

ВЫДВИЖЕНИЕ ПРЯМОГО ДОПОЛНЕНИЯ ИЗ КОСВЕННЫХ ВОПРОСОВ С *ЛИ*

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В данной статье исследуются островные эффекты в русских косвенных вопросах с *ли*. Такие вопросы имеют две возможные конфигурации: энклитика (*ли*) следует либо за предикатом, либо за вынесенной фокусной составляющей. В этом исследовании был проведен эксперимент, чтобы увидеть (i) как конфигурация влияет на приемлемость выдвигания прямого дополнения из косвенных вопросов с *ли*; (ii) как тип *A'*-передвижения влияет на выдвигание прямого дополнения из косвенных вопросов с *ли*. Результаты показывают, что оба фактора значимы.

Ключевые слова: слабые острова, косвенный вопрос с *ли*, вопросительный остров.

THE EXTRACTION OF DIRECT OBJECTS OUT OF INDIRECT YES/NO QUESTIONS IN RUSSIAN

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This paper examines island effects in Russian indirect yes/no questions formed with the *li* particle. Such questions have two possible configurations: the enclitic (*li*) follows either the clause predicate or a preposed focused element. In this study an experiment was conducted to see (i.) how the configuration affects the acceptability of moving DOs out of indirect questions; (ii.) how the type of *A'*-movement affects the acceptability of moving DOs out of indirect questions. The results show that both factors are significant.

Keywords: weak islands, *li* questions, yes/no questions, *wh*-island, experimental syntax.

1. Introduction

An indirect question is a structure in which the embedded clause is interrogative. Such structures exhibit island effects, in this way indirect questions in English exhibit the so-called weak island effect: not all elements can move out of these structures. In the literature on the topic, such structures are called *wh*-islands (e.g. [Boeckx 2012]). The acceptability of movement out of *wh*-islands depends on several factors. One of the most discussed factors is the opposition between arguments and adjuncts [Huang 1982; Chomsky 1986]. In (1a) it is possible to move the argument out of the indirect question, while in (1b) the movement of the adjunct is unacceptable.

- (1) a. *Which girl do you wonder [whether Bill kissed ____]?*
 b. **How do you wonder [whether Bill kissed Sue ____]?*

In Russian, indirect *wh*-questions also exhibit island effects. In (2a) *wh*-movement of a direct object is possible, while *wh*-movement of an adjunct in (2b) is ruled out.

- (2) a. *что ты не знаешь [где Петья купил ____]?*
 what you NEG know.2SG where Petya bought
 Lit.: 'What don't you know where Petya bought?'
 b. **где ты не знаешь [что Петья купил ____]?*
 where you NEG know.2SG what Petya bought
 Lit.: 'Where don't you know what Petya bought?'

Yes/no indirect questions in Russian are distinguished by the fact that they are formed using the clitic *li* and come in two configurations: *li* refers to the clause predicate (3a) or to some XP (3b).

- (3) a. *я не знаю [помыл-а ли Маша посуд-у].*
 I NEG know.2SG washed-F LI Masha dishes-ACC
 'I don't know whether Masha washed the dishes.'
 b. *я не знаю [Маша ли помыл-а посуд-у].*
 I NEG know.2SG Masha LI washed-F dishes-ACC
 'I don't know whether it was Masha who washed the dishes.'

As will be discussed in more detail in Section 2, these two configurations differ structurally: according to some analyses (e.g. [King 1994]) in (3b) the embedded CP specifier is occupied by the XP *Masha* (in English indirect questions the specifier is occupied by the *wh*-word *whether*), while in (3a) the specifier is left empty.

This study aims to find out whether the difference in configuration (3a) vs. (3b) affects the acceptability of movement out of yes/no indirect questions in Russian. Another question under study is if the acceptability is affected by the type of A'-movement. Apart from *wh*-movement, movement in relative clauses and scrambling have been considered. In order to answer these questions, an experimental study has been conducted.

2. Background

2.1. Weak islands

The seminal work [Ross 1967] was the first to describe structures that disallow moving constituents out of them — islands. Later, when new structures started adding to Ross's structures, the notions of strong and weak islands emerged. It is impossible to move any constituents out of a strong island (e.g. Complex Noun Phrase island (4a), Adjunct island (4b)).

- (4) a. **What did you make [the claim that John bought ____]?*
 b. **What do you worry [if John buys ____]?*

Some elements can move out of weak islands. According to [Szabolcsi 2006], the first explanations of the weak island effect are syntactic and focus on the contrast in (5): it is believed that moving out of weak islands is possible only for arguments (5a), but impossible for adjuncts (5b).

- (5) a. *What_i do you wonder [how_j to fix t_i t_j]?*
 b. **How_i do you wonder [what_j to fix t_j t_i]?*

In [Chomsky 1986] this contrast is explained by the Empty Category Principle.

- (6) Empty Category Principle (ECP) [Chomsky 1981, 1986]:
 [_α e] must be properly governed¹.

¹ A properly governs B iff A theta-governs B or A antecedent-governs B. A theta-governs B iff A governs B and A theta-marks B. A antecedent-governs B iff A governs B and A is coindexed with B.

In other words, a trace must be governed either by the head assigning it its theta role or by its antecedent. So, in sentence (5a), in which the argument is moved to the left periphery, t_i is theta-governed by the verb *to fix*, which assigns its theta role, and t_j is governed by the antecedent *how_j*, that is, both traces are properly governed. However, in sentence (5b), in which an adjunct moves from the island structure, t_i is not properly governed: it is not theta-governed, since there is no theta role assignment, and it is not antecedent-governed, since there is a barrier (CP) between *How_i* and t_i . For this reason, this sentence is ruled out.

However, it was soon noticed that it is not enough to be an argument to move out of a weak island [Rizzi 1990].

(7) **What did John wonder [whether these pearls cost ____]?*

In (7) **these pearls cost* is unacceptable, that is, the extraposed *wh*-pronoun is subject to subcategorization, therefore, it can be assumed that this is an argument. Then in (7), an argument is moved out of a *wh*-island. However, this sentence turns out to be unacceptable.

Another approach to the analysis of island effects is based on the concept of Relativized minimality [Rizzi 1990]. Rizzi notes that movement cannot cross an element that has features similar to the element being moved. Thus, an A'-movement cannot cross another A'-element, A-movement cannot cross another A-element and head movement cannot cross another head.

However, in addition to the contrast between arguments and adjuncts predicted by the ECP, it is also necessary to explain the unacceptability of examples like (7). Rizzi's theory suggests that referentiality is behind the contrast. The unacceptability of (7) is explained by the fact that, although such quantitative phrases can be arguments, they do not have theta roles of event participants (referential theta roles). [Rizzi 1990] suggests that referentiality "saves" movement because referential phrases receive a referential index that allows the trace to be semantically bound. In this case, this movement is not subject to locality restrictions. Thus, the traditional contrast (5a) vs. (5b) is explained by the fact that *what*, unlike *how*, has a referential index.

It is worth noting that although referentiality is central to Rizzi's theory of weak islands, the meaning of this term is not clearly defined. It is also not entirely clear what exactly these theories mean by referential index possession in case of *wh*-expressions.

Apart from syntactic theories on weak islands, there's also a number of semantic approaches [Kroch 1989; Szabolcsi, Zwarts 1993; Honcoop 1998]. The analysis in [Abrusán 2014] is also based on weak island semantics.

Considering *wh*-islands, M. Abrusán divides matrix predicates into *know*-class and *wonder*-class: the former (8b) cause stronger island effects than the latter (8a). The author considers island effects in indirect questions with *whether* on the material of degree questions (*how many / much*-questions) such as (8).

- (8) a. *How much wine are scientists investigating whether it is useful to drink in order to stay healthy?*
 b. **How much wine did scientists discover whether it is useful to drink in order to stay healthy?*

M. Abrusán's analysis is based on the maximal informativity principle following [Dayal 1996].

(9) The Maximal Informativity Principle

Any question presupposes that it has a maximally informative answer (i.e. a true answer which logically entails all the other true answers)

Considering the semantics of such questions, Abrusán comes to the conclusion that *wh*-islands with predicates of the *know*-class cannot get the maximally informative answer, which leads to a contradiction. The *wonder*-class predicates have the maximally informative answer only in very specific and often unnatural contexts, which makes them pragmatically odd.

In addition to the asymmetries associated with the extracted constituent, the acceptability of movement out of an indirect question may also depend on the type of movement itself. So, as mentioned in Section 1, in Russian, an indirect question turns out to be an island for the movement of *wh*-pronouns, but not relative ones [Lyutikova 2009].

- (10) a. *??tot, kto ya ne znal, chto darit.*
 that.one who I NEG knew what gives
 'The one about which I didn't know what he is giving as a gift.'

- b. *slovo kotoroe ya ne znayu ne tol'ko kak vyglyadit,*
 word which I NEG know NEG only how looks

no i chto oznachaet.
 but and what means

‘The word which I not only don’t know what it looks like but also what it means.’ [Lyutikova 2009: 467]

According to [Bailyn 2020], in Russian, there are also differences between *wh*-movement and scrambling out of an indirect question, along with perception verb complements (see, hear, etc.) and indicative clauses with the complementizer *chto* ‘that’. In (11) (examples from [Bailyn 2020: 9]), *wh*-movement out of an indirect question turns out to be ruled out for adjuncts but scrambling of the same constituent turns out to be acceptable. At the same time, *wh*-movement and scrambling behave the same way with respect to the complex NP constraint, the coordinate structures constraint, and the Condition on Extraction Domains.

- (11) a. *??ty molotk-om sprosil kogda Mitya chinil mashin-u.*
 you hammer-INS asked when Mitya fixed car-ACC
 Lit.: ‘With a hammer you asked when Mitya was fixing the car.’
- b. *ty chem sprosil kogda Mitya chinil mashin-u.*
 you what-INS asked when Mitya fixed car-ACC
 Lit.: ‘With what did you ask when Mitya was fixing the car?’

J.F. Bailyn bases his analysis of this asymmetry on a modification of the theory of Relativized minimality proposed in [Rizzi 2004]. Within the framework of this “featural” Relativized minimality, the A’-interveners are further subdivided into groups with respect to feature classes. Relevant for A’-movement is the division of features into quantificational [+Q], which include the feature [wh] and non-quantificational [−Q]. To explain the differences between *wh*-movement and scrambling, Bailyn introduces the [Σ] feature for scrambling, classifying it as non-quantificational. Scrambling constructions, according to [Bailyn 2020], are derived as follows: some functional head F on the left periphery attracts components with the [+Σ] feature to the specifier. Thus, *wh*-pronouns in Spec, CP of indirect questions, as well as complementizers *chto* ‘what’, *kogda* ‘when’, *kak* ‘how’ turn out to be [+Q] interveners for *wh*-movement. However, there are no interveners for the [+Σ] components, so scrambling in the considered constructions is possible. Bailyn explains the possibility of relative movement from the *wh*-island by the fact that the relative pronoun, being a [+Q] element, behaves like a [−Q] element due to the fact that it be-

longs to the subclass of quantificational elements, which are also modification elements. According to [Abels 2012], in this case, only an element of the same subclass of the class [+Q] can be an intervener for a relative pronoun.

To sum up, the analysis based on the Empty Category Principle successfully predicts the differences between the extraction of the direct object from *wh*-islands on the one hand and adjuncts on the other hand. However, within the framework of this analysis, it turns out that (7) is unexpectedly unacceptable: if we consider *what* as an argument, respectively, moving from a theta position, the analysis suggests the possibility of such an extraction. The theory in [Rizzi 1990] accounts for the unacceptability of (7), but the explanation for the asymmetry of the constituent types is based on the rather fuzzy notion of a referential index that allows *wh*-phrases possessing it to overcome the locality constraints. The analysis in [Bailyn 2020], based on Relativized minimality [Rizzi 2004], predicts differences between different types of movement out of *wh*-islands. The semantic theory in [Abrusán 2014] assumes a contrast in the type of the extracted constituents, however, it is composed based on the semantics of questions, and, in this form, does not make predictions about other types of movement.

2.2. Indirect yes/no questions in Russian

A yes/no indirect question in Russian is structured as follows: it is formed using the particle *li*, which follows the first component of the embedded clause. In the works [Schwabe 2004; Dyakonova 2009], adhering to the cartographic system of the left periphery of the clause (see [Rizzi 1997]), *li* is analyzed as the realization of the Force head — a functional head responsible for the illocutionary force of the sentence. According to Dyakonova's work, the component preceding *li* is focused and gets to its site by focus movement. According to [Schwabe 2004], *li* is an enclitic, so it is attached to the nearest phonological word, which is usually a verb in T. This analysis predicts the word order when *li* follows the verb. In the case when it follows a certain constituent (not the predicate), it is proposed to consider that the advanced constituent is in Spec, FocP. For (12), the word order *Ivan li* is also a consequence of *li*'s status as an enclitic.

- (12) a. *Ivan-a li Petr vstretit.*
 Ivana-ACC li Petr will.meet
 'Is it Ivan that Petr will meet?'

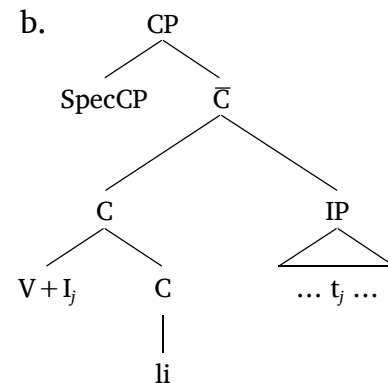
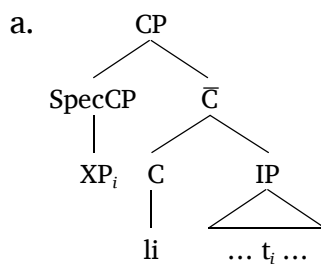
- b. [_{ForceP} *li* [_{FocP} [*Ivana*]_i Foc [_{TP} *Petr vstretit t_i*]]]

Among the works that do not rely on a cartographic approach, one can consider the analysis in [King 1994]. According to this paper, sentences in (13) have structures in (14): *li* is in C, in (13a) the focused constituent *knig-u* ‘book-ACC’ is in Spec, CP, while in (13b) the verb *prochitala* ‘read’ moves from V to C.

(13) a. *knig-u li prochital-a Anna.*
 book-ACC LI read-F Anna
 ‘Is it a book that Anna read?’ [King 1994: 92]

b. *prochital-a li Anna knig-u.*
 read-F LI Anna book-ACC
 ‘Did Anna read the book?’ [King 1994: 92]

(14) [King 1994: 93]



A similar analysis, but for the Bulgarian and Macedonian languages, is presented in [Rudin et al 1999]: *li* is in C° and can check the [+focus] feature. If there is no constituent before the *li*, then the verb V is raised to check the interrogative feature.

Thus, according to both groups of approaches, the XP *li* configuration differs in that XP is in the specifier, whereas with the V *li* configuration, the specifier position is not filled. In this case, the ECP predicts that in both configurations it will be possible to extract the direct object since its trace is theta-governed either way. From the point of view of Relativized minimality, for the XP *li* configuration, it should be impossible to perform A'-movement, since XP is in the A'-position and is an intervener for A'-movement. At the same time, the configuration V *li* should not present problems for A'-movement. In terms of the attribute relative minimality [Rizzi 2004], XP has the quantification attribute [+Foc], which, according to J.F. Bailyn, will make XP an intervener for *wh*-movement, but not for relative movement and scrambling.

In this study two questions were posed:

- (15) i. Does the choice of configuration (XP *li* or V *li*) affect the acceptability of extraction out of yes/no indirect questions in Russian?
- ii. Does the type of A'-movement affect the acceptability of extraction out of yes/no indirect questions in Russian?

To answer these questions, an experimental study was carried out. Due to the fact that the native speakers' judgments regarding the acceptability of movement out of this structure (and weak islands in general) are very different, it was decided to use an experimental methodology for this study, which will allow to generalize the scattered data, as well as analyze the statistical significance of the expected contrasts.

3. Experimental study

3.1. Design

In order to investigate how the configuration of the indirect question and the type of A'-movement affect the acceptability of movement of the constituents, an experiment was conducted with a factor design. According to questions i. and ii. formulated in (15), two factors have been investigated: (i) type of the constituent before the particle *li* (V or XP); (ii) type of movement (*wh*-movement, relative clause movement, or scrambling). Thus, the experiment had a 2×3 design (6 experimental conditions). Following the Latin square method, 6 experimental lists were compiled, in which each block of experimental conditions (2×3=6 conditions) was represented by 4 variants of lexical content. Thus, 24 experimental sentences were presented on each sheet. In addition, 24 filler sentences were drawn up, which were the same for all experimental lists. In the experiment, acceptability judgments were collected: the respondents were asked to rate the acceptability of sentences on a scale from 1 to 7.

3.2. Materials

To maintain maximum uniformity of the lexical material, the experimental sentences were composed in accordance with the following principles. Firstly, in all sentences, the direct object underwent movement since according to the above theories of weak islands, the DO is most likely to be able to move out of indirect questions. Subjects of the matrix clause were 2nd person singular pronouns in all the sentences. In sentences with a relative clause, *kotoryj* 'which'

was always chosen in inanimate, masculine form, since for this form the nominative and accusative are homonymous, which excludes the influence of the case factor on the results of the experiment. At the end of each sentence, there were adverbial prepositional groups (for example, for the evening in (16)). The constituent before *li* in the XP *li* configuration clauses was the subject of the embedded clause. As far as predicates are concerned, the decision was made to use the matrix predicates of the *wonder*-class, since, as discussed above, the predicates of this class have weaker island effects. The predicates *sprashivat* ‘ask’ and *proveryat* ‘check’ as the most frequently used. In each experimental list, each of these two predicates is combined with each embedded clause predicate from the list: *napisat* ‘write’, *slomat* ‘break’, *poteryat* ‘lose’, *prochitat* ‘read’, *posmotret* ‘see’, *sjest* ‘eat’, *narisovat* ‘draw’, *zametit* ‘notice’, *vybrosit* ‘throw out’, *spet* ‘sing’, *vyuchit* ‘learn’, *otmyt* ‘wash off’. This list was compiled on the basis of frequency, and also (and to a greater extent) on the basis of the compatibility of verbs with matrix predicates. Since the investigated constructions are not easily perceived in written speech: such constructions, if used, then in oral speech and in general can be difficult to interpret without context (especially sentences with scrambling, where we are interested in a certain intonation). Therefore, before the presentation of the experimental sentence, the respondent was shown the context for this sentence. The block of experimental sentences looked like this:

- (16) a. context: {I believe you tried to find out how Tanya was doing with some assignment that was due tomorrow.}

chto ty sprashival napisal-a li Tanya za vecher?
 what you asked wrote-F LI Tanya in evening
 Lit.: ‘What did you ask whether Tanya wrote in one evening?’

- b. context: {I believe you asked: “Was it Tanya who wrote such a paper in one evening?”}

chto ty sprashival Tanya li napisal-a za vecher?
 what you asked Tanya LI wrote-F in evening
 Lit.: ‘What did you ask whether it was Tanya who wrote in one evening?’

- c. context: {The teacher suspected that Tanya spent too little time working on one of her reports.}

uchitel' nemnogo porugal tot doklad kotoryj on sprashival
 teacher a.little scolded that report which he asked

napisal-a li Tanya za vecher?
wrote-F LI Tanya in evening

Lit.: 'The teacher scolded a little the report, which he asked whether Tanya wrote in an evening.'

- d. context: {The teacher suspected that Tanya copied her report from someone else's one.}

uchitel' nemnogo porugal tot doklad kotoryj on sprashival
teacher a.little scolded that report which he asked

Tanya li napisal-a za vecher?
Tanya LI wrote-F in evening

Lit.: 'The teacher scolded a little the report, which he asked whether it was Tanya who wrote in an evening.'

- e. context: {The teacher gave Tanya an assignment to write an essay, a report and an abstract.}

doklad on sprashival napisal-a li Tanya za vecher?
report he asked wrote-F LI Tanya in evening

Lit.: 'The report he asked whether Tanya wrote in an evening.'

- f. context: {The students handed a poster and a report to the teacher. They spent the evening working on them.}

doklad on sprashival Tanya li napisal-a za vecher?
report he asked Tanya LI wrote-F in evening

Lit.: 'The report he asked whether it was Tanya wrote in an evening.'

These sentences correspond to the levels of the studied factors as indicated in the table 1:

Table 1. The distribution of stimuli by factor levels

| | <i>wh</i> -movement | relative pronoun movement | scrambling |
|--------------|---------------------|---------------------------|------------|
| V <i>li</i> | 16a | 16c | 16e |
| XP <i>li</i> | 16b | 16d | 16f |

Fillers were also divided into two main groups: acceptable and unacceptable ones. This approach allows fillers to be used not only to distract the respondent, but also as a control group of examples to check the respondent's judgments. Among the acceptable ones were sentences with a yes/no indirect question without any movement (17a) and sentences with an indirect *wh*-question

without ant movement (17b). Among the unacceptable fillers were sentences with *wh*-movement out of a relative clause (18a), as well as scrambling out of a relative clause (18b). Judgments about the inacceptability of these structures were obtained previously from several native speakers.

- (17) a. context: {Vasya called the hospital to find out who treated him.}
on utochnil rabotal li doctor Nosov vchera utrom.
 he clarified worked LI doctor Nosov yesterday morning
 ‘He found out whether Dr. Nosov was at work yesterday morning.’
- b. context: {Anton was in such a difficult situation for the first time.}
on ne mog reshit' chto on dolzhen delat'
 he NEG could decide what he must do
 ‘He couldn’t decide what he should do.’
- (18) a. context: {I think Vasya went to see this movie because some famous critic liked it.}
**komu on posmotrel film kotoryj ponravilsya.*
 who.DAT he watched film which was.liked
 Intended: ‘Who is the person that Vasya watched the film because this person liked it?’
- b. context: {Vasya has two female friends: Masha and Olya. All his friends like Olya.}
**Mash-u on ne znaet chelovek-a kotoryj nenavidit.*
 Masha-ACC he NEG knows person-ACC which hates
 Intended: ‘He doesn’t know a person who hates Masha.’

3.3. Procedure

The experiment involved 42 respondents: 27 women and 15 men, 11 of whom had a linguistic education. The experiment was performed online on the Ibox Farm web platform [Drummond 2013]. First, the context was presented to the respondent on the screen. After reading the context, the respondent went to the experimental sentence, which needed to be rated on a scale from 1 to 7. Before going through the experiment, the respondent was presented with instructions with examples of ratings for acceptable and unacceptable sentences, followed by a training part of the experiment, consisting of one sentence with context. After that, the experiment itself began. Each answer was limited by 14 seconds (not counting the time to read the context). Time had to be limited so that the

respondent did not dwell on one example for a long time (the rating of such an example would be unreliable). The time limit of 14 seconds was determined based on the average reading and rating time of some of the stimulus sentences by the study author.

3.4. Results

Before analyzing the results of the experiment, a procedure for removing outlier responses was performed. First, the responses given in less than 3 seconds were deleted. Second, outlier respondents were identified and completely excluded from consideration according to the following procedure described in [Sprouse 2018]: (a) the sum of squares of errors (deviations from the expected filler rating) was calculated for each respondent; (b) the mean and standard deviation of the values obtained were calculated; (c) the respondents for whom the calculated mean of the squared errors deviated from the general mean by more than 2 standard deviations were removed from consideration. As a result of this procedure, all the answers of 2 respondents were deleted.

Standardization was carried out for the respondents' ratings (z-scores were calculated for each respondent), and filler subgroups were combined. The overall scores for factor conditions and fillers are plotted graphically: standardized scores in Figure 1, mean scores in Figure 2.

Analysis of variance (ANOVA) was used for the statistical analysis of the data. Both factors and their interaction turned out to be statistically significant: the factor of the type of movement turned out to be significant ($F=31.22$, $p \ll 0.001$), the configuration factor *V li* vs *XP li* turned out to be significant ($F=36.41$, $p \ll 0.001$), the same is true for the interaction of factors ($F=5.05$, $p=0.00663$). Pairwise comparisons were also performed using Tukey's test. As a result of these comparisons, it was found that both the differences between relative and interrogative movement ($p=0.0001621$) and the differences between scrambling and interrogative movement ($p=0.0005633$) and between scrambling and relative movement ($p < 0.01$) were statistically significant.

Also, the procedure of pairwise comparisons made it possible to establish that, in *wh*-movement constructions, the differences between the configurations *V li* and *XP li* are insignificant ($p=0.2898540$), in scrambling constructions as well ($p=0.5282024$), but the configuration has an effect with relative pronoun movement ($p < 0.01$); the differences between relative and *wh*-movement ($p=0.8833179$) and between *wh*-movement and scrambling ($p=0.1611467$) were also found to be insignificant with the *XP li* configuration. With the *V li* configuration, there were no significant differences between *wh*-movement and scrambling ($p=0.0599514$).

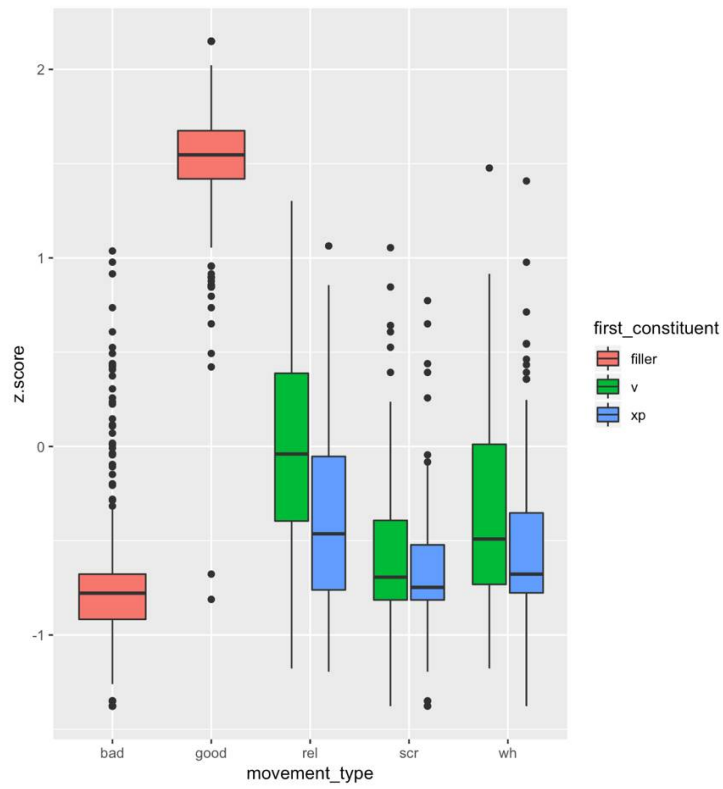


Figure 1. A box-plot for standardized scores

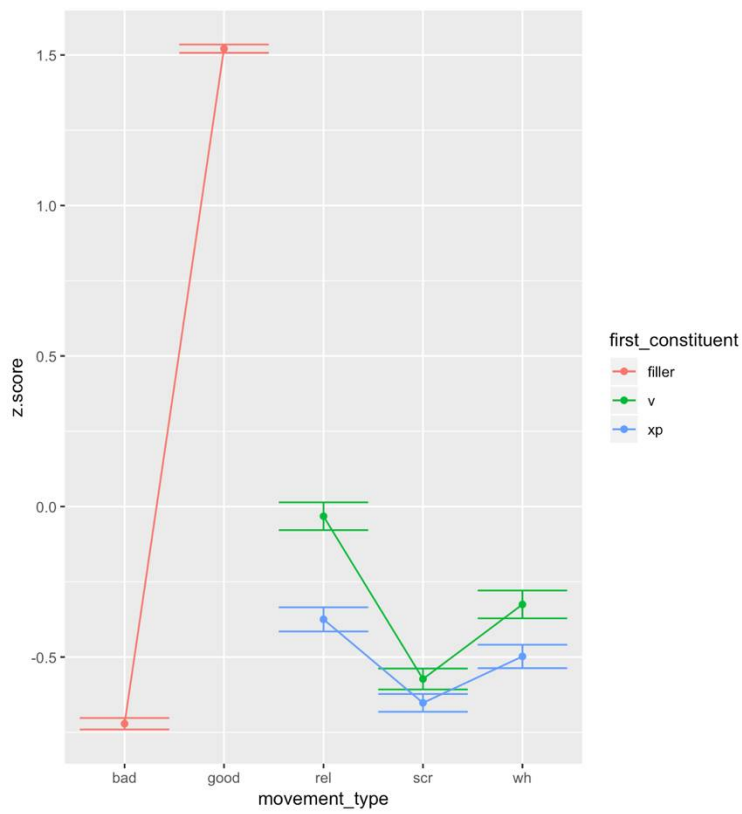


Figure 2. Means of standardized scores

Thus, sentences with the *V li* configuration receive higher ratings than those with the *XP li* configuration. Also, sentences with relative movement were the most acceptable, followed by sentences with *wh*-movement, and sentences with scrambling having been rated the lowest.

4. Conclusion

The experiment confirmed the hypothesis that the choice of configuration *V li* vs. *XP li* does affect the acceptability of a movement out of such an indirect question. Movement out of indirect questions with *V li* configuration is rated higher than out of indirect questions with *XP li* configuration.

Out of the analyses discussed in Section 2, such a result is most directly predicted by the approach based on Relativized minimality. According to it, movement cannot cross an element that has features similar to the element being moved. Thus, A'-movement cannot cross an A'-element.

Indeed, if the A'-position of the specifier in the embedded clause in *V li* configurations is not occupied by any intervening A'-elements, the DO can move to the matrix clause. In *XP li* configurations, the XP, being an A'-element, blocks A'-movement. Thus, the contrast (19a) vs. (19b) and higher scores for the former are predicted by Relativized minimality.

(19) a. *что ты спрашивал [написал-а ли Тanya что за вечер]?*
 what you asked wrote-F LI Tanya in evening
 Lit.: 'What did you ask whether Tanya wrote in one evening?'

b. *что ты спрашивал [Tanya ли написал-а что за вечер]?*
 what you asked Tanya LI wrote-F in evening
 Lit.: 'What did you ask whether it was Tanya who wrote in one evening?'

Both experiments showed that the type of movement affects the acceptability of moving an element (direct object) out of yes/no indirect questions. At the same time, the highest scores are observed for sentences with relative movement, lower scores for sentences with *wh*-movement, and the lowest scores are for sentences with scrambling.

Pairwise comparison of the experiment results also showed that sentences with relative movement are rated significantly higher than sentences with *wh*-movement. The fact that relative pronouns are more freely moved out of indirect questions than *wh*-pronouns was also noticed in [Lyutikova 2009]. This result is predicted by the analysis in [Bailyn 2020], but this approach predicts

the same high scores for scrambling, which is not supported by the results of the experiment. In addition, the predictions of this analysis do not match the result of pairwise comparisons: with XP *li* configurations, the differences between *wh*-movement and scrambling turns out to be not significant.

Low scores for sentences with scrambling can be explained by the fact that such extractions must be communicatively motivated, which means that the context is extremely important for the respondents, which could have been chosen inaccurately or poorly perceived. It is also possible that low scores for sentences with scrambling are due to the fact that, out of the movements considered in the experiment, only scrambling is optional. It can then be assumed that the lower scores for this type of extraction are due to economic considerations.

Of the approaches discussed in Section 2, an analysis based on the empty category principle does not predict the contrast between the two configurations of yes/no indirect questions (V *li* vs. XP *li*) when extracting a direct object and the influence of the type of movement on its acceptability. Rizzi's theory outlined above predicts the discovered contrast between the configurations of the indirect question. J.F. Bailyn's approach based on "Featural" Relativized minimality expects differences between the types of movement, however, scrambling, contrary to our results, should receive the highest marks within this approach. The semantic approach of M. Abrusán considers *wh*-movement and is based on the semantics of questions. That is, this theory does not seem to make predictions about other types of movement. Although almost all of the results obtained (with the exception of the low scores for scrambling) were expected, none of the considered approaches to analyzing the weak island effects predict all the results simultaneously. Thus, a detailed analysis of the results remains for further research. It should be noted that all predictions were considered, taking the approaches to the analysis of the structure of the general indirect question presented in Section 2.2. Another subject of further research should be the consideration of predictions of theories of weak islands in other analyzes for the indirect question of whether (e.g. [Rudnitskaya 2000]).

Abbreviations

ACC — accusative; DAT — dative; F — female; INS — instrumental; LI — particle *li*; NEG — negation; SG — singular.

References

- Lyutikova 2009 — Lyutikova E.A. Otnositel'nye predlozheniya s soyuznym slovom *kotoryj*: obshchaya kharakteristika i svoistva peredvizheniya. [Relative clauses with the conjunction word *kotoryj* 'which': General characteristics and movement properties]. Kiseleva K.L., Plungian V.A., Rakhilina E.V., Tatevosov S.G. (eds.). *Korpusnye issledovaniya po russkoi grammatike* [Corpus research in Russian grammar]. Moscow: Probel. P. 436–511.
- Abels 2012 — Abels K. The Italian left periphery: A view from locality. *Linguistic Inquiry*. 2012. Vol. 43. No. 1. P. 229–254.
- Abrusán 2007 — Abrusán M. Contradiction and grammar: The case of weak islands. Ph.D. thesis. Massachusetts Institute of Technology, 2007.
- Bailyn 2020 — Bailyn J.F. The scrambling paradox. *Linguistic Inquiry*. 2020. Vol. 51. No. 4. P. 635–669.
- Boeckx 2012 — Boeckx C. *Syntactic islands*. Cambridge: Cambridge University Press, 2012.
- Chomsky 1981 — Chomsky N. *Lectures on government and binding*. Dordrecht: Foris Publications, 1981.
- Chomsky 1986 — Chomsky N. *Barriers*. Cambridge, MA: MIT Press, 1986.
- Dayal 1996 — Dayal V. *Locality in WH Quantification*. Dordrecht: Kluwer, 1996.
- Drummond 2013 — Drummond A. *Ibex Farm*. 2013. <http://spellout.net/ibexfarm/>.
- Dyakonova 2009 — Dyakonova M. A phase-based approach to Russian free word order. LOT Dissertation Series. Netherlands Graduate School of Linguistics, 2009.
- Honcoop 1998 — Honcoop M. *Dynamic excursions on weak islands*. The Hague: Holland Academic Graphics, 1998.
- Huang 1982 — Huang C.-T.J. *Logical relations in Chinese and the theory of grammar*. Ph.D. thesis. Massachusetts University of Technology, 1982.
- King 1994 — King T.H. Focus in Russian yes-no questions. *Journal of Slavic linguistics*. 1994. P. 92–120.
- Kroch 1989 — Kroch A. Amount quantification, referentiality and long *wh*-movement. Ph.D. thesis. University of Pennsylvania, 1989.
- Rizzi 1990 — Rizzi L. *Relativized minimality*. Cambridge: MIT Press, 1990.
- Rizzi 1997 — Rizzi L. The fine structure of the left periphery. *Elements of grammar*. Dordrecht: Springer, 1997. P. 281–337.
- Rizzi 2004 — Rizzi L. Locality and left periphery. *Structures and beyond: The cartography of syntactic structures*. Vol. 3. Belletti A. (ed.). Oxford: Oxford University Press, 2004. P. 223–251.
- Ross 1967 — Ross J.R. *Constraints on variables in syntax*. Ph.D. thesis. Massachusetts Institute of Technology, 1967.
- Rudin et al. 1999 — Rudin C., Kramer C., Billings L., Baerman M. Macedonian and Bulgarian li questions: Beyond syntax. *Natural Language & Linguistic Theory*. 1999. Vol. 17. No. 3. P. 541–586.
- Rudnitskaya 2000 — Rudnitskaya E. Yes-no li questions in Russian: Interaction of syntax and phonology? *Papers from the Poster Session of the 18th Annual West Coast Conference on Formal Linguistics (WCCFL 18)*. 2000. P. 89–98.
- Schwabe 2004 — Schwabe K. The particle li and the left periphery of Slavic yes/no interrogatives. *The Syntax and Semantics of the Left Periphery*. Lohnstein H., Trissler S. (eds.). Berlin: Mouton de Gruyter, 2004. P. 385–430.
- Sprouse 2018 — Sprouse J. *Experimental syntax: Design, analysis and application*. Lecture notes, 2018.

Szabolcsi 2006 — Szabolcsi A. 2006. Strong vs. weak islands. *The Blackwell Companion to Syntax*. Vol. 4. Everaert M., van Riemsdijk H. (eds.). Oxford: Blackwell, 2006. P. 479–532.
Szabolcsi, Zwarts 1993 — Szabolcsi A., Zwarts F. Weak islands and an algebraic semantics for scope taking. *Natural Language Semantics*. 1993. Vol. 1. No. 3. P. 235–284.

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