

Interrogative islands in Russian: for an intervention account

1 Background. Weak, or selective, islands have been shown to exhibit asymmetries with respect to their opacity (Szabolcsi 2006 a.o.) from the foundational argument-adjunct extraction contrast to the fact that different types of movement behave differently with respect to extracting out of weak islands (see Rizzi 2004, Abels 2012, Bailyn 2020). The attempts of accounting for these contrasts generate discussions as to whether it is the structural or featural asymmetries that underlie each attested contrast. In this paper, I focus on experimental evidence for the potentiality of reducing the former, such as phase-based locality to the latter, such as Relativized Minimality, at least in the realm of weak islands. This is a proposal being discussed both in the domain of A-dependencies (Halpert & Zeijlstra 2024), and A'-dependencies, in particular with weak islands (Bailyn 2025).

The weak island structure under investigation here is a polar question in Russian. Russian embedded polar questions obligatorily contain a second-position clitic *li*, often analyzed as an interrogative complementizer (?), and include the fronting of either a narrowly focused element or the verb, which can also bear contrastive focus. This paper reports the results of three experimental studies of the comparative islandhood of these configurations. Example (1) presents a triplet from the target items used in the experiment. They show topicalization out of an embedded *li*-question. As stimuli materials, here they are presented without grammaticality judgment marks.

- (1) a. Piccu=to ja razbiralas' [prigotovila=**li** Maša ---]. (V-*li*)
pizza=TOP I inquired cooked=Q Masha
'As for pizza, I inquired whether Masha cooked it.'
- b. Piccu=to ja razbiralas' [PRIGOTOVILA=**LI** Maša ---]. (V_{loc}-*li*)
pizza=TOP I inquired cooked=Q Masha
'As for pizza, I inquired whether Masha COOKED it (or got from a restaurant).'
- c. Piccu=to ja razbiralas' [Maša=**li** prigotovila ---]. (DP-*li*)
pizza=TOP I inquired Masha=Q cooked
'As for pizza, I inquired whether it was Masha who cooked it.'

2 Experiment details. The factors under investigation in all three experiments¹ were *li*-question configuration and movement type. In all the studies, the respondents were given an acceptability judgment task on a 1-7 Likert scale with audio stimuli, as part of an online survey administered through the Qualtrics platform. In all the experiments, the *li*-question configuration factor had 3 levels: V-*li*, V_{loc}-*li* and DP-*li*. In experiments I and II, the 2 levels of the movement type factor were topicalization and relativization. In experiment III, the factor levels were topicalization and *wh*-movement. Thus, each study had a 3x2 design, with 10 lexicalization sets of 6 items created corresponding to the 6 conditions. In experiment I, the items had the form of a dialogue, with the first utterance providing context, and the second utterance being up for participant evaluation. Experiment II mirrored experiment I in everything but the presence of context. Experiment III also included no such context, but differed in the types of movement examined.

In each study, participants were distributed among 3 lists, each containing 20 target and 40 filler items in f-f-t-f-f-t-... order. The fillers were designed to have varying acceptability judgments to enable the participants to use the entirety of the Likert scale in their responses. The unacceptable fillers included those with a filler-gap dependency where the gap is filled with another element and sentences with CNPC violations. On the acceptable side there were sentences with extraction out of *čtoby*-clauses, shown to be quite acceptable in Russian (Morgunova 2021), and sentences with short A'-movement in the matrix clause.

3 Results. 44 self-identified native Russian speakers participated in experiment I, 34 – in experiment II, and 33 in experiment III. After the application of a procedure to remove outliers laid out in Sprouse (2018), the validity of the obtained results was checked by comparing received filler ratings to the anticipated ones. In all 3 studies, the mean ratings for expectedly acceptable fillers were within 6-6.26, and the mean ratings for expectedly unacceptable fillers were within 1.23-2.83. This fit the expectations.

¹Experimental protocols were approved by the relevant IRB under approval number IRB2025-00236.

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To analyze the data of the 3 studies, cumulative link mixed effects regression analyses were conducted in R (package ‘ordinal’, Christensen 2018) to test the dependence of target rating on movement type and *li*-configuration type. The model included participant and item as random effects. In study I, model comparison through anova likelihood ratio tests showed that the movement type factor was significant ($p < 0.001$), with topicalization rated higher than relativization. The *li*-configuration factor didn’t prove significant ($p > 0.1$). Given that the topicalization examples were rated quite high in study I ($M = 4.42$), study II was undertaken to check if the omission of context, which is known to lower acceptability ratings, would bring about more significant differences within the *li*-configurations. This was not the case: model comparison again showed the significance of movement type ($p < 0.001$) and didn’t show significance of *li*-configuration ($p > 0.1$). The model comparison for study III showed significance of the movement type factor ($p < 0.001$), with topicalization rated higher than *wh*-movement. In this study, the configuration type also appeared to be significant ($p < 0.01$), with post-hoc pairwise Tukey test (‘emmeans’ package) showing that the only significant contrast is the one between V-*li* and DP-*li* ($p < 0.01$).

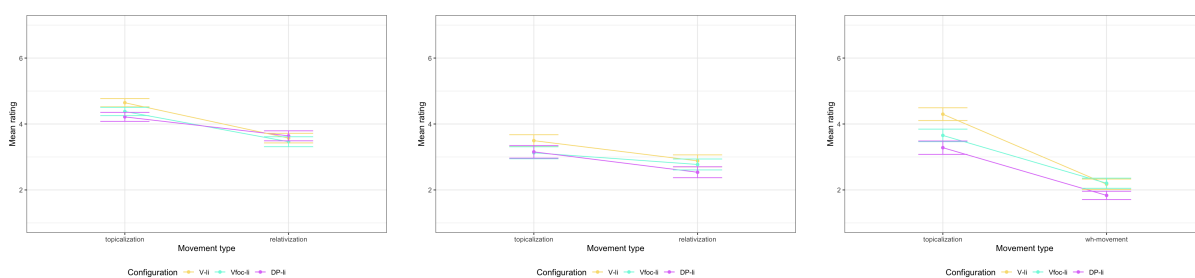


Figure 1: Interaction plots for study I, II and III.

4 Discussion. The aim of the study was the examination of potential islandhood asymmetries brought about by 3 configurations of Russian polar questions, and an assessment of whether Relativized Minimality can account for the results. Here I adopt featural RM (fRM) (Rizzi 2004), which organizes features into classes, such that elements that bear features of the same class can be interveners for each other’s movement. Weak islands are results of Q(quantificational)-feature-bearing elements blocking Q-movement. I also follow Abels (2012)’s A' -feature hierarchy. In this, if a phrase bears only a feature of a superclass, its movement is blocked by any element of this superclass. If a phrase bears a feature of a subclass, its movement will only be blocked by elements of the same subclass. According to these, *wh*-movement out of a question should be much worse than topicalization² or relativization. This is borne out in the results of studies I-III. In this study, topicalization received significantly higher ratings than relativization. I speculate that this is due to the comparative length of the sentences in these conditions: the relativization items were 1 clause longer than the topicalization ones. As for the lack of differences in *li*-configuration, if what underlies these structures’ islandhood is the quantificational interrogative feature on the embedded C, as fRM accounts would suggest, then adding focus, another Q feature, or filling a left periphery specifier with a focus fronted DP, isn’t expected to create contrasts. That is, fRM anticipates lack of significance for the configuration, which is what has been shown in experiments I and II. This leaves the question of the significance of *li*-configuration found in study III. Adding the more severely unacceptable *wh*-movement seems to have played a role in bringing about this contrast. Figure 1, however, shows that it does not just come from the *wh*-movement condition. Given that the configuration contrast was not found consistently in all 3 studies, I do not take there to be enough evidence of its presence at this time. This, however, leaves to further research the methodological matter of how exactly swapping relativization for *wh*-movement in the design could have brought about the configuration contrast.

²Note that even though the topicalization in this study is contrastive, the feature relevant for the movement is not of the Q class, and, therefore, isn’t subject to intervention.

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References

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