same phenomenon.

Bibliography
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