"Head of an XP" fragments in Russian (Фрагментные ответы, состоящие из вершины проекции XP, в русском языке)

Ekaterina Morgunova (Екатерина Витальевна Моргунова) Lomonosov Moscow State University / Pushkin State Russian Language Institute

Abstract: This paper examines a certain type of fragment answers in Russian, namely the fragments that consist of a single head of a noun or a verb phrase. Invoking arguments from Vera Gribanova's works on verb head movement and some novel data on noun head movement in Russian, I argue that these constructions are derived not by focus movement, as was previously proposed for fragment answers by Jason Merchant, but by the stranding of the phrase's head. I show that the constructions in question present an argument in favor of the alternative theory of fragment's derivation, proposed in Andrew Weir's works, and help us reformulate the MaxElide constraint on fragment answers.

Аннотация: В статье рассматривается определенный вид фрагментных ответов в русском языке, а именно фрагменты, состоящие из вершины именной или глагольной группы. Опираясь на аргументы Веры Грибановой о передвижении глагольных вершин в русском и на новые данные, касающиеся передвижения именных вершин, мы защищаем предположение о том, что описываемые конструкции образуются с помощью стрэндинга (независимого передвижения) вершин составляющих, а не с помощью фокусного передвижения, как ранее предполагалось в работах Джеймса Мерчанта. Мы также демонстрируем, что исследуемые конструкции представляют новый аргумент в пользу альтернативной теории образования фрагментов, представленной в работах Эндрю Вейра, и позволяют нам более точно сформулировать принцип MaxElide для фрагментных ответов.

1. Introduction

Fragment answers (fragments) are short completed phrases, that typically consist of a constituent smaller than a full clause. In this article I will regard several different constructions as fragments. (1a) demonstrates the most common type of fragments — a fragment answer to a certain question. Fragments in (1b) and (1c) are responses to a verdictive phrase, the former being a contrastive response and the latter being a clarifying one. Finally, in (1d) a fragment with no linguistic antecedent is shown.

```
(1) a. A: kto
               ljubit
                              vasju?
          who love.PRS.SG.3 Vasya.ACC
          'Who likes Vasya?'
       B: maša.
          Masha
          'Masha (does)'
    b. A: maša ljubit
                               petju.
          Masha love.PRS.SG.3 Petya.ACC
          'Masha likes Petya'
       B: net. lena.
          no Lena
          'No, Lena (does)'
    c. A: govorjat,
                        čto maša
                                    vljubilas'
          say.PRS.PL.3 that Masha fall.in.love.PST.SG.F
                odnogo
                        svojego odnokassnika.
          into one.ACC self.ACC classmate.ACC
```

'They say that Masha fell in love with one of her classmates'
B: da, v vasju.
yes into Vasya.ACC
'Yes, with Vasya'
d. [Adressing a waiter] Odno kofe, požalujsta.
one coffee please
'One coffee, please.'

According to the hypothesis presented in Merchant's seminal paper (2004), fragment answers are derived in two steps: the phrasal movement of the remnant out of the clause to the specifier of the FP projection (which supposedly is a focus projection) and the following ellipsis (deletion on the PF level) of the rest of the clause. I will further address this approach as the "movement+ellipsis" approach. (2) shows the derivation of a fragment answer in English.

(2) a. A: Who did she see?
B: Jonh.
B': She saw John.

b. [FP[John] [TP-she saw John]]

Merchant's hypothesis is based on two sets of empirical observations. The facts of the first kind demonstrate that the form of a constituent in a fragment answer matches the form of the same constituent in a full answer. That entails that the remnant is a part of a full sentence (at least at the early steps of the derivation). For instance, the case form of the DP in a fragment must be the same as the form of the DP in a full sentence:

maša podarila (3) A: komu fotoapparat? who.DAT Masha give.PST.SG.F camera 'To who did Masha give a camera?' B: pete ||*petju ||*petej. Petya.ACC Petya.INSTR Petya.DAT 'To Petja'. B':maša podarila fotoapparat pete ||*petju ||*petej. Masha give.PST.SG.F camera Petya.DAT Petya.ACC Petya.INSTR 'Masha gave a camera to Petja'

Furthermore, in fragments, anaphoric elements must obey the principles of the Binding Theory, just like their correlates in non-elided clauses do. (4) demonstrates that anaphors and pronominals in fragments must obey Principles A and B respectively, while (5) shows that R-expressions in fragment answers cannot violate Principle C.

(4) A: kogo udaril miša_i?
who.ACC hit.PST.SG.M Misha
'Who did Misha hit?'
B: ego*_{i/j} ||sebja_{i/*j}.
he.ACC self.ACC
'Him. || Himself.'
B': miša_i udaril ego*_{i/j} ||sebja_{i/*j}.
Misha hit.PST.SG.M he.ACC self.ACC
'Misha hit him || himself.'

(5) A: gde oni živët?

where he live.PRS.SG.M

'Where does he live?'

B: *na dače kirilla_i.

at country.house.PREP Kirill.GEN

'At Kirill's country house.'

B': *on_i živët na dače kirilla_i.

he live.PRS.SG.M at country.house.PREP Kirill.GEN

'He lives at Kirill's country house.'

Observations of the second kind demonstrate that fragments undergo A'-movement out of the ellipsis site. According to Merchant, this is evident from the fact that some elements that are not able to undergo A'-movement cannot be used in a fragment answer. One proof of that sort is connected to the preposition stranding — it is permissible in fragment answers in a particular language only if it is acceptable in full sentences as well. That is why it is possible to strand a preposition in English fragments, but not in Russian ones¹:

(6) A: With who does Mary live?

B: (With) her parents.

(7) A: s kem živët nina?

with who.PREP live.PRS.SG.3 Nina

'Who does Nina live with?'

B: *(s) roditeljami

with parents.PREP

'With parents.'

(8) A: gde ležat jabloki?

where lay.PRS.PL.3 apple.PL

'Where are the apples?'

B: *(na) stole.

on table.PREP

'On the table.'

Having presented the basic fact about fragment answers, I turn to the main topic of this paper. In this paper I will consider one particular type of fragments in Russian, examples of which are presented in (9)–(10). The specific property of these constructions is that they consist of a head of a VP or a DP.

(9) A: čto on sdelal so svojej rukopis^jju? what he do.PST.SG.M with self.PREP manuscript.PREP

'What did he do to his manuscript?'

B: sžëg.

burn.PST.SG.M

'He burned it.'

(10) A: uvarov byl drugom puškina?

Uvarov be.PST.SG.M friend.INSTR Pushkin.GEN

'Was Uvarov a friend of Pushkin's?'

B: net, vragom.

no enemy.INSTR

'No, he was an enemy of his.'

It was previously noted in Testelets 2011, that such fragments might provide an argument against Merchant's hypothesis for the following reason. Let us remind that Merchant supposed that fragment's remnants undergo focus movement to the left periphery of the clause, i.e. they undergo A'-movement. It is known, that only full constituents can undergo that kind of movement. Thus, we would expect that heads of projections would not compose a felicitous fragment. That prediction is not borne out in Russian, as shown in the examples above.

There are two possible ways of how one can account for this property of Russian fragments. One possible hypothesis would be that fragments are derived by A'-movement, but an additional ellipsis of the head's arguments occurs after the remnant moves out of the TP. Alternatively, one could suggest that there is a special kind of movement in Russian, that can move heads independently and that this type of movement is the one used in the constructions in question. In this paper I will argue in favor of the latter analysis.

The paper is constructed as follows. In Section 2 I will provide arguments in favor of stating that "the head of an XP" fragments are derived by stranding of a verb or a noun head. Section 3 discusses what does the Russian data tell us about fragment's derivation in general. In Section 4 I talk on MaxElide constraint on fragment answers. Section 5 presents conclusive remarks.

2. Derivation of the "head of the XP" fragments

This section is devoted to the issue of the syntactic derivation of the type of fragment answers in question. I will start with presenting Vera Gribanova's arguments in favor of stating that short verbal responses in Russian involve verb-stranding. Next I am going to argue that a similar type of movement is involved in the derivation of the short nominal responses.

2.1. Derivation of the fragments consisting of a verb head

In her papers (Gribanova 2013a, 2013b, 2017) Gribanova argues that sentences like (9), along with a number of similar constructions, are derived by the independent movement of the verb head to the left periphery of the clause (namely, to the head Pol). The proposed derivation of such phrases is shown in (11).

The arguments in favor of that point of view are the following. First, both the pre-verbal subjects and the post-verbal ones are unacceptable in answers to polar questions. This fact indicates that such fragments represent a case of TP ellipsis — a type of ellipsis large enough to subsume all the arguments of the verb, including the surface structure subject².

(12) (Gribanova 2017: (50))

A: maša včera pis'mo v moskvu i telegrammu v piter? otpravila Masha yesterday send.PST.SG.F letter to Moscow and telegram to Piter 'Did Masha send a letter to Moscow, and a telegram to St. Petersburg yesterday?' B: (da), (#/?ona) otpravila (*ona). she send.PST.SG.F she yes 'Yes, she did.' B':(net), (#/?ona) ne otpravila (*ona). NEG send.PST.SG.F she no

'No, she didn't.'

Secondly, Gribanova points out that the verb head can strand from conjunctions and disjunctions. That is also expexted under Gribanova's account, because TP ellipsis is large enough to be able to elide fairly large portions of the sentence, composed of multiple constituents.

(13) (Gribanova 2013a: (3))

B: net, ne

budet

(*i).

A: kažetsja, čto anja položila ručku na stol, i knigu na stul. seems that Anya put.PST.SG.F pen.ACC on table and book.ACC on chair 'It seems that Anya put the pen on the table and the book on the chair.'

B: net, ne položila (*i). no NEG put.PST.SG.F and 'No, she didn't.'

Thirdly, short verbal responses involve a restriction in mismatching the stranded verb and the antecedent verb. For example, (14) demonstrates, that the verb stems cannot mismatch even if the verbs are synonymous. According to Gribanova, this also suggest that ellipsis is involved and that the ellipsis site is large enough to include in it the original positions associated with the verb stem (i.e. it is VP or larger).

```
(14) (Gribanova 2017: (52))
Paša poterjal knigu v biblioteke, i žurnal
Paša lose.PST.SG.M book.ACC in library.PREP and magazine
v stolovoj?
in cafeteria.PREP
'Did Pasha lose a book in the library, and a magazine in the cafeteria?'
*Da, posejal.
yes lose.PST.SG.M
'Yes, lost.'
```

Moreover, Gribanova's account might be applicable to other types of verbal answers, in which the remnant is an auxiliary verb or a lexical verb in an analytical verb form. The tests, analogous to the ones in (12) and (13) for these types of verbs, are presented in (15) and (16) respectively.

```
stixotvorenije ole
(15) a. A: ty
                budeš
                          pisat'
                                                                pesnju
                                                                          mile?
           you will.2SG write.INF poem
                                                 Olya.DAT and song.ACCMila.DAT
           'Are you going to write a poem for Olya and a song for Mila?'
        B: (da), (#ja) budu
                               (*ja).
           ves I
                     will.1SG I
           'Yes, I am going to.'
        B': (net), (#ja) ne
                            budu
                                     (*ja).
                      NEG will.1SG I
           'No, I am not going to'
     b. A: anja budet
                           est'
                                  ikru
                                               v kannax
           Anya will.3SG eat.INF caviar.ACC in Cannes.PREP
                          šampanskoje v pariže.
           and drink.INF champagne in Paris.PREP
           'Anja will eat caviar in Cannes and drink champagne in Paris.'
```

no NEG will.3SG and 'No, she won't.'

(16) a. A: ty budeš ŽARIT' kuricu?
you will.2SG fry.INF chicken.ACC
'Are you going to fry the chicken?'
B: net, (#ja budu) varit' (*ja budu).
no I will.1SG boil.INF I will.1SG
'No, I am going to boil it.'

I should note, that alternative analyses have been proposed for the same issue by other researches. In particular, John F. Bailyn argues in his 2014 paper that phrases like (9) are derived by the argument allipsis (and the pro-drop of the verb's subject). A thorough comparision of Gribanova's and Bailyn's accounts goes beyond the scope of the current work. Therefore I will simply note, that I will rely on Gribanova's assumption, because it provides an account for a wider set of constructions and has been further supported by additional data (see Abramovitz 2018).

2.2. Derivation of the fragments consisting of a noun head

Taking into account the analysis of short verbal responses, one might wonder whether it is reasonable to assume that short nominal responses can be derived by stranding as well. In order to figure it out, we must first check whether this kind of movement is available in other contexts.

Let us first address the basic structure of a Russian DP with arguments. Lyutikova 2014 argues that all the arguments of object nouns appear in the lexical noun's projection. Next the head of the NP undergoes movement to the upper projection X (which is supposedly a Num projection). If the internal argument of the noun is non-genitive, only the N head moves. Otherwise, due to the language-specific restriction on the genitive relation violation, stated in Zaliznyak, Paducheva 1979, the whole NP moves to the XP.

```
(17) a. [XP xèndaut+n+X [nP professora n [NP xèndaut [PP k lekcii]]]
           handout
                              professor.GEN handout
                                                            for lecture.DAT
        'professor's handout for the lecture'
      b. [XP \text{ pis'mo+n+X}]_{nP} bakunina n [NP \text{ pis'mo}]_{DP} sëstram]]]
                              Bakunin.GEN letter
           letter
                                                        sisters.DAT
        'Bakunin's letters to the sisters'
      c. [XP [NP konspekt [DP lekcii]] X
                                          [_{nP}] brata n
                                                         [NP-konspekt [DP-lekcii]]]]
                            lecture.GEN
                                               brother.GEN notes
               notes
                                                                           lecture.GEN
        'brother's lecture notes'
```

In case of eventive nominals, on the other hand, the verb head obligatorily incorporates into the noun head. Unlike the object nominals, eventive nominals do not move to the X projection at all.

(18) a. [NP torgovlja+v+N [VP angličan torgovlja+v [VP torgovlja [DP opiumom]]]]
trade Englishmen.GEN trade trade opium.INSTR
'Englishmen's opium trade'
b. [NP ispolnenie+v+N [VP ispolnenie+v [VP ispolnenie [DP arii]]]]
performance performance performance aria.GEN
'aria performance'

Thus, noun heads obligatory move from their in situ position (with the only exception being the object nominals with an internal genitive argument, which move together with their argument). That suggests, that stranding of nominal heads might be possible in general.

Let us consider whether this movement is possible in full, non-fragment sentences. In Russian constructions like (19)–(25) where the noun's arguments are omitted are indeed possible. We can positively state that the arguments were indeed omitted (i.e. they are present in the structure at least at the early steps of the derivation) based on the fact that all the sentences have a reading, which implies that the elided arguments of the noun in the consequent clause are identical to the arguments of the nouns in the antecedent clause. This holds for the cases, when nominals have only an external argument, only an internal one or both arguments at the same time. Moreover, this interpretation is more accessible for most of the speakers I have consulted.

- (19) eventive nominal, internal argument omitted tvojë opisanie gollandii xuže, čem moë opisanie. your.F description Holland.GEN worse than my.F description 'Your description of Holland is worse than mine.'
 - a. = Your description of Holland is worse than my description of Holland.
 - b. = Your description of Holland is worse than my description (of an unstated entity).
- (20) object nominal, internal (genitive) argument omitted ³
 ty pogovoril s tremja issledovateljami kazaxskogo,
 you talk.PST.SG.M with three.INSTR researcher.PL.INSTR Kazakh.GEN
 a ja pogovorila s dvumja issledovateljami.
 and I talk.PST.SG.F with two.INSTR researcher.PL.INSTR
 'You talked to three researchers of Kazakh language, and I talked to two researchers.'
 - a. = You talked to three researchers of Kazakh language, and I talked to two researchers of Kazakh.
 - b. = You talked to three researchers of Kazakh language, and I talked to two researchers (of an unstated subject of study).
- (21) object nominal, internal (oblique) argument omitted snačala petja sžėg dva pis^jma sëstram first Petya burn.PST.SG.M two letter.PL.ACC sister.PL.DAT a potom sžėg eš'ë tri pis'ma. and then burn.PST.SG.M also three letter.PL.ACC 'First Petya burned two letter to the sisters, and then he burned three more letters.'
 - a. = First Petya burned two letter to the sisters, and then he burned three more letters to the sisters.
 - b. = First Petya burned two letter to the sisters, and then he burned three more letters (to an unstated addressee).
- (22) eventive nominal, external argument omitted ty videl dva vytuplenija kirkorova

you see.PST.SG.M two performance.PL.ACC Kirkorov.GEN

a ja videla tri vystuplenija

and I see.PST.SG.Fthree performance.PL.ACC

'You saw two Kirkorov's performances, and I saw three performances.'

- a. = You saw two Kirkorov's performances, and I saw three performances of Kirkorov.
- b. = You saw two Kirkorov's performances, and I saw three performances (of an unstated artist).
- (23) object nominal, external argument omitted

ty pročital tri knigi xomskogo,

you read.PST.SG.M three book.PL.ACC Chomsky.GEN

i ja pročitala dve knigi.

and I read.PST.SG.Ftwo.F book.PL.ACC

'You read three books by Chomsky, and I read two books.'

- a. = You read three books by Chomsky, and I read two books by Chomsky.
- b. = You read three books of Chomsky, and I read two books (written by an unstated author).
- (24) eventive nominal, external and internal arguments omitted

segodnjašnij osmotr pacientov ivanovym šël dol'še,

today's checkup patient.PL.ACC Ivanov.INSTR go.PST.SG.M longer

čem včerašnij osmotr.

then yesterday's checkup

'Today's patients' checkup by Ivanov lasted longer, then yesterday's checkup.'

- a. = Today's patients' checkup by Ivanov lasted longer, then yesterday's checkup of the patients by Ivanov.
- b. = Today's patients' checkup by Ivanov lasted longer, then yesterday's checkup (of an unstated person by an unstated checker).
- (25) object nominal, external and internal arguments omitted

staryj xéndaut xomskogo k lekcii lučše étogo novogo xéndauta. old handout Chomsky.GEN for lecture better this.GEN new.GEN handout.GEN

'The old Chomsky's handout for the lecture is better than the new handout.'

- a. = The old Chomsky's handout for the lecture is better than the new handout of Chomsky for the lecture.
- b. = The old Chomsky's handout for the lecture is better than the new handout of an unstated author and purpose.

In full sentences, head nouns cannot be stranded higher than the X head or the N head. This is evident from the fact that in the described constructions it is not possible to retain the meaning of the adjuncts of the DP.

(26) eventive nominal

vitja segodnja videl tri prekrasnych vystuplenija

Vitya today see.PST.SG.M three wonderful.PL.ACC performance.PL.ACC

a ja videl dva vystuplenija.

and I see.PST.SG.M two performance.PL.ACC

'Vitya saw two wonderful performances today, and I saw two performances.'

- a. = ??Vitya saw two wonderful performances today, and I saw two wonderful performances.
- b. = Vitya saw two wonderful performances today, and I saw two performances (of an unstated quality).
- (27) object nominal

vitja segodnja posmotrel dva prekrasnych fil'ma Vitya today watch.PST.SG.M two wonderful.PL.ACC film.PL.ACC

a ja posmotrel tri fil'ma.

and I watch.PST.SG.M three film.PL.ACC

'Vitja watched two wonderful films tonight, and I watched two films.'

- a. = ??Vitya watched two wonderful films tonight, and I watched two wonderful films.
- b. = Vitya watched two wonderful films tonight, and I watched two films (of an unstated quality).

However, the following examples suggest, that the locality of noun head's stranding can be violated in (at least some cases of) fragment answers, as shown in (28)–(29). I assume, that might be explained by the "last resort" nature of the movement in fragments and by the MaxElide constraint on fragments (I discuss these issues later in sections 3 and 4, respectively).

(28) A: vitja segodnja posmotrel dva prekrasnych fil'ma. Vitya today watch.PST.SG.M two wonderful.PL.ACC film.GEN 'Did Vitya watch three wonderful films today?'

B: net, spektaklja.

no play.GEN

'No, plays'

- a. = No, Vitya watched two wonderful plays tonight.
- b. = ?? No, Vitya watched two plays (of an unstated quality) tonight.
- (29) A: ty uslyšal gromkoje penije?

you hear.PST.SG.M loud.N singing

'Did you hear loud singing?'

B: net, šuršanie.

no rustle

'No, some rustle.'

- a. = No, I heard a loud rustle.
- b. = No, I heard a rustle (of an unstated loudness).

So far, the Russian data suggests, that both verb and noun heads can be stranded in fragment answers, even though the stranding of the latter seems to be strictly local in other contexts. With these facts in mind, I turn to the issue of the how one can account for the properties of Russian fragments within the "movement+ellipsis" approach.

3. The relevance of the "head-of-the-XP" fragments for the theory of fragment's derivation

In the previous section I have argued that fragment answers can be formed by stranding of a verb or a noun head. The main consequence of this fact is that we cannot longer claim that focus movement is the only way to form fragments, as was proposed in Merchant 2004. In order to provide an account for the "head-of-the-XP" fragments we would require a theory, that does not put strict restrictions on the type of movement used in the fragment answers' derivation. Such an

approach was presented in Weir 2014. Andrew Weir argues that the remnants of the fragments move only at the PF-level, remaining in situ at the LF-level.

The PF-movement proposed by Weir is said to be of an exceptional nature — it is licensed not by some uninterpretable features, but by the requirement to move the focused constituent out of the domain of the ellipsis. That is necessary to account for the fact that certain constituents that cannot undergo focus movement in general can in fact be licit fragment answers in English (for example, NPIs, bare quantifiers and particles). Thus, this kind of movement can only occur in elliptical contexts.

Weir also notes that this kind of movement is a syntactic process that operates on the constituents that are mobile in a language. This is captured by the following generalization:

(30) If a string cannot be targeted by a phrasal movement operation even in principle, it cannot appear as a fragment.

What does 'in principle' mean? Let me cite Weir himself (Weir 2014, footnote 102):

'Even in principle' here means that the architecture of the grammar, as we understand it, does not allow the string to move, and that this is true cross-linguistically. The idea is to separate non-constituents and heads, which never undergo phrasal movement in any language, from things like particles or complements of PPs, which are immobile in certain languages, but mobile in others, suggesting that they are not immobile 'in principle'.

This generalization is too strong for Russian, since Weir assumes that heads cannot undergo phrasal movement in any language. I propose that heads should be in the same class with particles and complements of PPs, since head stranding is in fact possible in certain languages, while being ungrammatical in others. With that modification, Weir's theory is able to provide an account for the Russian data.

Overall, Merchant's analysis fails to provide an explanation for how the fragments discussed in this paper are formed, while if we adopt Weir's approach to fragment answers with some minor modifications, the availability of the "head-of-the-XP" fragments is actually expected, as the head stranding is possible in Russian in general.

4. Fragment answers and MaxElide

In this section I will demonstrate how the "head-of-the-XP" can help us define the MaxElide constraint on fragment answers more clearly.

When answering a question, one can use fragments of different size. However, in spoken language it is the shortest one that is most frequently used. For example, in (31) the fragment answer consisting of the head of the possessive DP is preferred to the one consisting of the full DP. Similarly, as shown in (32), it is more natural to use a short verbal response consisting of a verb head alone, rather than the one consisting of the full VP with an overt direct object. Notice, that the fragment answer where the head's argument is realized as a pronoun are slightly more acceptable than the fragment answers where the head's argument is an R-expression. We will address this issue later.

(31) A: uvarov byl drugom puškina?
Uvarov be.PST.SG.M friend.INSTR Pushkin.GEN
'Was Uvarov a friend of Pushkin's?'

B: net, vragom || ?net, ego vragom || ??net, vragom puškina no enemy.INSTR no his enemy.INSTR no enemy.INSTR Pushkin.GEN 'No, an enemy of his.'

- (32) a. A: čto on sdelal so svojej rukopis^jju? what he do.PST.SG.M with self.PREP manuscript.PREP 'What did he do to his manuscript?'
 - B: sžëg || sžëg (eë). || ??sžëg rukopis^j burn.PST.SG.3 burn.PST.SG.3 it burn.PST.SG.3 manuscript 'He burned it.'
 - b. A: ty budeš zavtra vystupat' na koncerte? you will.2SG tomorrow perform.INF at concert.PREP 'Are you going to perform at the concert tomorrow?'
 - B: (da) budu. || [?]budu vystupat'. yes will.1SG will.1SG perform.INF
 - c. A: ty budeš žarit' kuricu?
 you will.2SG fry.INF chicken.ACC
 'Are you going to fry the chicken?'
 - B: net, varit'. ||?net, varit' eë. ||??net, varit' kuricu. no boil.INF no boil.INF it.ACC no boil.INF chicken.ACC

The fact that shorter fragment answers feel more natural can be attributed to the language economy. Similar phenomenon was described in Merchant 2008. Merchant notes, that in sluicing constructions only TP-ellipsis is available, while the ellipsis of a smaller constituent — vP — is prohibited.

(33) They said they heard about a Balkan language, but I don't know a which they said they heard about.b.which.c.*which they did.

Merchant captures that phenomenon with the help of the MaxElide constraint:

(34) MaxElide (Merchant 2008)

Let XP be an elided constituent containing an A'-trace. Let YP be a possible target for deletion. YP must not properly contain XP (XP \notin YP).

An alternative version of the MaxElide principle was proposed in Takashi, Fox 2005.

(35) MaxElide (adapted from Takahashi, Fox 2005)
Elide the biggest deletable constituent reflexively dominated by Parallelism Domain, if the PD is semantically identical to another constituent AC, modulo focus marked constituents.

In case of fragment answers, however, we should also be able to capture the fact, that the remnant itself should be as small as possible. However, we should keep in mind that we cannot say that any minimal part of a full sentence can necessarily constitute a felicitous fragment. Thus, we need to have a notion that would identify the set of the fragment answers allowable in the given discourse. Such notion was introduced in Weir's works.

Following Reich 2007 he proposes that all fragments stand in a particular relation to a certain pragmatic object — Question under Discussion (QUD, Roberts 1996). QUD is a set of questions that is intended to be resolved in a certain period of time by the discourse participants.

The relation, that binds fragment answers and QUD is called QUD-GIVENness and has the following definition:

(36) QUD-GIVENness

A clause E is QUD-GIVEN iff there exists a question Q on the QUD stack such that $UQ \Leftrightarrow U||E||F$.

In other words, clausal ellipsis is licensed only when the conjunction of all the unresolved questions in the current discourse mutually entail the conjunction of all the focused elements in the current discourse.

Using the notion of the QUD-GIVENness we are now able to formulate the notion of the MaxElide constraint.

(37) MaxElide in fragments

The most felicitous fragment answer is the one that is the smallest in size and is at the same time is QUD-given.

This generalization successfully captures the fact, that in fragment answers not only the biggest constituent should be elided (which is TP is all cases), but also that the remnant itself should be as small as possible.

Let us briefly discuss two issues connected to the MaxElide constraint, mentioned earlier in the paper.

First, it might provide an account for the fact that noun stranding becomes non-local in fragment answers if we assume that MaxElide constraint can lead to the violation of the properties of stranding. Moreover, the grammaticality of the remnant with overt adjectival modifier of the DP is degraded. That fact confirms my assumptions.

(38) A: ty uslyšal gromkoje penije? you hear.PST.SG.M loud.N singing 'Did you hear loud singing?'
B: net, (??gromkoje) šuršanie.
no loud rustle
'No, a loud rustle.'

Secondly, I have noted earlier, that the fragments, in which the head's arguments are not elided but are substituted by a pronoun in a fragment answer, seem to be more grammatical compared to the fragment answers where the arguments are left as regular R-expressions. The MaxElide constraint for fragment answers, as I have formulated it, does not particularly capture that on first site. However, this fact can be accounted for if we adopt Postal's idea on pronominals. In his 1966 paper he proposes that pronouns are in fact a case of noun ellipsis; in particular pronouns are not full NPs, but articles with certain features. If Postal suggestion is right, then we can suppose that fragments like *Szhëg eë* are of the same size as fragments like *Szhëg* (the fragment answers where all the head's arguments are elided), the only difference being that in the former constructions there are two independent ellipsis involved in the derivation (TP-ellipsis and argument ellipsis), while in the latter case only TP-ellipsis is used. The same hold for cases like (31) where the head noun is the remnant. Taking these considerations into account we can state that MaxElide constraint is respected in all the examples.

5. Conclusion

In this paper I discussed a certain type of fragment answers, which I addressed as the "head of the XP" fragments. I argued that these fragments are derived by the stranding of a verb or a noun

head, both of which are attested in non-elliptical and elliptical contexts. While the availability of such fragment answers is not accounted for under Merchant's theory of fragment derivation, Weir's alternative hypothesis seems to provide a reasonable explanation for it — since head-stranding is possible in Russian 'in principle', one would expect that kind of movement to be possible in elliptical contexts as well. Finally, on the basis of "head of the XP" fragment answers, I proposed a version of the MaxElide constraint for fragments.

Notes

* I would like to thank my supervisor, Prof. Ekaterina Lyutikova, for the continuous support of my work on this topic. This research has been supported by the Russian Scientific Foundation (PHΦ, grant № 18-18-00462, «Communicative-syntactic interface: typology and grammar»).

¹ That fact holds for the prepositions that consist of 0 or 1 syllables. However, if the preposition contains more than 1 syllable, it can be omitted in a fragment answers.

- (i) A: protiv čego vystupili studenty?
 against what.GEN oppose.PST.PL student.PL
 'What did students oppose?'
 B: (protiv) fan-zony u mgu.
 against fan-zone near MSU
 'They opposed the fan-zone near MSU.'
- (ii) A: blagodarja komu ivanov vyžil v tom boju? thanks.to who.DAT Ivanov survive.PST.SG.M in that.PREP battle.PREP 'Thanks to who did Ivanov survive in that battle?'
 - B: (blagodarja) svojemu sosluživcu. thanks.to self.DAT colleague.DAT 'Thanks to his colleague.'

Similar phenomenon has been noted in sluicing constructions in Ionova 2016. The reasearcher proposes that the possibility to omit prepositions follows from their prosodic structure — while the stranding of a preposition that do not form a free phonetical word is not possible, the stranding of a separate phonetical word is permissible. It is likely that the same requirements hold in case of fragments.

² The reader might notice that in all the examples from Gribanova's papers, as well as in my examples analogous to hers, the antecedent phrase includes coordination of VPs. That is needed to be sure that we are dealing with verb stranding and not with object drop, since, as Gribanova points out, both operations are active in Russian, with only the latter being restricted inside islands.

³ As I have already noted, Russian employs a restriction on the genitive relation violation (Zaliznyak, Paducheva 1979). This example shows, however, that the genitive argument can be omitted. One may argue that those constructions have slightly different derivation than all the other constructions — they might employ argument ellipsis. Alternatively, we can propose that in the elliptical contexts the restriction on the genitive relation violation does not hold. I do not know how to argue in favor of either options. Perhaps, further research of Russian ellipsis and its interaction with that restriction might provide us with a better understanding of this puzzle.

Bibliography

- Abramovitz, R. (2018). Verb-Stranding Verb Phrase Ellipsis in Russian: Evidence from Unpronounced Subjects. Talk given at fragment answerSL 27.
- Bailyn, J. F. (2014). Against a VP ellipsis account of Russian verb-stranding constructions. In Vovin, A., McClure, W. (eds.) Studies in Japanese and Korean historical and theoretical linguistics and beyond. A Festschrift to honor Prof. John B. Whitman on the occasion of his 60th birthday. Folkestone, Leiden.
- Gribanova, V. (2013a). A new argument for verb-stranding verb phrase ellipsis. Linguistic Inquiry, 44(1), 145–157.
- Gribanova, V. (2013b). Verb-stranding verb phrase ellipsis and the structure of the Russian verbal complex. Natural Language and Linguistic Theory 31(1), 91–136.
- Gribanova, V. (2017). Head movement and ellipsis in the expression of Russian polarity focus. Natural Language and Linguistic Theory 35(4), 1079–1121.
- Ionova, A. A. (2016). Effekt zavisaniya predloga pri slusinge v russkom yazyke (=Preposition stranding in Russian sluicing). Talk given at the conference «Tipologiya morfosintaksicheskih parametrov».
- Lyutikova, E. A. (2014). Russkij genitivnyj posessor i formalnye modeli imennoj gruppy (=Russian genitive possessor and formal models of the noun phrase), in Lyutikova, E. A., Cimmerling, A. V., Konoshenko, M. B. (eds.) Tipologiya morfosintaksicheskih parametrov. Materialy mezhdunarodnoj konferencii «Tipologiya morfosintaksicheskih parametrov 2014», 1, Moscow, 120–145.
- Merchant, J. (2001). The syntax of silence: Sluicing, islands, and the theory of ellipsis. Oxford University Press on Demand.
- Merchant, J. (2004). Fragments and ellipsis. Linguistics and Philosophy, 27, 661–738.
- Merchant, J. (2008). Variable island repair under ellipsis. In Johnson, K. (ed.) Topics in ellipsis, 132–153. Cambridge: Cambridge University Press
- Postal, P. (1966). On so-called pronouns in English. Monograph series on language and linguistics, 19, 177–206.
- Reich, I. (2007). Toward a uniform analysis of short answers and gapping. In Schwabe, K., Winkler, S. (eds.) On information structure, meaning and form, 467–484. Amsterdam: John Benjamins.
- Roberts, C. (1996). Information structure in discourse: towards an integrated formal theory of pragmatics. Semantics & Pragmatics, 5, 1–69.
- Takahashi, Sh., Fox, D. (2005). MaxElide and the Re-binding Problem. In Proceedings of Semantics and Linguistic Theory 15, 223–240.
- Testelec, Ya. G. (2011). Ellipsis v russkom yazyke: teoreticheskij i opisatelnyj podhody (=Ellipsis in Russian: theoretical and descriptive approcaches). Talk given at the conference «Tipologiya morfosintaksicheskih parametrov».
- Weir, A. (2014). Fragments and clausal ellipsis. PhD thesis, University of Massachusetts Amherst.
- Zaliznyak, A. A., Paducheva, E. V. (1979). Sintaksicheskie svojstva mestoimeniya KOTORYJ (=Syntactic features of the pronoun kotoryj). In Kategoriya opredelennostineopredelennosti v slavyanskih i balkanskih yazykah, 289–329.