ON HYBRID COORDINATION AND QUANTIFIER RAISING IN RUSSIAN

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Dedicated to my mother
Writing acknowledgments is the holy grail of every graduate student: it signifies the end of a lonely journey to the sometimes anti-climactic denouement (known in the wild as “defense”) and provides a safe(ish) venue for parading one’s dubious sense of humor. I religiously checked the acknowledgments of every dissertation that I came across. The anecdata that I accrued from other people’s acknowledgments led me to the following scientifically sound conclusion: the wittier the acknowledgments, the better the dissertation (this is not a two-way correlation). My one hope is that I do not become a glaring counterexample.

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ON HYBRID COORDINATION AND QUANTIFIER RAISING IN RUSSIAN

The empirical base of this dissertation is comprised of two parts, neither of which has been systematically investigated in the generative literature before. The first one is dedicated to the “hybrid” coordination constructions evinced by (1); the second explores binding into the NP in the contexts with multiple edges, as in (2).

Hybrid coordination is understood as a conjunction of a Y/N- and a wh-question. The difference between (1a) and (1b) lies in the order of elements: in the former, a reduced polar interrogative precedes the constituent question; in the latter, this sequence is reversed. I argue that the apparent similarity between (1a) and (1b) is not symptomatic of identical derivations, as the two pattern differently in a variety of contexts.

(1) a. Skoro li i kto pridet?
   soon Q and who comeFUT
   ‘Will it be soon that somebody will come and who will come?’

b. Kto i skoro li pridet?

The analysis that I develop for the hybrids in (1) has bearing on our understanding of argument structure, the nature of null elements, Across-The-Board movement, Quantifier Raising (QR), polarity items licensing, properties of ellipsis, and PF-syntax interface issues.

The main claim defended in this dissertation is that Russian, traditionally taken to be a rigid scope language, has QR. Two sets of facts are invoked as evidence. The first batch implicates the distribution of quantifiers in hybrid constructions like (1), where I show that quantifiers behave differently from other arguments.

The second context, where quantifiers also behave differently from non-quantifiers, involves binding into NPs with multiple edges. The behavior of quantifiers in this respect is illustrated by (2).

(2) a. vse svoi proekty
   all self’s projects
   ‘…all of her/his projects’

b. *…svoi vse proekty

I show that these facts follow directly if QR is assumed to be operable in Russian. In addition, the paradigm in question is shown to be relevant for the contextual approach to phases and the Phase Impenetrability Condition, proper formulation of Condition A, focus movement, and the structure of NP.

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vi
Table of Contents

Chapter 1. Introduction, preliminaries, and overview ................................................................. 1
  1.1 Overview ............................................................................................................................... 1
  1.2 Preliminaries ....................................................................................................................... 8
    1.2.1 Related phenomena ................................................................................................. 8
    1.2.2 Russian polar interrogatives .................................................................................. 12
    1.2.3 Basic properties of svoj and some disclaimers ....................................................... 16
  1.3 Dissertation map .................................................................................................................. 20

Chapter 2. Hybrid Wh-Coordination ......................................................................................... 24
  2.0 Introduction ......................................................................................................................... 24
  2.1 Adjuncts versus Arguments/Verbs .................................................................................... 28
    2.1.1 Basic facts ............................................................................................................... 28
    2.1.2. Analysis ............................................................................................................... 33
    2.1.3 Consequences and extensions: Amelioration effects ............................................. 44
    2.1.4 Consequences and extensions: A note on prefixed verbs of motion and argument structure ........................................................................................................ 48
  2.2 Quantifiers .......................................................................................................................... 52
    2.2.1 QR as covert movement ......................................................................................... 55
    2.3.2 Evidence for QR and CP-adjunction ................................................................. 60
    2.3.2 Evidence for ATB-movement ................................................................................. 68
    2.3.3 Consequences for ATB-movement ......................................................................... 80
  2.4 Placement of li ..................................................................................................................... 92
  2.5 Conclusion .......................................................................................................................... 110

Chapter 3. Reverse Hybrid Wh-Coordination ........................................................................... 112
  3.0 Introduction .......................................................................................................................... 112
  3.1 rHWh questions: basic facts ............................................................................................... 115
  3.2 rHWh questions with non-D-linked wh-words ................................................................ 125
    3.2.1 Null wh-indefinite ................................................................................................. 128
    3.2.2 Pre-li verbs ............................................................................................................ 137
    3.2.3 Non-quantified arguments vs. adjuncts ............................................................... 141
    3.2.4 Quantified arguments ............................................................................................ 145
    3.2.5 Multidominance alternatives .................................................................................. 155
    3.2.6 Intermediate summary ......................................................................................... 161
  3.3 rHWh questions with D-linked wh-phrases ................................................................. 162
    3.3.1 D-linked wh-phrases as topicalized constituents ................................................. 163
      3.3.1.1 Impossibility of LBE ...................................................................................... 163
      3.3.1.2 Strong crossover environments and argument drop .................................... 170
      3.3.1.3 Island contexts .............................................................................................. 178
    3.3.2 D-linked rHWhs with various pre-li constituents .............................................. 183
  3.4 Conclusion .......................................................................................................................... 191

Chapter 4. Quantifier Raising .................................................................................................... 194
Chapter 1. Introduction, preliminaries, and overview

1.1 Overview

The Slavic family has proved to be an ample source for many theoretical insights throughout the history of the generative enterprise. Since the seminal work of Rudin (1986/2013), one of the most widely researched areas has been multiple wh-fronting (MWF), as in Bulgarian (1).

(1) a. Koj kogo e vidjal?
    who whom Aux3SG seen
    ‘Who saw whom?’

b. *Koj e vidjal kogo?

From the crosslinguistic perspective, MWF languages constitute a distinct type when it comes to constituent questions: in the menagerie of possible multiple wh-language types, the Slavic family distinguishes itself by requiring the fronting of all wh-words to the periphery, unlike, e.g., Japanese, a wh-in-situ representative, or English, where only one wh-element is eligible to move. As such, the phenomenon of MWF has opened a new window into the investigation of the properties of natural language: viz., what factors determine this typological pattern, is our theoretical apparatus sufficient to derive the facts, and, if the conceptual adjustments prove to be necessary, how could they affect the other components of the theory? A great deal of empirical and theoretical discoveries have sprung up in conjunction with the exploration of MWF (Billings and Rudin 1996, Bošković 2002, Boeckx 2003, Cheng 1991, Citko and Grohmann 2001, Diesing 2003, Grohmann 2000, Nunes 2004, Pesetsky 2002, Richards 1997, Rudin 1988, Stjepanović 1999b, 2003, Wachowicz 1974, among many others). The construction has turned out to be quite effective in furnishing the empirical foundation for the investigation of multiple specifiers, superiority, syntax-PF interface, focus, and the interpretation of questions.
This dissertation aligns with the spirit of such investigations in that it pushes the boundaries of the system by virtue of clearing a new empirical terrain for the inquiry into several familiar mechanisms. Under scrutiny here is a fairly obscure construction provided in (2) that has not been systematically explored (and, in fact, went entirely unreported for Russian). The analysis that I develop for constructions like (2) will be shown to bear on a number of theoretical issues. The central claim advanced in this dissertation (contrary to the standard view) is that Russian does not “wear LF on its sleeve”; it is a language that, in fact, does resort to quantifier raising (QR).

(2) a. Skoro li i kto pridet?
    soon Q and who comeFUT
    ‘Will it be soon that somebody will come and who will come?’

b. Kto i skoro li pridet?
    ‘Who will come and will it be soon that somebody will come?’

Let me now zoom in on the construction under scrutiny in (2). Both examples above evince a conjunction of a Y/N question and a wh-question. The difference between the two lies in the order of elements: in ((2)a), a reduced polar interrogative precedes the constituent question; in ((2)b), this sequence is reversed. The former are christened hybrid wh-questions (HWh), the latter – reverse hybrid wh-questions (rHWh). Despite the superficial similarity, the two configurations in (2) are not amenable to identical treatment, as they display a distinct set of restrictions.

Putting those “internal” differences aside, it is generally the case that both hybrids and reverse hybrids are quite persnickety in the choice of constituents that are eligible to appear in such configurations. The main restriction is imposed on the element that surfaces before the Y/N marker li (glossed as Q throughout this dissertation). In contrast to non-coordinated root polar questions which boast a substantial degree of freedom when it comes to the material that can be preposed before li, constructions in (2) tolerate only a subset of items normally available in front of li. Roughly speaking, only quantifiers and adjuncts of various flavors can be felicitously fronted before the Y/N-marker in coordinated structures of this (hybrid) type.
The analysis that I develop has consequences for an aggregate of contingent phenomena. My primary objective is to grapple with syntactic mechanisms implicated in the derivation of these sentences, but the proposals made here necessitate an occasional foray into the interactions of syntax and PF and syntax-semantics interface.

In particular, I contend that constructions like (2) are underlyingly biclausal, derived via ellipsis in the first conjunct, which naturally invites a discussion of the properties of ellipsis. Certain restrictions will be shown to follow from the necessity to preserve argument structure in both conjuncts. This, in turn, leads to the exploration of argument/adjunct dichotomy and the nature of non-overt arguments. The presence of wh-elements warrants an investigation into the idiosyncrasies of Russian wh-words. The latter realize a dual function: they can be interpreted either as true interrogative elements or as indefinite pronouns depending on the syntactic environment in which they find themselves. In hybrid contexts they appear in both incarnations: as true wh-words in the wh-conjunct, and as indefinites in the Y/N-conjunct. An inevitable consequence of dealing with wh-questions is the need to consider non-D-linked and D-linked wh-phrases, as their behavior in rHWh questions is not identical. The D-linked wh-phrases will be shown to share a few traits with topicalized constituents. In fact, the matters of topicalization are considered at several junctures throughout this dissertation, since they prove to be pertinent to the investigation of both syntactic patterns and PF-related issues. Russian interrogative marker *li*, an enclitic endowed with a set of rigid restrictions, is the principle vehicle for examining the PF-syntax interactions. Endorsed here is a particular PF reordering mechanism, which places the Y/N marker to the left of its host. Some empirical discoveries are related to the particular conception of Across-the-Board (ATB) movement. I will consider several available proposals and argue, in light of novel Russian data, that ATB-movement is not reducible to movement in one conjunct; rather, the restrictions that obtain in Russian follow from certain linearization constraints.

Perhaps the most unorthodox claim advanced in this dissertation is that Russian, traditionally taken to be a rigid scope language (Ionin 2002), has recourse to QR. There are several environments where quantified NPs behave in a way that consistently sets them apart from non-quantified NPs. This divergent patterning can be captured in a straightforward way if QR is assumed to be operable in Russian: QNPs must
be displaced, hence, they do not remain in the same positions as other NPs, and so, naturally, they exhibit distinct properties.

Roughly two independent sets of facts argue in favor of this proposal. The first set implicates the distribution of quantifiers in hybrid constructions. In contrast to their non-quantified counterparts, QNPs are eligible to appear in the highly restricted position before *li* (cf. (3)a), with a quantified argument before *li*, and ((3)b), with a bare NP in the same position). This will be shown to be a consequence of QR.

(3) a. Vsë *li i kogda* Ivan rasprodal__?
   all Q and when Ivan sold
   ‘Was it everything that Ivan sold, and when did Ivan sell everything?’

b. ?*Mašiny *li i kodga* Ivan rasprodal__?
cars Q and when Ivan sold

Intended: ‘Was it cars that Ivan sold, and when did Ivan sell cars?’

The second empirical cornerstone for such an unconventional proposal is the behavior of quantifiers within the NP. Specifically, their ordering restrictions with respect to the anaphoric possessive follow directly if quantifiers undergo QR in Russian. Consider (4), which demonstrates that a universal quantifier must precede the anaphoric possessive *svoj*. The ambition here is to show that *svoj* has to appear in a particular configuration in order to be bound. In pretheoretic terms, it has to be the leftmost element inside the NP. Note that the only way to ensure that this requirement is complied with is by raising *vse ‘all’ out of its NP-internal base position in ((4)a). Observe that in ((4)b) *svoj* is the leftmost element in the NP, so it is bound. The degradedness of this example will be argued to stem from a blocking effect: the quantifier in ((4)b) fails to undergo QR, because the possessive hinders the extraction.
(4) a. Ona brosila [NPvse svoi ostal’nye proekty]. [www]
     she gave up all self’s remaining projects
     ‘She gave up all of her remaining projects.’

b. *…svoi vse ostal’nye proekty…
     self’s all remaining projects

In short, these two independent phenomena fall out in straightforward manner if one is willing to accede to the idea that Russian has QR. In fact, one would expect that this analysis of Russian should in principle extend to other rigid scope languages (though I will not stray into the crosslinguistic minefield here).

The analysis of constructions like (4) constitutes the second major part of this dissertation. In addition to investigating the interactions of the anaphoric possessive with quantifiers, I consider the distribution of svoj with focalized adjectives and superlatives. On the theoretical level these data are relevant for a particular conception of phases and the Phase Impenetrability Condition (PIC), binding restrictions, focus movement, and the structure of NP.

I will depart from the “rigid” approach to phases (e.g., Chomsky 2000, 2001) in favor of the contextual treatment (Bošković 2014a, b, in press). The notion “phase” serves to capture the idea that syntactic derivations proceed in incremental steps. Once a particular structural unit has been assembled from a lexical subarray, it can be spelled out, i.e. shipped to the interfaces, and “forgotten” for the purposes of further computations (presumably easing the computational strain). The “phase” is understood as this relevant structural unit. Under Chomsky’s approach, phasehood is a property of a category: hence, only v and C are endowed with the status of a phase. A further distinction is made between a phasal head (v0 and C0), its complement, and its edge (Spec,vP/CP or adjunct to v0/C0). The PIC regulates what is eligible for further computations: in this system, only phasal heads and their edges (i.e. Specs and adjoints) can be further manipulated; the complement is transferred to the interfaces (and so inaccessible for subsequent operations) as soon as the phase is completed. In short, a “phase” determines the locality and delineates the points of spellout.
Bošković’s approach departs from the idea that only \( \nu^0 \) and \( \mathcal{C}^0 \) are phases. He maintains that the phasehood of a particular XP is determined by its syntactic context. Specifically, the highest phrase within the extended domain of a given lexical head delimits a phase. For example, within the domain of \( \nu^0 \), NP, DP or QP can in principle function as a phase, depending on the inventory of functional elements in a given language and the specific configurations resulting from Merge. This means that the “size” of a phase is variable not only across different languages, but that it can fluctuate within a language. Russian (5) demonstrates the point: NP in (a), being the highest projection of N, counts as a phrase. In (b), upon the introduction of the quantifier, the QP assumes that role (see Bošković 2014a,b, in press for evidence to that effect).

(5) a. …kupil \([\text{NP} \text{ knigu}]\).
   
bought book

b. …kupil \([\text{QP} \text{ neskol’ko} \ [\text{NP} \text{ knig}]])\).
   
bought several books

My reader would notice that in (5) I tacitly make a particular commitment by assuming that Russian projects no DP. This is in line with much recent research on the matter advanced in Bošković (see esp. Bošković 2013a and numerous references therein). The idea here is that languages are subject to parametric variation: some count D among the available functional elements, others do not. This correlates with the presence/absence of a definite article (see also Bošković 2005, Corver 1992, Uriagereka 1988).

The main argument for this parametric treatment hinges on a number of syntactic and semantic generalizations that hold of DP-languages, on the one hand, and NP-languages, on the other hand (see, e.g., Bošković 2005, 2013a). The two types seem to form two distinct natural classes. In a variety of constructions they exhibit consistently uniform behavior: for instance, DP-languages prohibit Left-Branch Extraction (LBE), but have clitic doubling, while NP-languages permit LBE, but disallow clitic doubling.

Russian belongs in the D-less class. The next logical step here is to assume that adjectives and determiner-like elements (demonstratives and possessives) are NP-adjoined. Some evidence for this is
provided by their morphology: each nominal modifier in (6) agrees (in the same way) with a head noun in case, gender and number. Furthermore, Russian is rather flexible in the order of these elements, as (b) and (c) attest, which follows on the adjunction analysis. Note also that the availability of all these word order options renders Russian an excellent candidate for investigating binding of possessives.

(6) a. …prines [NP ètu [NP novuju [NP Mašinu [N knigu]]]].
    bought thisACC.SG.FEM newACC.PL Masha’ACC.SG.FEM booksACC.SG.FEM
    b. …prines novuju ètu Mašinu knigu.
    c. …prines ètu Mašinu novuju knigu.

My analysis also bears on the particular approach to PIC. Consider (4), repeated in (7). Earlier I stated the restriction in ((7)b) in rather vague terms: the possessive blocks QR, hence, the sentence is bad. This blocking is, in fact, due to PIC. Following Bošković (2014a,b, in press), I argue that in cases of multiple edges, only the highest one is eligible for subsequent operations – extractions and binding. In (7), each modifier adjunct (i.e., quantifier, possessive, adjective) is on the edge. However, what is crucial for the PIC is the highest edge. In ((7)a), the highest edge is vse. After QR the possessive anaphor becomes the highest edge, eligible for further computations. In this configuration it can be bound, as it is now accessible to its binder. In ((7)b) the anaphor occupies the highest edge, so it is bound just fine. The problem is that it blocks QR, since vse in this configuration is not on the highest edge and, therefore, inextricable.

(7) a. Ona brosila vse svoi ostal’n’ye proekty. [www]
    she gave.up all self’s remaining projects
    ‘She gave up all of her remaining projects.’
    b. *…svoi vse ostal’n’ye proekty…
       self’s all remaining projects

I will demonstrate that an aggregate of additional facts – distribution of the possessive anaphor with focalized elements and superlatives – all fall in place on this analysis. The behavior of the anaphoric
possessive with focalized adjectives and superlatives will be argued to be a consequence of the syntactic focus movement, which may be string vacuous. I will show that Russian has two focus positions, which belong in two separate phasal domains: the verbal domain and the clausal domain. I will also consider some facts pertaining to focalizing elements like *only* and *even*, arguing that in languages that have focus movement, focus association must be overt.

In short, in addition to reporting on an aggregate of novel empirical facts, this dissertation intends to contribute to the debate on the following theoretical issues: the mechanism of QR, the nature of ATB-movement, PF-syntax constraints, our understanding of phases and related phenomena, as well as certain binding issues.

Before I delve into the content proper, however, I will address a few preliminary issues. I discuss two phenomena that have enjoyed some attention in the literature, which appear to be quite similar to the construction I will be reporting on: viz., coordinated multiple wh-questions and reverse sluicing contexts. I then give a brief descriptive overview of the properties of Russian polar interrogatives and the anaphoric possessive *svoj*.

### 1.2 Preliminaries

This section considers some “kin” phenomena. My overall objective is to present some facts that testify to the crosslinguistic ubiquity of hybrid-like constructions. In addition, the section provides a brief descriptive summary of two key contexts that will be prominently featured in the subsequent discussion – the main traits of Russian *li*-interrogatives and the properties of the anaphoric possessive *svoj*.

#### 1.2.1 Related phenomena

Though the hybrid construction under investigation here may appear somewhat peculiar (and, in fairness, it is quite rare), it is nevertheless attested in other languages. As far as I can tell, the first mention thereof appears in Browne (1972). His BCS example is given in (8a). Tomaszewicz (2011) reports that a similar
construction is available in Polish: in ((8)b) the Y/N-marker *czy* finds itself in an &P-configuration with *co* ‘what’. She derives ((8)b) from a biclausal structure, coordinated at the TP-level, via ellipsis in the first conjunct. Of the few languages that I checked, the hybrid conjunction is likewise possible in Turkish ((8)c,d) and Bulgarian ((8)e).

(8) a. *Da li i gde si ih video?* [BCS]
   *da Q and where Aux2SG them seen*
   ‘Did you see them and where?’ (Browne 1972)

b. *Czy i co studiujesz?* [Polish]
   *Q and what study2SG*
   ‘Do you study something and what do you study?’ (Tomaszewicz 2011)

c. *Hasan yakında mı ve niçin gelecek?* [Turkish]
   *Hasan soon Q and why comeFUT.3SG*
   ‘Will Hasan come soon and why will he come?’

d. *Herkese mi ve kim ödülü verdi?* [Turkish]
   *to.everybody Q and who award gave*
   ‘Did somebody give an award to everybody, and who was it is?’ (Öner Özçelik, p.c.)

e. *Otdavn li i po kakva pričina zvanja Ivan?* [Bulgarian]
   *long.ago Q and for what reason called Ivan*
   ‘Was it a while ago that Ivan called and for what reason?’ (Vesela Simeonova, p.c.)

To my knowledge no serious attempts have been undertaken to investigate this construction in any detail. It gets mentioned in the context of its “sister” phenomenon – coordinated multiple wh-questions (CMWs), which in contrast has generated a considerable interest in the syntactic literature, producing a plethora of accounts (Browne 1972, Citko and Gračanin-Yüksek 2013, Gračanin-Yüksek 2007, Gribanova 2009, Kazenin 2002, Lipták 2003, Ratiu 2010, Skrabalova 2006, Whitman 2002, Zoerner 1995, Zhang 2007, a.o.). Descriptively, multiple wh-coordination involves a conjunction of two or more wh-phrases on
the left periphery of the clause, as in (9). The inventory of languages that permit some variant of CMW-coordination is rather substantial (the entire Slavic family, English, Hungarian, Romanian, etc.).

(9) a. Komu i za skol’ko budet prodan neprofil’nyj biznes Gazproma?
   whom and for how much will be sold incidental business of Gazprom
   ‘To whom will they sell the non-core Gazprom business, and for how much?’

   [Russian National Corpus. K. Veretennikova. Izvestija. 2001]

   b. Ki és mikor látta Marit?
   who and when saw Mary
   ‘Who saw Mary and when?’

   [Hungarian] (Lipták 2003)

c. Acari s či ari vijyť?
   who and what has seen
   ‘Who saw something and what did they see?’

   [Vlach] (Merchant 2008)

d. What and where did you sing?

   [English] (Citko and Gračanin-Yüksek 2013)

Several analyses are available to capture the facts in (9). Gribanova (2009), concerned mostly with explaining Russian CMWs, argues for a derivation along the lines of ((10)a), which represents a monoclausal structure with &P coordination on the periphery (see also Kazenin 2002). An alternative in ((10)b) entails clausal coordination with some reduction in the first conjunct (Browne 1972, Whitman 2002, Tomaszewicz 2011).

(10) a. \([\text{CP} [\&P \text{wh}_1 \text{ and wh}_2] [\text{TP} \ldots t_1 \ldots t_2 \ldots]]\)

   b. \([\&P[\text{CP} \text{wh}_1 [\text{TP} \ldots t_1 \ldots ] \text{ and } [\text{CP} \text{wh}_2 [\text{TP} \ldots t_2 \ldots ]]]\)

Finally, a relatively unconventional, but at this point a reasonably well-established line of research, maintains that CMWs incarnate some variety of multidominant structures, whereby certain material is

By far the closest analogue of (8) is investigated in Giannakidou and Merchant (1998). The construction they consider is known in the literature as “reverse sluicing”, in which the Y/N marker is conjoined with a wh-clause: it is demonstrated for English in (11) and Modern Greek in (12). There are certain restrictions that emerge in such contexts: in English only wh-adjuncts are licit in such configurations. In Greek, both wh-adjuncts and arguments may follow the coordinator. I will delay the exposition of Giannakidou and Merchant’s analysis until Chapter 3. For the present purposes it is sufficient to note the sheer existence of such constructions.

(11)  a. It’s not clear if and when the police arrested the demonstrators.
    
    b. *It is not clear if and who the police have arrested.

(12)  a. Dhem ine akomi safes an ke pote sinelave i
not is yet clear if and when arrested\textsubscript{3SG} the
astinomia tus dhiadhilotes.
    police the demonstrators

b. Dhem ine akoni safes an ke pjon sinelave i astinomia.
not is yet clear if and who arrested\textsubscript{3SG} the police

Lit. ‘It is not yet clear if and whom the police arrested.’

(Giannakidou and Merchant 1998: 234)

Consider now the extent of similarity between reverse sluicing sentences and the hybrid examples from before. All the Slavic hybrids in (2), (3) and (8) are embeddable in precisely the form they take in root contexts. Shown in (13) are the embedded hybrids in Russian and BCS. Observe that BCS is practically non-distinct from English/Greek reverse sluices: the interrogative complementizer \textit{da li} is akin to English \textit{whether/if} and Greek \textit{an}.

(13)
Russian, however, comes with a little twist: the interrogative marker *li* is an enclitic, which (unlike its full tonic South Slavic brother *da li*) must be preceded by some overt lexical material. Additionally, this Russian *li* has focalizing properties: it imposes a particular contrastive focus interpretation on the preposed material. Furthermore, in hybrid contexts the position preceding *li* tolerates a limited subset of elements that are licit in “normal” (i.e., non-coordinated) Y/N-questions.

(13) a. Mne ne jasno, skoro li i kto pridet. [Russian]
to.me neg clear soon Q and who come<br>‘It is unclear to me whether it will be soon that somebody will come and who will come.’

b. Nije još jasno da li i gdje ih je vidio. [BCS]
not yet clear da Q and where them Aux<br>‘It is not yet clear whether and where he saw them.’

To appreciate the scope of pre-*li* restrictions in HWh and rHWh contexts, I briefly lay out the baseline pattern for regular polar root interrogatives in the next section.

1.2.2 *Russian polar interrogatives*

Consider first the strategies responsible for the formation of Russian Y/N-questions in general. The first (and arguably less marked) one operates on the level of prosody: the permutations of the pitch contour result in different interpretation as demonstrated in (14). Under the prosodic strategy, the focused element receives the highest sentential pitch. The default Y/N question is shown in ((14)a). It has two pitch peaks – on the stressed vowel of the verb and the following vowel of the direct object. In ((14)b), *ty* ‘you’ receives the highest pitch, since this constituent comes under focus. Similarly in ((14)c), the stressed vowel of *gazetu* ‘newspaper’ simultaneously realizes the highest sentential pitch, which correlates with a focus interpretation of the direct object. Finally, a declarative proposition in ((14)d) has a falling pitch contour. Note that no permutations of word order obtain in those environments.
(14)  

a. Ty kupIL gazetu?
you bought newspaper

‘Did you buy a newspaper?’

b. TY kupil gazetu?
you bought newspaper

‘Was it you who bought a newspaper?’

c. Ty kupil gaZEtu?
you bought newspaper

‘Was it a newspaper that you bought?’

d. Ty kupil gazetu.
you bought newspaper

‘You bought a newspaper.’

The second option, exemplified in (15), involves an introduction of an interrogative particle li, which obligatorily cliticizes to the first prosodic word of the utterance (splitting constituents where necessary). Almost anything can precede li, but the most neutral variant of li-Y/N-interrogative under this strategy is (15a) with a fronted verb. By contrast, the configuration in (15b) induces a focus interpretation of the left-branch extracted adjective. This latter holds of any other fronted constituent – a non-quantified argument NP in ((15c)), adverbial adjunct in ((15d), and a quantified argument in ((15e). The meaning corresponding to the examples in ((15)b–e) is best conveyed by the English cleft construction, which is how I will be rendering those examples.

(15)  

a. Platite li vy nalogi?
pay Q you taxes

‘Do you pay taxes?’
b. Bol’šoj li vy platite nalog?
big Q you pay tax
‘Is the tax that you are paying burdensome?’
c. Ivan li zaplatil nalogi?
Ivan Q paid taxes
‘Was it Ivan who paid taxes?’
d. Davno li Ivan zaplatil nalogi?
long.ago Q Ivan paid taxes
‘Was it a while ago that Ivan paid taxes?’
e. Vse li platjat nalogi?
all Q pay taxes
‘Is it everybody that pays taxes?’

While the prosodic strategy is often selected for root Y/N-interrogatives, the *li*-strategy is obligatory in embedded contexts, as shown in (16). It is necessary to keep in mind that all the interpretative effects are maintained in both root and embedded contexts: XPs are understood to realize contrastive focus when preposed before *li*, while the verb-fronting can encode a neutral Y/N-strategy.

(16) a. *Ja ne znaju, ty kupIL gazetu.
I neg know you bought newspaper
Intended: ‘I don’t know if you bought a newspaper.’
b. Ja ne znaju, kupil li ty gazetu.
I neg know bought Q you newspaper
‘I don’t know if you bought a newspaper.’

The paradigms in (17) and (18) demonstrate the one prosodic word requirement. The NP-constituent in ((17)a) must be interrupted by *li*: this is so because the first stressed word is the adjective (stress is indicated
with diacritics in the glosses below). Placing an entire constituent before \textit{li}, as in in ((17)b), results in the ostensible PF violation, since two stress-bearing elements precede \textit{li}. The same carries over to (18): the first prosodic word here is the P+Adj complex, so it must serve as a host for the Y/N marker (cf. ((18)a) and ((18)b).

(17) \begin{itemize}
  \item a. Vérvnoe li lečénije oni naznačili?  
      correct Q treatment they ordered
      \quad \text{‘Was it the correct treatment that they ordered?’}
  \item b. *Vérvno lečénije li oni naznačili?
      correct treatment Q they ordered
\end{itemize}

(18) \begin{itemize}
  \item a. V právil’nom li napravlénii dvižetsja Rossija?
      in correct Q direction moves Russia
      \quad \text{‘Is it the correct direction that Russia is moving in?}
      \quad \text{[Russian National Corpus. E.Kostjuk.} \textit{Vremja MN. 2013]}
  \item b. *V právil’nom napravlénii li dvižetsja Rossija?
      in correct direction Q moves Russia
\end{itemize}

Finally, the sharply ungrammatical (19) shows what happens when \textit{li} has no host. The more obvious context is in ((19)a), where \textit{li} has literally nothing in front of it. The embedded environment in ((19)b) demonstrates that the host must be local to \textit{li}: i.e., \textit{li} cannot cliticize to the matrix \textit{V}.

(19) \begin{itemize}
  \item a. *Li vernoe lečenije oni naznačili?
      Q correct treatment they ordered
      \quad \text{Intended: ‘Did they order correct treatment?’}
  \item b. *Ne znaju [li vernoe lečenije oni naznačili]?
      neg know Q correct treatment they ordered
      \quad \text{Intended: ‘I do not know if they ordered correct treatment.’}
\end{itemize}
So, Russian li tolerates a great deal of various elements in front of it, as long as these elements comply with the one prosodic word requirement. Non-verbs are obligatorily understood as contrastively focused elements when they appear before li. The neutral interpretation is achieved via verb fronting.

These facts are pertinent to Chapters 2 and 3 that deal with hybrid coordination. We will see shortly that in hybrid coordination contexts, the position before li is much more restricted than in “regular” Y/N questions discussed above.

In Chapter 4, I turn to the interaction of the anaphoric possessive svoj with various elements. The main objective pursued in this part of the dissertation is to provide independent evidence for QR in Russian as well as to account for a rather intricate paradigm involving binding of the Russian anaphoric possessive. The next section gives a brief descriptive overview of the properties of this possessive.

1.2.3 Basic properties of svoj and some disclaimers

Russian has a full inventory of possessive pronouns shown in ((20)a), which correspond to the English equivalents (their distribution is very similar). In Russian these possessive are adjectival in that they agree with the noun they modify in gender, number and case. They are eligible to modify the nouns appearing in subject positions. The only oddity in ((20)a) concerns the 3rd singular possessive. First, ee/ego is invariable: it never changes regardless of the environment in which it appears. Second, ee/ego is identical to the form of the personal pronoun she/he in genitive/accusative case. The difference between ((20)a) and ((20)b) is that the former agree with the antecedent in person, but the latter does not.

All these possessives, save for 3rd singular, are in free variation with svoj ‘self’s’. Compare ((21)a) and ((21)b). Both moj ‘my’ and svoj ‘self’s’ are possible with the antecedent in 1st singular. However, the majority of speakers reject the frozen ee ‘her’ on the bound variable interpretation in favor of svoj ‘self’s’.

Additionally, svoj has a number of extra restrictions that the possessives in ((20)a) lack.
(20) a. moj ‘my’ b. svoj ‘self’s

tvoj ‘yourSG’

ee/ego ‘her/his’

naš ‘our’

vaš ‘yourPL’

ix ‘their’

(21) a. Ja \textsubscript{1} napisala moju/svoju \textsubscript{1} dissertaciju.

I wrote my/ self’s dissertation

‘I wrote my dissertation.’

b. Veronika \textsubscript{1} napisala *ee/ svoju \textsubscript{1} dissertaciju.

Veronika wrote her/ self’s dissertation

‘Veronika wrote her dissertation.’

The first thing to notice with respect to svoj is that it is insensitive to the person specification of its antecedent. Consider (22): svoj agrees with husband and job in number, gender, and case; the antecedent has no apparent effect on the morphological makeup of this item.

(22) a. Maša\textsubscript{1} brosila svoego\textsubscript{1} muža.

Masha\textsubscript{NOM,FEM,SG} gave.up self\textsubscript{SACC,MASC,SG} husband\textsubscript{ACC,MASC,SG}

‘Masha left her husband.’

b. Vy\textsubscript{1} brosili svoju\textsubscript{1} rabotu.

you\textsubscript{NOM} gave.up self\textsubscript{SACC,FEM,SG} job\textsubscript{ACC,FEM,SG}

‘You quit your job.’

The second point concerns certain locality restriction imposed on svoj. As (23) shows, svoj cannot modify the noun appearing in the subject position, even though this is a configuration, in which the possessive is bound, as it has a c-commanding antecedent. Evidently, this is the issue of binding domain:
the anaphoric possessive seems to lack an appropriately local binder. Note that the pronominal possessive in (b) is fine in the same position.

(23) a. *Ivan₁ znaet čto svoj₁ sestra umeet rešat’ differencial’nye uravnenija.
Ivan knows that self’s sister can solve differential equations

Indended: ‘Ivan knows that his sister can solve differential equations.’

b. Ivan₁ znaet čto ego₁ sestra umeet rešat’ differencial’nye uravnenija.
Ivan knows that his sister can solve differential equations

‘Ivan knows that his sister can solve differential equations.’

Furthermore, the Russian anaphoric possessive is subject oriented, as (24) shows (data slightly modified from Asarina 2005): a direct object in (a) or an indirect object in (c) may not serve as eligible binders; svoj must be co-referential with the subject. The pronominal possessives, on the other hand, exhibit antisubject orientation, as in (b) and (d), in that they require a non-subject antecedent.

(24) a. Petja₁ predstavil Mašu₂ svoj₁/₂ tete.
Petya introduced Masha to self’s aunt

‘Petya introduced Masha to his aunt.’

b. Olja₁ predstavila Mašu₂ ee₂/₁ tete.
Olya introduced Masha to her aunt

‘Olya introduced Masha to her (own) aunt.’

c. Petja₁ predstavil Maše₂ svoj₁/₂ tete.
Petya introduced Masha to self’s aunt

‘Petya introduced his aunt to Masha.’

d. Olja₁ predstavila Maše₂ ee₂/₁ tete.
Olya introduced Masha to her aunt

‘Olya introduced her (own) aunt to Masha.’
Having presented these paradigms, I must issue two disclaimers at this juncture. Chapter 4 is not conceived as a thorough investigation of Condition A in Russian (though it does have substantial bearing on it). Therefore, the precise definition of the binding domain in cases like (23) or the explanation for the subject orientation of Russian anaphors in (24) are orthogonal to my goals. I will simply assume that some mechanism compatible with my analysis derives the facts in (23)/(24), confining my discussion to the “micro” issues, which boil down to the behavior of the possessive inside the NP, as in (25) (repeated from (4)), which shows the quantifier-
svoj interactions, and (26), involving an adjective.

Consider the difference between the two examples: the quantifier (which is adjectival in that morphologically it behaves like poleznye ‘useful’ from (26)) must precede the possessive, but the adjective has to follow it. The general idea to be pursued hinges on the phasal approach to binding, which entails the statement of the binding domain for Condition A in terms of phases (see also Bošković in press, Canac-Marquis 2005, Despić 2011, in press, Hicks 2009, Lee-Schoenfeld 2008, Quicoli 2008, Safir 2011 for arguments to that effect). My main contention is that the anaphoric possessive in (25) and (26) can be bound outside of its phasal XP only if it is located on the phasal edge. Combining that with the conception of the PIC that I adopt here, there is an additional requirement – viz., it has to occupy the highest edge in order to be bound. When in this configuration, the anaphor is not really a part of its initial nominal phase, but in a sense “belongs” in the higher verbal domain. In light of the complexity of the Russian edge paradigm (which can be gleaned even from the small dataset below) such an exploration will be shown to be rather informative for the statement of Condition A.

(25) a. Ona brosila vse svoi ostal’nye proekty. [www]
    she gave.up all self’s remaining projects
    ‘She gave up all of her remaining projects.’

    b. *…svoi vse ostal’nye proekty…
    self’s all remaining projects
One final caveat is this: I will limit my exploration to the behavior of anaphoric possessives, putting aside the dichotomy in (21). It should be noted, however, that the analysis I develop in Chapter 4, in fact, predicts that svoj and ee/ego ought to be in complementary distribution. Three contexts are considered there: the interactions of the anaphoric possessives with quantifiers, focalized elements, and superlatives. While the complementarity of svoj vs. ee/ego in quantified contexts is clear cut, the facts become murkier with focused adjectives and superlatives with ee/ego-type possessives (there seems to be a greater degree of speaker variability for the latter two contexts). So, I will present the facts and the analysis for svoj only, leaving ee/ego for future research. With these preliminaries out of the way, I can turn to the issues of organization.

1.3 Dissertation map

The dissertation can be divided into two parts: the first part deals with hybrid coordination (Chapters 2 and 3), the second part focuses on independent QR-related matters in conjunction with the distribution of the anaphoric possessive in various contexts (Chapter 4).

A distinction is necessary between HWh questions in ((27)a) and their reverse incarnations in ((27)b). The basic analysis I will pursue for all instances of this unconventional coordination boils down to biclausal coordination with TP-ellipsis in the first conjunct.

(27) a. Skoro li i kto pridet? [HWh]
soon Q and who come\textsubscript{FUT}
‘Will it be soon that somebody will come and who will come?’

b. Kto i skoro li pridet? [rHWh]

‘Who will come and will it be soon that somebody will come?’

In Chapter 2, I explore the properties of HWh configurations. The position preceding *li* is quite restricted in such cases. Only adjuncts and quantifiers, but not non-quantified arguments and verbs, are allowed to appear there. In Section 2.1 I present a proposal for excluding certain elements from pre-*li* positions in HWh questions. The analysis hinges on a deficiency in argument structure, whereby a constituent appearing before *li* in the first conjunct is shown to be missing in the second conjunct. This analysis makes a number of predictions related to the notion “argument structure”. Of particular pertinence for my purposes is the phenomenon of argument drop and some issues connected to the standard approaches to the adjunct/argument dichotomy. In Section 2.2 I turn to the behavior of quantifiers in pre-*li* positions. As advertised earlier, their felicity in such configurations will be argued to follow from QR, which proceeds in an ATB-fashion out of each conjunct, adjoining the quantified NP to the higher CP-segment. There are a few unconventional claims advanced in this part. First, QR is normally confined to the covert component of grammar, yet in Russian the QNP is pronounced before *li*. The requirement to pronounce the quantifier in such constructions will be shown to follow from a PF constraint: *li*, being an enclitic, requires a prosodic host to its left. Second, QR is standardly taken to target a lower position, yet I defend the view that QR results in CP-adjunction. In addition, I discuss a few current proposals to ATB-movement in general, ultimately siding with the analysis which hinges on the idea that an aggregate of restrictions stem from the linearization constraints. Section 3.3 is dedicated to the PF-syntax interface: it is mostly structured around the discussion of the properties of *li*.

In Chapter 3, I consider rHWh with the form in ((27)b). The construction presents an interesting challenge, because the position before *li* appears to be even more restricted in rHWh configurations, but only when the wh-conjunct contains a non-D-linked wh-word (in this case, the pre-*li* position tolerates only adjuncts). Their D-linked counterparts, on the other hand, are compatible with pre-*li* adjuncts and
Section 3.2 is dedicated to the behavior of non-D-linked wh-words in rHWh sentences, showing how to rule out quantifiers, verbs, and non-quantified arguments in the positions before *li*. An aggregate of contingent phenomena will be discussed: some restrictions on ellipsis, certain semantic and pragmatic factors pertinent to Y/N questions in Russian, and the distribution of wh-indefinites in the environments with other quantifiers. Section 3.3 deals with D-linked wh-words, which appear to be constrained in the same way as topicalized constituents in crossover and island environments and with respect to the availability of “resumption” (where “resumption” can be understood either as a species of argument drop or the insertion of the pronoun in place of a trace variable). I will argue for the high CP-adjunction of D-linked wh-words. The crucial difference between non-D-linked and D-linked wh-phrases lies in the fact that the latter tolerate quantifiers in the positions before *li*. This will be argued to follow from the combination of QR and the nature of the null element in the second conjunct. With D-linked wh-phrases the null element is simply a trace of the wh-phrase, but in rHWhs with non-D-linked phrases the null element in the second conjunct is a non-overt wh-indefinite. The chapter also presents two additional arguments for QR in Russian. The first one is linked to the behavior of wh-indefinites in quantified contexts: the licensing of wh-elements is blocked in such cases due to the intervention effects of the quantifiers. The second one has to do with some Scope Parallelism effects.

Finally, Chapter 4 is largely dedicated to the facts in (7). Roughly speaking, this chapter is divided into two parts: the first one investigates the interaction of the possessive anaphor *svoj* ‘self’s’ with quantifiers, the second deals with the distribution of *svoj* with contrastively focused adjectives and superlatives. Under focus in Section 4.2 are quantifiers, both agreeing and genitive-assigning types. Here I show that the behavior of *svoj* with quantifiers is the result of conspiracy among QR, phasal properties (and conditions on extractions), and binding. In this section I address certain issues related to the interpretation of *svoj* with genitive-assigning quantifiers and the weak vs. strong quantifier dichotomy. Since my implementation of QR is rather unconventional, as I argue that only the quantified part (rather than the quantified NP) is subject to this operation, I present a sketch of how this can be captured in semantics (this analysis is, in fact, in line with some theoretical desiderata, as in Chomsky 1995). The next step then is to track whether the claims that I
make regarding the anaphoric possessive itself hold in other contexts. This leads me to consider the distribution of svoj with focused elements in Section 4.3 and with superlatives in Section 4.4. I will argue that Russian has syntactic focus movement which may be string vacuous. This, in turn, harks back on the issues related to binding and the phasal approach that I adopt in this discussion. So, in Section 4.4, I return to the issue of binding, comparing two competing approaches: binding-as-agree and binding-as-movement, showing that the former handles my data in a more straightforward way.
Chapter 2. Hybrid Wh-Coordination

2.0 Introduction

The present chapter is concerned with constructions like (1), dubbed here Hybrid Wh-coordination (HWh). It is a peculiar type of what appears to be clausal coordination, whereby a reduced Y/N-interrogative is conjoined with a wh-question, giving rise to an interrogative interpretation in both conjuncts, roughly corresponding to the English translation provided in (1).

(1) Skoro lì i kto pridet?
    soon Q and who come_{FUT}

    ‘Is it soon soon that somebody will come and who will come?’

The main reason to claim that both conjuncts are interpreted as true interrogatives is grounded in facts like (2). This latter sentence is minimally different from (1) in that the conjunction element ‘and’ is missing here. This absence of the coordinator leads to the obligatory construal of the wh-word as a wh-indefinite in (2), as indicated in the gloss.

(2) Skoro lì kto pridet?
    soon Q who come_{FUT}

    ‘Will someone come soon?’

Such dual function of wh-words in Russian is not groundbreaking news: indeed, their properties in various environments are reasonably well catalogued. I will not attempt to review all the relevant literature on the matter here as it will take me too far afield, however I will provide a very brief sketch of their distribution in their non-interrogative incarnations to make the contrast in (1) and (2) clear. Roughly speaking, there are two general environments in which bare wh-words are interpreted as indefinites: (i) if they appear in particular licensing configurations (i.e., in the presence of certain licensers); and (ii) in
embedded infinitival wh-clauses under the existential predicates.1 Regarding (i), consider the slightly modified paradigm from Yanovich (2005) in (3): the construal of wh-words as indefinites is licensed in polar interrogatives ((3)a), conditionals ((3)b), subjunctive clauses ((3)c), and under certain epistemic operators, as in ((3)d). Yanovich analyzes those items as Hamblin pronouns for the following reasons: they require a licenser; in the presence of several possible licensers, they associate with the closest one; they are unable to take widest scope; and, finally, they are allowed to scope out of the islands.

(3) a. Ne zaxodil li kto?
    neg enter Q who
    ‘Did anybody stop by?’

b. Esli kto pridet, pozovi menja.
    if who comes call me
    ‘If anybody comes, calls me.’

c. Petja zaper dver’, chtoby kto ne vošel.
    Petja locked door thatSUBJ who neg entered
    ‘Petja locked the door in order that no one can come in.’

1 The second context mentioned in (ii) above is not exclusive to Slavic, but is found in a variety of typologically different languages (e.g., Greek, Hebrew, Romance group, etc.). An existential or a possessive predicate can take as a complement an infinitival or a subjunctive wh-clause: in Spanish (i) the combination is have+subjunctive, in Russian (ii) it is be+infinitival, but in both cases the wh-word is construed as an indefinite (Grosu 1994, Grosu and Landman 1997, Pancheva 1998, Pesetsky 1982, Rivero 1986, Rappaport 1986, and references therein).

(i) El Coronel no tiene [quien le escriba].
    the colonel not have3.SG who him write3.SG.SUBJ
    ‘Noone writes to the colonel.’ (lit. ‘The colonel has noone to write to him.’) (Pancheva 1998)

(ii) Nam est’ [čto delat’].
    weDAT be3.SG what to do
    ‘There is something for us to do.’ (Rappaport 1986)

These latter two paradigms are provided for the sake of thoroughness, however they will not be relevant for my purposes here.
d. Možet, kto priodil.

maybe who came

‘Maybe someone came.’

Of pertinence for the present exposition are contexts like ((3)a), which is exactly like my sentence in (2): the bare wh-word is understood as an indefinite (which, in turn, is contended to be licensed in the presence of the interrogative operator).

Returning now to the HWh configuration in (1), I will argue that it is underlyingly biclausal. The derivation proceeds as demonstrated in (4): the conjuncts are coordinated at the level of CP; the TP in the first conjunct is elided. The interpretation of the wh-word that obtains in the ellipsis site is identical to what is reported for (2): i.e., in the first conjunct the presence of li requires the indefinite pronoun construal of the wh-word, while in the second conjunct is it understood as a true wh-word (unsurprisingly so, given the absence of the indefinite licensing context).

(4) Skoro li [kto pridet] i [kto pridet]?
soon Q someone comeFUT and who comeFUT

The example in (1)/(4) represents the showcase specimen of what will be the focus of this chapter and provides a rough approximation of the analysis pursued here. Schematically, (1)/(4) has the form in (5). There are several things to notice with respect to (5). First, as already discussed in Chapter 1, the Y/N-marker li is an enclitic, imposing a one-prosodic word requirement on its host (see Franks and King 2000). This means that the position indicated by “X” below is limited to a single prosodic unit (defined in terms of word-level stress). Second, what can occupy this pre-li position itself is restricted in HWhs. This property distinguishes HWhs from their non-coordinated (root polar) counterparts: in the latter, “X” is free to host a much larger set of elements.

(5) X li [pridet] & wh...?
Specifically, in regular non-coordinated Y/N questions, the position before *li* can accommodate verbs, arguments, adjuncts and certain quantifiers, as demonstrated in (6)b. But in HWh interrogatives the pre-*li* position is available only for adjuncts (the best examples are constructible with adverbs, like in (1)) and a limited number of quantifiers, as summarized in (6)a.

(6) a. \( \text{\_li [TP\ldots]} \) \& wh…?
   b. \( \text{\_li [TP\ldots]} \)?

*Verb*,
*Argument*,
✓Adjunct
✓Quantifier
✓Verb
✓Argument
✓Adjunct
✓Quantifier

The upshot of the above is the following: in addition to producing an account that would explain the behavior of (1), repeated below in ((7)a), the analysis would have to accommodate facts like ((7)b), involving quantifiers. Furthermore, it must also capture the dichotomy between HWhs and root polar interrogatives stated in (6): viz., why are verbs and arguments impossible in pre-*li* positions in HWhs in contrast to root Y/N-questions?

(7) a. Skoro li i kto pridet?
   soon Q and who come\textsubscript{FUT}
   ‘Will someone come soon and who will come?’

b. Vsem li i kogda budut davat' kompensaciju? [www]
   all\textsubscript{DAT} Q and when will\textsubscript{3,PL} to.give compensation
   ‘Is it to all that they will be paying out the compensation, and when they will be paying it?’

The questions above basically capture the organization of the chapter. It is split into two large parts: the first one deals with the adjunct vs. argument/verb asymmetry. A number of contingent phenomena will be considered here. In particular, I will touch upon the issue of what counts as an adjunct and how my analysis bears on certain predicted amelioration effects that arise in the contexts of pre-*li* arguments in HWh questions (Section 2.1). The second part is dedicated to quantifiers (Section 2.2). I will show that Quantifier
Raising (QR) and Across-The-Board (ATB) movement are responsible for the felicity of ((7)b). This then invites a discussion of the properties associated with QR and ATB. Finally, I will consider in some detail the PF/syntax interface by scrutinizing the behavior of li in a variety of contexts (Section 2.3). The conclusion is in Section 2.4.

2.1 Adjuncts versus Arguments/Verbs

2.1.1 Basic facts

To appreciate the idiosyncrasy of HWhs, consider first some root contexts, in which any element may precede li.((8)a) with a fronted verb constitutes the most neutral way of asking a Y/N question. The rest of the paradigm in (8) contains fronted non-quantified arguments (N>li), which are interpreted as focus bearing elements: subject in ((8)b), object in ((8)c), and indirect object in ((8)d). A few words of warning before I proceed further. Recall from Chapter 1 that an intonation strategy is often preferred over the li-strategy in the formation of Y/N root interrogatives. The li-strategy is, however, obligatory in embedded questions. Speakers who find (8) slightly degraded have no objection to such strings in the embedded clauses, as in (9). My arguments extend to both root interrogatives and embedded contexts.

\(8\)

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<tr>
<td>a. Darit li Ivan Lene cvety?</td>
<td>gives Q Ivan Lena_{DAT} flowers_{ACC}</td>
<td>‘Does Ivan give flowers to Lena?’</td>
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<tr>
<td>b. Ivan li darit Lene cvety?</td>
<td>Ivan Q gives Lena_{DAT} flowers_{ACC}</td>
<td></td>
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<tr>
<td>c. Cvety li Ivan darit Lene?</td>
<td>flowers_{ACC} Q Ivan gives Lena_{DAT}</td>
<td></td>
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\(^2\) Certain quantifiers are illicit in pre-li positions in non-coordinated questions. See footnote 11.
(9) Ty ne znaeš _____?

‘Do you know whether…?’

The point of divergence is evinced in (10): none of the elements which can appear before *li* in (8) are permitted in HWh-questions. The worst configuration involves a fronted verb in ((10)a), while the least degraded one (relative to the rest of the set) is the preposed dative indirect object in ((10)d).

(10) a. *Daril li i čto Ivan Lena?

gave Q and what ACC Ivan Lena DAT

Intended: ‘Did Ivan give something to Lena, and what did he give?’

b. ?*Ivan li i komu daril cvety?

Ivan Q and who DAT gave flowers ACC

c. ?*Cvety li i kto daril Lena?

flowers ACC Q and who gave Lena DAT

d. ?? Lene li i čto podaril Ivan?

Lena DAT Q and what ACC gave Ivan

In (10) all the wh-words are arguments. This pattern of ungrammaticality is maintained, however, even if the wh-adjuncts are substituted, as demonstrated in (11).

(11) a. *Daril li i kogda Ivan Lena cvety?

gave Q and when Ivan Lena DAT flowers ACC

Intended: ‘Did Ivan give flowers to Lena, and when did he give her the flowers?’
b. ?*Ivan li i kogda daril Lene cvety?
   Ivan Q and when gave Lena_{DAT} flowers_{ACC}

c. ?*Cvety li i kogda Ivan daril Lene?
   flowers_{ACC} Q and when Ivan gave Lena_{DAT}

d. ?? Lene li i kogda podaril Ivan cvety?
   Lena_{DAT} Q and when gave Ivan flowers_{ACC}

So, what can appear in the position “___” in the schematic HWh configuration (12)?

(12) ___ li and wh…??

The first subset of licit pre-li elements is provided in (13). A variety of adverbs of different flavors (manner, time, place, frequency, etc.) as well as some PP adjuncts can surface before li in HWh questions.


b. Other adjuncts: locational, directional, instrumental PPs

Examples with the elements from ((13)a) are provided below; most of them are naturally occurring examples collected from the internet. (14) demonstrates that the adverbial adjuncts in pre-li positions are possible in environments where the second conjunct contains an argument wh-phrase, while (15) attests to the felicity of strings containing an adverbial adjunct in the reduced clause and the wh-adjunct in the second conjunct.

(14) a. Davno li i kto ottalkivaet Ukrainu ot Rossii? [www]
   long.time.ago Q and who pushes Ukraine from Russia
‘Has been a while that somebody has been pushing Ukraine away from Russia, and who has been pushing Ukraine from Russia?’

b. Naročno li i kto zdes’ razlil moloko?
on.purpose Q and who here spilled milk

‘Was it on purpose that somebody spilled milk, and who spilled milk here?’

c. Vsegda li i komu èto vygodno? [www]
always Q and whoDAT this profitable

‘Is it always profitable for someone, and for whom is it profitable?’

(15) a. …razuznal, davno li i kuda uexal batjuška. [www]
found.out long.time.ago Q and where left priest

‘he found out whether it was a while that the priest left, and where the priest left for.’

b. Zdes’ li i kogda točno budet proxodit’ meroprijatie?
here Q and when exactly will take.place event

‘Is it here that the event will take place, and when exactly will the event take place?’

c. Vsegda li i začem nužny pyšnye poxorony? [www]
always Q and why necessary pompous funeral

‘Is it always necessary to have a pompous funeral, and why is it necessary to have a pompous funeral?’

The situation with PP-adjuncts is slightly more complicated. Consider the paradigms in (16) and (17). The unaccusative verb of motion in (16), apparently, does not tolerate the directional PP adjunct in the pre-
li position in HWh configurations (though the sentence is marginally better with the adjunct wh-word, as in ((16)b)). In other contexts (e.g., when an unaccusative is embedded under a modal in (17) in the presence of the locative modifier), the PP adjuncts are quite felicitous in the positions preceding li.

3 Note that in (17) the PP na ètoj nedele ‘on this week’ is obligatorily split by the Y/N marker. The splitting is due to the one prosodic word requirement imposed by li: the preposition here is a proclitic on the demonstrative, so that #na
(16) a. ?*V magazin li i kto ušel?
    to store Q and who left

    Intended: ‘Was it for the store that someone left, and who left?’

b. ??V magazin li i kogda ušel Ivan?
    to store Q and when left Ivan

    Intended: ‘Was it to the store that Ivan left, and when did Ivan leave?’

(17) a. Utočni, na ètoj li nedele i kto dolžen javit’sja v sud.
    verify on this Q week and who must appear in court

    ‘Find out exactly whether it is this week that somebody has to appear in court, and who must
    appear in court.’

b. Utočni, na ètoj li nedele i kuda dolžen javit’sja korrespondent.
    verify on this Q week and where must appear correspondent

    ‘Find out exactly whether it is this week that the correspondent has to appear somewhere, and
    where the correspondent must appear.’

    The examples in (17) involve a temporal adjunct, but the directional and locative PPs are likewise
    possible given the right environment. In contexts with regular ditransitive predicates, as in (18), the locative
    PP can appear before li without any problems:

(18) a. Uznaj, v ètom li ofise i komu on otdal dokumenty.
    find.out in this Q office and whoDAT he gave documents

    ‘Find out whether it is in this office that he gave somebody the documents, and to whom he gave
    the documents.’

ètoj# is parsed as a single prosodic word. I will return to the discussion of the mechanisms involved in li placement at
the end of this chapter in Section 2.3 (see also Chapter 1).
As a result, we have an aggregate of generalizations to account for, as summarized in (19). In HWhs the position preceding li tolerates neither arguments nor verbs (in contrast to root polar questions). Only adjuncts are allowed to be preposed in the configurations I am considering. The best instances implicate adverbial adjuncts. Various types of PP adjuncts can also participate in such constructions with the following caveat: viz., their felicity in HWh questions apparently hinges on the type of the predicate involved. The type of the wh-phrase introduced in the second conjunct, however, appears to have no significant bearing on the pattern of grammaticality.

(19)  a. ^ li & wh…?  
      *argument
      *verb  
  b. ^ li & wh…?  
      ✓adverbial adjunct  
  c. ^ li & wh… ✓  
      ✓PP adjunct in the “right” environment

2.1.2. Analysis

It is admittedly hard to tease apart various analyses of conjunction structures. There are several alternatives that can be entertained: the flat structure, the Spec-complement of BP configuration, and the adjunction structure, corresponding to ((20)a,b,c), respectively (for a comprehensive overview of existing approaches to coordination see Progovac (1998) and references therein). In the ensuing discussion, and throughout this dissertation, Munn’s (1993) BP-adjunction structure is assumed. Under this approach the head of the Boolean phrase (BP) merges with the lower conjunct, forming an object labelled BP. This BP is adjoined to the higher conjunct in the manner of ((20)c).
As discussed in Munn (1993), binding asymmetries between the conjuncts of the kind shown in (21) essentially rule out structures like ((20)a), as the first element must be higher. Russian is parallel to English in this respect, as (22) demonstrates.

(21) a. John₁’s dog and him₁ went for a walk.  (Munn 1993: 16)
   b. *Him₁ and John₁’s dog went for a walk.

(22) a. Mama Vani₁ and on₁ xodili na progulku.
    mother Vanja_GEN and him went for walk
    ‘Vanya’s mother and him went for a walk.’
   b. *On₁ i mama Vani₁ xodili na progulku.

The remaining two structures in (20) are both consistent with the data in (21) and (22). Munn argues that the adjunction configuration ((20)c) is superior in that, in addition to BT facts, it captures certain crosslinguistic agreement patterns and allows him to recast ATB-movement as an instance of parasitic gaps.

One supplemental fact renders ((20)c) a better alternative. To see this, consider the iterating conjunction facts in Russian (23): both conjunction and disjunction elements can repeat in Russian before each XP. Munn proposes (24) for such instances.

(23) a. Ona prinesla i knigi, i gazety, i žurnaly.
    she brought and books and newspapers and magazines
    ‘She brought books, newspapers, and magazines.’
b. Narisuj mne ili begemota, ili krokodila, ili gorillu.

draw me\textsuperscript{DAT} or hippopotamus or crocodile or gorilla

‘Draw me a hippopotamus, a crocodile or a gorilla.’

\begin{equation}
\begin{tikzpicture}
  \node (BP) at (0,0) {BP};
  \node (NP2) at (-1,-1) {NP\textsubscript{2}};
  \node (B) at (-2,-2) {B};
  \node (NP1) at (-3,-3) {NP\textsubscript{1}};

  \draw (BP) -- (NP2);
  \draw (NP2) -- (B);
  \draw (B) -- (NP1);
\end{tikzpicture}
\end{equation}

It should be emphasized that the iteration itself is not a problem for (20)b. However, there is a prediction that the structure in (24) yields. Consider NP\textsubscript{2}: the modifiers (adjectives and possessives) can adjoin to either the lower segment, in which case they cannot scope over the material in NP\textsubscript{1}, or the higher segment, which would then produce a scope configuration extending over the material in NP\textsubscript{1} and NP\textsubscript{2}. This is borne out by Russian (25). The entire paradigm is ambiguous: the possessive and the adjective can be understood as scoping only over knigi ‘books’ or over both nouns. On the assumption that adjectives and possessives are NP-adjuncts (see Bošković 2005, 2009, Despić 2011, and Chapter 4 of this thesis for arguments in defense of this claim) the available interpretations in (25) follow directly if the BP-adjunction structure, as in (26), is assumed.

\begin{itemize}
  \item (25) a. Ona prinesla kak svoi knigi, tak i gazety.
    she brought how self’s books so and newspapers

    ‘She brought both her books as well as (her) newspapers.’
  
  b. Ona prinesla svoi knigi i gazety.
    she brought self’s books and newspapers

    ‘She brought her books and (her) newspapers.’
\end{itemize}
c. Ona prinesla novye knigi i gazety.

she brought new books and newspapers

‘She brought new books and (new) newspapers.

(26)  

On the other hand, the Spec-Complement structure like (27) predicts that the possessive and the adjective ought to always scope only over the higher conjunct.⁴

(27)  

⁴ There are two ways around this problem, neither is particularly compelling. One can either adjoin the modifier to the &P (which may be problematic from the standpoint of semantic composition). Alternatively, one can posit ATB-movement out of each conjunct to the same position, though it is unclear how to handle it from the standpoint of anti-locality.
Granted, this is just one argument for the structure. In Section 2.2 I return to the matter briefly, presenting another set of facts that seem to have bearing on the choice between ((20)b) and ((20)c), ultimately concluding in favor of the latter.

Returning now to HWh configurations. Given the above, I am assuming that BP is right-adjointed to CP₁, as shown in (28). The gist of the analysis is quite simple and reduces to TP-ellipsis in the first conjunct, as indicated. Though there is some debate in the literature as to the precise nature of Y/N question formation in Russian (see Bošković 2001, Franks and King 2000, King 1995 and references therein), for the sake of explicitness, I assume that li is in C₀, the fronted argument occupies Spec CP₁, and the verb adjoins to C₀ (as in Bošković 2001). I will return to the issue in Section 2.4, arguing that this is the right approach to Russian li-interrogatives.

I begin by giving some justification for the posited structure. The first thing to note here is that the conjuncts are claimed to be CPs. In what ensues I offer four arguments in support of this proposal.

First, wh-questions and Y/N-interrogatives are in complementary distribution (presumably due to some semantic mismatch). They are thus incompatible in a single clause. Since the elements of both interrogative types are ostensibly present in the HWh construction, it follows that we are dealing with two clausal conjuncts (recall that when the wh-word appears in the Y/N-question environment it is obligatorily construed as an indefinite).

Second, the conjuncts can be coordinated by a strictly clausal coordinator – a – in the presence of high speaker oriented adverbs (diagnostics are due to Tomaszewicz 2011), as in ((30)a) (cf. ungrammatical ((30)b)). To see the point consider first the facts surrounding the coordinator a: ((29)a) shows that the
conjuncts are clauses, which can be coordinated by both *i* and *a*. In contrast, attempts to conjoin NPs in ((29)b) or PPs in ((29)c) produce unacceptable results (the examples in (a) and (b) are modeled after Tomaszewicz’s Polish paradigm).

(29) a. Ivan igrал на pianino,*i/a* Nina igrала на скрипке.

Ivan played on piano and Nina played on violin

‘Ivan played the piano, and Nina played the violin.’

b. Jaroslav  *i/*a* Anastasia idут v кино.

Jaroslav and Anastasia go to movies

‘Jaroslav and Anastasia are going to the movies.’

c. Jaroslav  xodит v лес *i/*a na реку.

Jaroslav goes to forest and on river

‘Jaroslav goes to the forest and to the river.’

5 I must qualify this statement, as it is not exactly precise for Russian. The coordinator *a* is endowed with contrastive properties. So, (i) and (ii) below are perfectly acceptable whenever one of the conjuncts is negated.

    neg Jaroslav  but Masha goes to movies
    b. Jaroslav, a ne Maša, idet v кино.

(ii) a. Jaroslav xodit  ne v les, *a* na реку.
    Jaroslav goes  neg to forest  but to river
    b. Jaroslav xodit v les, a na реку.

Another aside here, which I will not attempt to grapple with is the curious interaction of negation and high adverbs like *glavnoe* ‘importantly’. Such adverbs can appear clause initially or before a negated XP after *a* in (i-b) and (ii-b). But they cannot follow *a* in non-negated conjuncts in (i-a) and (ii-a). This is summarized in (iv) and (v) below:

(iii) *Ne Jaroslav, a glavnoe Maša, idet v kino. / ✓Jaroslav, a glavnoe ne Maša,... / ✓Glavnoe ne Jaroslav, a Maša...

(iv) *Jaroslav xodit ne v les, a glavnoe na реку./ ✓… v les, a glavnoe ne na реку./ ✓Glavnoe... ne v les, a na реку.

Be that as it may, instances in ((30)a) still constitute a reliable diagnostic for the height of the conjunction. *Glavnoe* ought to be adjoined really high, presumably, between CP and TP. Consider (vi), which is a wh-question context: *kto* on any account is at least as high as TP. Note that *glavnoe* cannot appear after it (cf. (vi-b)).
The third argument hinges on examples like (31), which show that the coordination of two Y/N markers is possible. This is predictable, if the conjuncts are CPs (given the standard practice of treating li as a complementizer).  

(31) a. U každogo li i nadolgo li xvatit vyderžki?  
   at each Q and for.long Q suffice restraint  
   ‘Will each have enough restraint, and will they have it for long?’

b. No dolgo li i často li ty budeš pol’zovat’sja ětimi očkami –  
   but long Q and often Q you will use these glasses  
   vot vopros.  
   this question  
   ‘But the question is whether you will be using this glasses long and whether you will be using these glasses often.’

Finally, the paradigm in (32) demonstrates that there is a requirement to answer both conjuncts, suggesting again that HWh questions are underlyingly biclausal. It should be noted that the answer to the Y/N interrogative can only be affirmative for obvious reasons: the second conjunct presupposes an

(v) a. *Kto glavnoe ne javilsja na zanjatija? / b. √Glavoe kto ne javilsja na zanjatija?  
   who importantly neg showed.up to class

6 Note that in (16) the first conjunct contains a QP argument. I will return to the distribution of quantified expressions in HWh contexts in Section 2.3.
affirmative reply to the first conjunct. Still, the infelicity of ((32)b) and ((32)c) indicates that there two true interrogatives here.

(32)  a. Skoro li i kto pridet?
         soon Q and who come_{FUT}

   b. #Da. ‘Yes’
   c. #Ivan.
   d. Da, skoro, Ivan sobiralsja zajti.
         yes soon Ivan was.planning to.stop.by
   ‘Yes, Ivan was planning to stop by soon.’

With this much settled, I therefore assume that we are in fact dealing with CP-coordination, and return to the adjunct/argument asymmetry. The core idea accounting for this asymmetry hinges on the preservation of the argument structure in both conjunct. So, the ungrammatical sentences are ruled out due to a missing obligatory element in the second conjunct. The adjuncts can freely precede li, since they need not be present in the second conjunct.

The most straightforward case is in (33) (repeated from ((10)a)), with a simplified derivation in (34). The sentence is ruled out because the verb is missing in the second conjunct.

(33) *Daril li [TP čto Ivan Lena] i čto Ivan Lena?
         gave Q something Ivan Lena_{DAT} and what Ivan Lena_{DAT}
   Intended: ‘Did Ivan give something to Lena, and what did he give to Lena?’

(34) *[V+li [TP tV]] & [CP⋯]
     ^ellipsis ^missing verb
Arguments are excluded in pre-*li* positions for the same reason: the second conjunct is missing an obligatory element – subject in the case of (35), repeated from ((10)b).\(^7\) Much like the case of (33), the ungrammaticality of (35) is triggered by the defective argument structure of the second conjunct, as the derivation in (36) demonstrates.

(35) *?*Ivan li [TP komu daril cvety] i komu daril cvety?

Ivan Q somebody\(_{DAT}\) gave flowers and whom\(_{DAT}\) gave flowers

(36) *?*[NP li [TP \(f_{NP}\)] \& [CP... ]

`ellipsis` `missing subject`

The rest of the paradigm in (10), involving arguments in pre-*li* positions, is ruled out exactly like (36). Recall also that the argument status of the wh-word in the second conjunct appears to be irrelevant. HWhs of the form `[[V/argument li...]& [wh...]]` are consistently degraded, both in environments where the wh-element is an adjunct, as in (11), or an argument, as in (10). On the analysis proposed here, this follows: in both cases the crucial violation occurs due to the missing obligatory element in the second conjunct.

Given the above, the felicity of HWh configurations with adverbial/PP adjuncts in the positions preceding *li* is straightforward. It is simply the case that those elements are not required by the argument structure of the predicates. Hence, no problems arise, if these optional elements are not present in the second conjunct. The derivation of (37) proceeds as demonstrated in (38): the adverbial adjunct is merged in the first conjunct, but not in the second. Observe that no difficulties implicating theta-theoretic considerations obtain in such environments.

(37) Skoro li [TP kto pridet] i kto pridet?

soon Q someone comes and who comes

\(^7\) For arguments that Russian is a non-*pro*-drop language see Franks (1995) and Lindseth and Franks (1996). Franks (1995) observes that though not a pro-drop language in the canonical sense, Russian sometimes permits subject drop if it can be recovered from context.
If this is on the right track, we have a very interesting testable prediction. It has been noted in the literature that some predicates require obligatory adverbial support. Dowty’s (2000) English paradigm in (39) demonstrates the point: certain predicates, like “treat” and “behave” require a “subcategorized” (i.e., obligatory) adverb. The sentences in ((39)b) and ((39)c) are infelicitous on the intended interpretation.

(39)  a. He always treated me fairly.
    b. #He always treated me.
    c. Johnny behaved badly.
    d. #Johnny behaved.

English is not unique in this respect. Certain Russian predicates behave in the same way. One such predicate otnosit’ja lit. ‘to relate oneself’ is in (40). The contrast between (a) and (b) demonstrates that the adverb is required on the interpretation of ‘treating somebody well/badly’. Without the adverb the predicate can only be understood to mean ‘pertain to’, as in (c). Given the meaning, an attitude adverb like ploxo ‘badly’ is, of course, prohibited in such contexts, as (d) demonstrates.

(40)  a. On k Ivanu xorošo otnosit'ja.
       he to IvanDAT well relates
       ‘He treats Ivan well.’
    b. *On k Ivanu otnosit'ja.
    c. Èto otnosit'ja k odnomu periodu.
       this relates to same period
       ‘This pertains/dates back to the same period.’
    d. *Èto ploxo otnosit'ja k odnomu periodu.
       this badly relates to same period
With this background, consider what my analysis predicts. When a predicate requires a subcategorized adverb, the fronting of this adverb to the pre-\textit{li} position in HWh questions will result in ungrammaticality. This is because such a configuration would entail a missing obligatory element in the second conjunct. The prediction is borne out: though adverb fronting is perfectly acceptable in non-coordinated interrogative contexts, as in (41), it is impossible in the HWh configuration in ((42)a).

Let us consider this more closely. A root wh-question in ((41)a) and a polar interrogative in ((41)b) are not only acceptable with an adverb, they are ungrammatical without it.

(41) a. Kto k nemu *(xorošo / ploxo) otnositsja?

\begin{quote}
who to him well badly treats
\end{quote}

‘Who treats him well/badly?’

b. *(Xorošo) li Maša k nemu otnositsja?

\begin{quote}
well Q Masha to him treats
\end{quote}

‘Does Masha treat him well?’

On the other hand, the fronting of this obligatory \textit{xorošo} ‘well’ in the HWh question ((42)a) is prohibited, exactly as my analysis predicts. In effect, ((42)a) is ruled out just like the sentences involving the pre-\textit{li} argument in (35)/(36). ((42)a) contrasts markedly with ((42)b). The latter is also an instantiation of an HWh question, yet the fronting of this same adverb results in a perfectly acceptable surface string. Of course, this is expected on my treatment, since the predicate \textit{igrat’} ‘to play’ in ((42)b) does not need adverbial support.

(42) a. *Xorošo li i kto k nemu otnositsja?

\begin{quote}
well Q and who to him treats
\end{quote}

Intended: ‘Does somebody treat him well, and who treats him well?’
b. Xorošo li i s kem včera sygral Spartak?
well Q and with who yesterday played Spartak

‘Did Spartak play well yesterday, and with whom did it play?’

To summarize briefly: my analysis of HWs entails biclausal coordination at the level of CP. The impossibility of verbs, arguments, and certain obligatory adverbials to appear in the position preceding li follows from the selectional requirement of the predicates. If a conjunct is missing an obligatory element, then the entire sentence becomes deviant. Non-obligatory constituents may be merged solely in the first conjunct without affecting the overall grammaticality status of the sentence.

With this basic approach in place, I turn to certain predictions and consequences that my proposal yields. The next section deals with some amelioration effects that help salvage the ungrammatical instances of HWh questions. Then I briefly consider the adjunct/argument dichotomy: under focus are the contrasts evinced by (16) vs. (17), which implicate PP adjuncts, and the ever so slight distinction in acceptability between fronted subjects/direct objects, on the one hand, and indirect objects, on the other hand, reported in (10) and (11).

2.1.3 Consequences and extensions: Amelioration effects

Russian offers several strategies that induce amelioration effects in HWh questions involving arguments: the resumptive strategy and the contexts that facilitate argument drop will be considered here. The former strategy implicates the introduction of resumptive-like elements – pronouns or epithets – in the second conjunct, as in (43).\(^8\) Observe that in (43), upon the insertion of the co-referential pronoun or the epithet, the argument structure of the predicates in both conjuncts is rendered intact. The proposed analysis, hence,

\(^8\) Judgments in (43) vary among speakers – from unacceptable to nearly perfect. This variation is presumably due to the availability of this “resumptive” strategy among my informants.
predicts the improvement below: in these configurations the selectional requirements of the predicates in both conjuncts are satisfied.

(43) a. ?Ivan₁ li i čto on₁ včera nakupil?
   Ivan Q and what he yesterday bought
   ‘Was it Ivan that bought something yesterday, and what did he buy?’

   b. ?Ivan₁ li i čto ětот durak₁ opjat’ nakupil?
   Ivan Q and what this fool again bought
   ‘Did Ivan buy something again, and what did this fool buy?’

I am assuming that the counterpart of the pre-li argument in the second conjunct must be coindexed with the pre-li argument referring back to it, which yields a resumptive-like interpretation. If this is correct, we then expect HWh questions of the configuration [pronoun li & name...] to be unacceptable. This prediction is borne out, as shown in (44).

Note that the ungrammaticality of (44) on the current analysis is not due to a Condition C violation, since the pronoun does not c-command the R-expression (recall that arguments move to Spec,CP on my account, as in (45)). Rather, it is attributed to the ban on backward anaphora.

---

9 Quite a few languages impose a ban on backward anaphora. I am giving Spanish and BCS in (i) and (ii), which demonstrate that the pronoun in the preposed when-clause is impossible on the corefential interpretation (cf. grammatical English). Russian (iii) patterns with Spanish and BCS in prohibiting such backward configurations.

(i) Cuando pro/ *él trabaja, Juan no bebe. [Spanish]
   When he works Juan neg drinks
   ‘When he works, John doesn't drink.’
   (Larson and Luján 1984: 3)

(ii) Kada je pro/*on ušao u sobu, Jovan je počeo plakati. [BCS]
    when Aux₂SG he entered in room Jovan Aux₂SG started crying
    ‘When he entered the room, John started crying.’
    (Despić 2011: 273)

(iii) *Kogda on vošel v komnatu, Ivan načal plakat’. [Russian]
    when he entered in room Ivan started to.cry
    ‘When he entered the room, Ivan started crying.’
Another strategy that leads to improvement in HWhs with arguments is contextualization. Russian is a language that under certain pragmatic consequences permits argument drop (Gribanova 2013, Franks 1995, Lindseth and Franks 1996, a.o.). In (46), for example, the context establishes the referent, which can then be dropped in the answer.

(46) [Context: Something falls; someone wants to get it.]  

Ne vstavaj, ja podnimu e.  

neg get.up I will.pick.up  

‘Don’t get up, I’ll pick (it) up.’ (Gordishevsky and Avrutin 2003:7)

Given this, we expect that when the context allows it, the argument may be dropped in HWhs as well. This is indeed the case for some speakers, as demonstrated in (47).

(47) [Context: A book and a notepad fell down on the floor in the classroom. Somebody volunteered to pick one of them up.]  

?Tetrad’1 li i kto podnjal e1?  

notepad Q and who picked.up  

‘Was it the notepad that somebody picked up, and who picked (it) up?’
In fact, even the speakers who find pre-*li* arguments in HWh questions only slightly degraded (rather than fully unacceptable as reported above) impose a particular interpretation which correlates with argument drop. The latter is apparent with optionally transitive verbs like čitat ‘to read’ in ((48)a), which require a bound variable reading in the second conjunct, as demonstrated by the paraphrase in ((48)b). The ‘at all’ reading, associated with the intransitive incarnation of čitat’ in ((48)c), is impossible.

\[(48)\]
\[
a. \ \text{Bulgakova}_i \text{ li } i \ kto \ zdes’ \ čital \ e_i? \\
Bulgakov \text{ and who here read}
\]

‘Was it Bulgakov that somebody read, and who read (him)?’

b. = ‘Was it Bulgakov that someone read, and who read him here?’

c. ≠ ‘Was it Bulgakov that someone read and who was reading here (at all)?’

Finally, it was noted earlier that, depending on their grammatical function, pre-*li* arguments in HWh configurations are not uniformly bad. There is a scale of (un)acceptability, which sets apart subjects/direct objects from indirect objects. The latter are degraded, but not entirely unacceptable. This idiosyncrasy can be likewise linked to argument drop: omitting dative arguments appears to be easier than dropping direct objects or subjects (though I will not venture a reason for this). So, ((49)a) (repeated from ((10)d)) is marginally acceptable for the same reason ((49)b) is.

\[(49)\]
\[
a. ??\text{Lena}_\text{DAT} \text{ li } i \ čto \ podaril \ Ivan? \\
\text{Lena and what gave Ivan}
\]

b. ??Čto \ podaril \ Ivan? \\
what \ gave \ Ivan

All these amelioration strategies apply to the arguments and have the effect of repairing the argument structure of the predicates in the second conjunct. However, as far as I can tell, no apparent recourse is available to salvage the ungrammatical cases of HWhs with preposed verbs, as in (50) (repeated from ((10)a)), which is the source of extreme degradedness of such examples.
(50) *Daril li i čto Ivan Lena?
gave Q and whatACC Ivan LenADAT

Intended: ‘Did Ivan give something to Lena, and what did he give?’

2.1.4 Consequences and extensions: A note on prefixed verbs of motion
and argument structure

In this section I briefly discuss the contrast between (51) and (52), repeated from (16) and (18). As was observed earlier, the deviant status of (51) hinges on the type of predicate involved. In (51), the preposed PP adjunct is incompatible with the unaccusative verb of motion. On the other hand, the regular transitive predicate tolerates PP adjuncts in the positions preceding li in HWh questions, as in (52).

(51) a. ?*V magazin li i kto ušel?
to store Q and who left

Intended: ‘Was it for the store that someone left, and who left?’

b. ??V magazin li i kogda ušel Ivan?
to store Q and when left Ivan

Intended: ‘Was it to the store that Ivan left, and when did Ivan leave?’

(52) a. Uznaj, v ètom li ofise i komu on otdal dokumenty.
find.out in this Q office and whODAT he gave documents

‘Find out whether it is in this office that he gave somebody the documents, and to whom he gave the documents.’

b. Uznaj, v ètom li ofise i kodga on peredal sekretarju dokumenty.
find.out in this Q office and when he gave sekretaryDAT documents
‘Find out whether it was in this office that he gave the documents to the secretary some time, and when he gave the documents to the secretary.’

The issue quite clearly relates to the argument/adjunct dichotomy. The textbook wisdom concerning this split maintains that adjuncts are optional. Strictly speaking, however, this generalization is not precise. We have already seen that certain predicates (like treat and behave) require adverbial support. In a similar vein, some passive predicates (as in, e.g., (53)) cannot appear without a by-phrase. Grimshaw and Vikner (1993) argue that the predicates in (53) involve a complex event structure, whereby a predicate like build denotes two events composed of a process (i.e., house-building) and a resulting state (existence of the house). Under Grimshaw and Vikner’s analysis the obligatory presence of the by-phrase follows from the requirement to “identify” the sub-events, which is accomplished via the introduction of the required expressions.10

(53)  a. *This house was built/designed/constructed.

   b. This house was built/designed/constructed by a French architect. (Gross 1979: 864)

In fact, the event structure research is not confined to the investigation of obligatory by-phrases with passives and adverbial modifiers. It has been shown that the event structure determines an aggregate of general properties associated with predicates, including their behavior with various modifiers and interactions with aspect (Dowty 1979, Pustejovsky 1991, Wasow 1977, and references therein). Pustejovský’s (54) serves to illustrate this point: an intransitive predicate with no modifiers in ((54)a) denotes the process. However, the introduction of the directional PP in in ((54)b) adds an additional constraint to the meaning, “assert[ing] that the process has logical culmination or duration” (Pustejovský 1991: 49).

(54)  a. Mary walked.

---

10 See Grimshaw and Vikner (1993) for a discussion of the difference between “obligatory adjuncts” and “arguments”. They argue against treating the by-phrases in (53) as arguments.
b. Mary walked to the store.

I am putting aside the particulars of the implementation of these observations, simply taking it for granted that the event structure apparently affects the presence/absence of obligatory modifiers. With this in mind, consider the perfective prefixed verb of motion like *ujiti* ‘away-go’, i.e., the predicate appearing in degraded (51), and *vyjiti* ‘out-go’. The former fails the standard test for telicity in ((55)a), unlike *vyjiti* in ((55)b), which is compatible with the durational PP. This is further reinforced by the facts in (56): whereas *ujiti* implies no return (hence, it is felicitous in the contexts with *forever* and can be used in the idiomatic sense ‘to leave a family’), *vyjiti* does entail the return (and so it cannot appear in such contexts). We can conclude, therefore, that *ujiti* is atelic, while *vyjiti* is telic.


he away-went on 5 minutes

Intended: ‘He left for 5 minutes.’

b. On vy-šel na 5 minut.

he out-went for 5 minutes

‘He stepped out for 5 minutes.’

(56) a. On u-šel navsegda/ iz sem’i.

he away-went forever/from family

‘He left forever/the family.’

b. *On vy-šel navsegda/ iz sem’i.

he out-went forever/ from family

As observed in Richardson (2007), the event structure of Slavic predicates is normally altered via the means of prefixation (rather than the presence/absence of PP modifiers). One notable exception to this generalization are the verbs of motion, whose event structure *can* be affected by the introduction of a PP. Observe that this is precisely what happens in (57): the atelic predicate *ujiti* in the presence of the directional
PP is compatible with a durational modifier, denoting a temporal boundary of the event. So, in contexts like (57) *ujti really behaves like a telic predicate (implying the imminent return of the agent).

(57) On u-šel v magazin na 20 minut.

he away-went to store for 20 minutes

‘He went to the store for 20 minutes.’

If so, the paradigm in (51) follows directly: the predicate in the second conjunct is missing an obligatory PP adjunct that is linked to telicity. *Ušel ‘away-went’ in the second conjunct can only be understood as a predicate presupposing no completion, while the presence of the directional PP in the first conjunct before *li implies that the predicate in the ellipsis site is construed as a telic element. The mismatch between the event structure of the predicate in the elided TP and the surviving conjunct leads to the observed ungrammaticality, as demonstrated by (58).

(58) *[ PP li[... V_{TELC} + tPP ]] & [wh... V_{TELC} ]

^ellipsis ^missing obligatory element: directional PP!

Consider also the vast improvement of (51) in (59): the obligatory directional PP is merged in both conjuncts, so there is no event structure mismatch in the two conjuncts (both have all the obligatory elements). In other words, the predicates are construed as telic due to the presence of the directional modifier. This means that in (59) the elided constituent in the first conjunct is *kto ušel v magazin ‘who away-went to store’. The durational adverbial in pre-*li position is an optional element that can appear solely in the higher clause. The observed result is predictably good on my analysis.

(59) Nadolgo *li i *kto u-šel v magazin?

for.long Q and who away-went to store

‘Was it for long that somebody went to the store, and who went to the store?’
The main conclusion here is that the initially stated dichotomy with respect to arguments/adjuncts in HWhs may be too crude. The relevant split is better restated in terms of arguments/“obligatory” adjuncts vs. “true” adjuncts. The former are required by the argument/event structure of predicates, the latter are not. So, only the latter can be felicitously preposed before *li* in HWhs. Therefore, examples like (51)=(16) indicate that the predicate is missing a required element (an “obligatory” adjunct), while in (52)=(18) and (17) the adjuncts in pre-*li* positions are truly optional. I will not attempt to contrive a technical definition of “obligatory” and “true” adjuncts, as the intuitive notion is quite clear and should suffice for my purposes.

So far then we are led to the following conclusions. HWhs involve CP coordination with ellipsis in the first conjunct. As long as fully-fledged argument/event structure is preserved in both conjuncts, HWh configuration is possible. No “rescue” strategies are available for verbs, so they are the least acceptable, but some “repair” strategies – introduction of resumptive-like elements and argument drop – exist for pre-*li* arguments. These strategies can salvage the argument structure in both conjuncts of HWh questions. By far the best examples are constructible with pre-*li* “optional” adjuncts, since the latter are not required by the predicates.

With this matter settled, I turn to another batch of facts that implicate quantifiers in HWh contexts. Recall that in addition to adjuncts, quantifiers can likewise appear in such contexts.

### 2.2 Quantifiers

Consider the generalization (6) again, repeated as (60). In the previous section the non-quantificational elements were considered (verbs, arguments, and adjuncts of all flavors). I have also pointed out that, in addition to adjuncts, the pre-*li* position in HWhs can accommodate quantifiers. Their behavior is under scrutiny in this section.
First consider the core paradigm in (61). In ((61)a), it is the whole QP (i.e., vsë) that appears before li. In ((61)b) only the quantifier, but not its associate ljudej ‘people’, is fronted to the position preceding li. Curiously, the remnant stays in the NP-internal position in the second conjunct. Finally, the QP has an option of fronting as a constituent in ((61)c) (with subsequent PF splitting effects, whereby the Y/N question marker interrupts the constituency on the surface).

(61) a. Vsë li i kogda Ivan prodal __ Olegu?
    all Q and when Ivan sold Oleg

    ‘Was it everything that Ivan sold to Oleg, and when did he sell everything to Oleg?’

b. Mnogo li i kto priglasil na novyj god [ __ ljudej]?
    many Q and who invited to new year people

    ‘Was it many people that somebody invited to the New Year’s eve party, and who invited many people to the party?’

c. ?Mnogo li ljudej i kto priglasil na novyj god __?
    many Q people and who invited to new year

    ‘Was it many people that somebody invited to the New Year’s eve party, and who invited many people to the party?’

The number of quantified arguments that may appear in pre-li positions in HWs is somewhat limited. Those allowed in such positions are catalogued in ((62)a); those prohibited are listed in ((62)b).

b. **Prohibited:** *kto-to* ‘somebody’, *kto-nibud’* ‘somebody’, *kto-libo* ‘someone’, *neskol’ko* ‘several’, *nikto* ‘noone’, *mnogie* ‘a lot’ (adjectival), *ljuboj* ‘any’, *malo* ‘little, few’.

The gist of the analysis to be defended is as follows: an argument can precede *li* only if it is extracted in an Across-The-Board (ATB)-fashion from each conjunct to a position high enough to c-command both traces, as in (63). The operation that triggers this movement is QR: hence, only quantified arguments can appear in the pre-*li* position.

The analysis sketched above contains a healthy dose of controversial claims. The very idea that Russian has QR is a contentious issue given the traditional analysis of Russian as a language lacking this covert operation, as, e.g., in Ionin (2002). The evidence that I present in this chapter, together with the set of independent facts based on the interaction of reflexive possessives with quantifiers from Chapter 4 of this dissertation, argue against this position (see also Antonyuk-Yudina 2006, 2009).

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11 The quantifiers in (62)b are generally illicit preceding *li*. There are a few possible reasons why these quantifiers cannot participate in the construction under consideration (at least one of the following reasons holds for each element in (62)b)). First, they simply do no co-occur with *li* as shown in (i):

(i) *Kto-nibud’* li kupil moloko?  
someone Q bought milk

Second, they do not undergo QR (see Yanovich 2005). Third, Fitzgibbons (2011) argues that the highest possible position for *-nibud’* quantifiers is in Spec, AgrSP. See also Chapter 4 of this dissertation for arguments that *ni*-items cannot cross a TP boundary.
Second, the QR operation is standardly taken to target IP rather than CP (e.g., May 1985). This is primarily due to its freezing (“clauseboundedness”) effect. The long standing observation concerns the peculiar status of the quantified phrases when it comes to A’-movement in that they cannot extend scope in a manner consistent with the usual cyclic movement: universal/distributive quantifiers (i.e., precisely the quantifiers listed in ((62)b) are confined to the tensed clause boundary (Reinhart 1997, Szabolsci 2011)). My explanation for this is couched in terms of the Scope Economy Principle (Fox 2000) as well as the independently necessary requirement that the quantifier bind its trace variable.

Finally, QR is a covert operation. Unlike the instance of, e.g., wh-movement in a variety of languages, the results of QR are never heard, as demonstrated in (64) (but see Szabolsci 1997 for arguments that Hungarian may have overt QR): in ((64)a) it is the tail of the chain that is pronounced, rather than the usual higher copy. Yet my instances in (61) involve an apparent high copy pronunciation.

(64)  a. PF: A boy loves every girl.  ≠  LF: [every girl₁ [ a boy [loves t₁]]]  ∀>∃

   b. PF: Who₁ does every boy love t₁? = LF: [who₁ [does every boy love t₁]

The above delineates the scope of the ensuing discussion. In addition to addressing all these QR-related issues, I will also need to justify the claims that the examples in (61) are in fact derived via ATB-movement, which will be shown to have some bearing on the current approaches to ATB-movement. The organization follows the advertised sequence: I first address the questions regarding QR (starting with the “QR as covert operation” wisdom) and then proceed to the ATB-related matters.

2.2.1 QR as covert movement

The point of descriptive departure is this: QR is normally taken to be confined to the “covert” component of the grammar. If this is so, why do examples like (65) (repeated from ((61)a), as well as the rest of the paradigm in (61)), alleged here to be the instances of QR, look like overt movement operations, whereby the quantifier is pronounced on the left periphery instead of its base position (indicated by “___” below)?
The first question to grapple with is this: what does “covert” actually mean? Covert movement in the earlier generative days was understood as an operation that takes place at the level of LF after Spellout. This distinguished the operation from overt movement, the result of which can be heard. Of course, this presupposes the existence of LF, an undesirable allowance given current theoretical desiderata (Chomsky 1995). There are a variety of treatments that re-conceptualize the notion “covert”. What I assume here is a single-cycle syntax where covert displacement is recast as a copying operation that results in the pronunciation of the tail of the chain in PF (i.e., of the lowest copy).12

One such proposal is made explicit in Fox and Nissenbaum (1999) (see also the extended version of this coauthored paper in Nissenbaum 2000). They conceive of QR in terms of higher copy deletion. Under their account QR involves movement prior to Spellout with pronunciation of the lower copy. This approach allows them to account for the extraposition facts of English in ((66)a) by applying the following computational steps: first, the indefinite DP is QRed to the right edge of VP, as shown in ((66)b); the PP *by John* then adjoins to the QRed DP, as in ((66)c); in phonology the higher copy of the quantified DP is deleted, as sketched in ((66)d). They provide some empirical arguments in favor of this treatment. Their analysis in (66) predicts that the QRed element will be at least as high as the scope of the extraposed constituent (e.g., the relative clause in the case of (67)). Now, *any* requires a licenser like the modal operator *look for*. On their analysis *anything* in (67) is at the same attachment level as the extraposed constituent, which, given its appearance after the high adverb, is outside the scope of *look for*.

(66) a. We saw a painting yesterday by John.

---

12 See also Bobaljik 1995, Pesetsky 1998, Groat and O’Neil 1994 for more general approaches where covert movement is recast in terms of pronunciation of lower copies.
b. We [saw a painting yesterday <a painting>].

\^QR

c. We [saw a painting yesterday <a painting>] by John.

\^adjunction

d. We [saw a painting yesterday <a painting>] by John.

\^PF: higher copy deletion

(67) *I looked for [anything] very intensely <anything> that will/would help me with my thesis.

\^QR: outside the scope of the licenser

So, a system along these lines is what I am assuming for the notion “covert operations”.

The second issue is obviously related to the exigencies of PF, viz.: which copy must be pronounced? It is well-known that in non-QR cases certain PF considerations sometimes affect the expected PF copy deletion: instead of the “normal” high copy pronunciation, a lower copy is pronounced. Franks (1998) and Bošković (2001, 2002) demonstrate that certain PF constraints conspire to cause the pronunciation of the lower copy instead of the usual higher copy. Such PF considerations trigger delayed clitic placement in languages like BCS or the unusual low pronunciation of wh-words in multiple wh-fronting languages. The latter is demonstrated by the two paradigms below for BCS (the data are due to Bošković 2002). First, a little background: BCS, like all Slavic, is a multiple wh-fronting language. This means that examples like ((68)b) with in-situ wh-phrases are prohibited (the pronounced copy is bolded and underlined in the examples).

(68) a. Ko šta voli šta?

Who what loves

‘Who loves what?’

b.*Ko šta voli šta?

Who what loves what

But in the cases of morpho-phonological syncretism (what in nominative and accusative has the same form), as in (69), the phonological ban on contiguous homophonous wh-words prohibits the pronunciation of the
expected higher copy in ((69)a), as in usually the case in multiple wh-questions in BCS. The only recourse for the convergence in PF is to pronounce the lower wh-copy, as in ((69)b).

(69) a. *Šta₁ šta₂ [šta₁ uslovljava šta₂]?
   \[\text{what}^{\text{NOM}} \text{what}^{\text{ACC}} \text{what}^{\text{NOM}} \text{conditions} \text{what}^{\text{ACC}}\]
   ‘What conditions what?’

b. Šta₁ šta₂ [šta₁ uslovljava šta₂]?
   \[\text{what}^{\text{NOM}} \text{what}^{\text{ACC}} \text{what}^{\text{NOM}} \text{conditions} \text{what}^{\text{ACC}}\]

The summary of the two preliminary considerations is provided in (70). The standard procedure in PF selects the highest copy for pronunciation and deletes the lower one, as in ((70)a). If, however, the pronunciation of the higher copy induces a violation of some variety, then the lower copy is pronounced, as demonstrated in ((70)b).

Now, in the cases of QR it is the lower copy that is normally pronounced, as in ((70)c). Observe that it is the mirror image of the pattern that holds of non-quantificational contexts. The generalization boils down to the following: pronounce higher copy in non-QR contexts, but the lower copy in QR environments.

However, whenever the pronunciation of the “normal” copy fails for PF reasons, the “unusual” copy is selected for pronunciation. The pattern is reversed again for standard cases of copy deletion and the copy deletion mechanism implicated in QR contexts: in the former, the “unusual” copy is the lower one, but in the latter it is the higher one, as demonstrated in ((70)d).
This proposal then accounts for my data in a straightforward way. PF considerations in the cases of HWh coordination trigger the pronunciation of the head of the chain (to support the Y/N marker li, which requires a prosodic host to its left), instead of the expected low copy of the QP. This is represented by (71): ((71)a) evinces the “unhappy” PF, whereby li has no host (if it is the usual QP copy that is deleted), while (71)b) with an unusual high QP copy pronunciation satisfies the PF requirement.

The explicit derivation of (65) proceeds as demonstrated in (72). Vsë ‘all’ undergoes QR out of both clauses and adjoins to the highest CP. The prosodic requirements of li necessitate the pronunciation of the highest copy, i.e., instead of the expected low copy pronunciation (as is normally the case with QR), phonological requirements prompt high copy pronunciation.
With this, I am assuming that the “covert” issue is settled. Next I turn to the evidence that supports the notion that the mechanism underlying the derivation in HWhs with quantifiers is indeed QR and that this operation targets CP (rather than IP).

2.3.2 Evidence for QR and CP-adjunction

The most transparent piece of evidence in defense of my proposal concerns the split between quantified and non-quantified arguments, demonstrated by the contrast in (76).

(76) a. Vsëli i kogda Ivan rasprodal __?
    all Q and when Ivan sold

b. ?*Mašiny li i kodga Ivan rasprodal __?
    cars Q and when Ivan sold

Since only the QPs are licit in pre-<i>li</i> positions in HWh questions, it follows that there is something special about them. That <i>something</i> is precisely their quantificational properties. Hence, there is no other alternative other than to ascribe the felicity of ((76)a) to an operation that specifically manipulates those quantificational elements – i.e., to QR.

Before I proceed further, let us consider the proposed structure in (77) (repeated from (63)) again. Note that contrary to the standard treatment (May 1985) that maintains that QR targets IP, I am arguing for CP-adjunction. In fact, it is not only CP-adjunction, but the adjunction to the highest CP segment in the proposed BP-structure. A configuration like this ensures that the variable traces in both conjuncts are bound by the quantifier. Observe that the only possible way to accomplish this is by remerging QP to the edge of the higher segment of CP<i>1</i>, i.e., to a position which allows it to c-command both traces (this, incidentally, can be construed as independent evidence in favor of the BP-adjunction structure). In addition to this c-commanding requirement, the ensuing discussion presents two pieces of evidence in favor of CP-adjunction in such configurations. Both follow from Scope Economy, which is what I briefly discuss next.
The descriptive generalization concerning QR is that it is an operation unlike all other A’-movement. Its main distinguishing property is clauseboundedness (Aoun and Hornstein 1985, Beghelli 1993, Cecchetto 2004, Hornstein 1995, May 1977, Reinhart 1997, a.o.). Clauseboundedness is an effect that can be best gleaned from examples in (78): ((78)c) demonstrates that wh-moving can proceed over a finite clause boundary, but the universal DP in ((78)a) cannot, given the absence of the inverse scope reading (shown in ((78)b)). The inverse scope is, however, available if the quantified expressions are in the clausemate configuration like (79).

(78)  a. A technician said [that John inspected every plane]
   
   b. LF: *every plane|[a technician said [that John inspected ti] | [*∀>∃]  
   
   c. What did a technician say [that John inspected ti]? (Cecchetto 2004: 350)

(79)  A technician inspected every plane.  
       [∀>∃]  

I am adopting Fox’s (2000) analysis to capture the above. For him, QR applies in a uniform fashion to all quantified NPs. However, it is constrained in two ways. First, the operation itself is successive cyclic (that is, each application of QR complies with the usual locality constraints). Second it is subject to certain economy conditions: viz., QR can take place only if it is semantically motivated insofar as scope shifting.
operations yield distinct truth-conditional statements, stated in the form of the Scope Economy Principle in (80).\(^\mathrm{13}\)

(80) Scope Shifting operations that are not forced for type considerations must have a semantic effect.

To see the point, consider (81). In ((81)a), both LFs in (a’) and (a”) are possible, since they correspond to two distinct interpretations; one with the narrow scope of the universal in ((81)a’) and the other with the wide scope in ((81)a”). But in ((81)b), however, every girl cannot adjoin to IP, as this would have no effect on the interpretation.

(81) a. A boy loves every girl.

\[
\begin{align*}
\text{(a’)} & : [IP \text{ a boy} \ldots [VP \text{ every girl} \ldots [VP t_l \text{ loves } t_2]]] \\
\text{(a”)} & : [IP \text{ every girl} \ldots [IP \text{ a boy} \ldots [VP t_l \text{ loves } t_2]]]
\end{align*}
\]

b. John loves every girl.

\[
\begin{align*}
\text{(b’)} & : [IP \text{ John} \ldots [VP \text{ every girl} \ldots [VP t_l \text{ loves } t_2]]] \\
\text{(b”)} & : *[IP \text{ every girl} \ldots [IP \text{ John} \ldots [VP t_l \text{ loves } t_2]]]
\end{align*}
\]

On this analysis the apparent clauseboundedness effect follows from the interaction of locality and Scope Economy. Let us see how. Assuming that VP-ellipsis is constrained by the parallelism requirement, whereby the scope of the quantifier in the ellipsis site tracks the scope of the quantifier in the antecedent clause, consider (82). In both sentences in (82) every teacher first adjoins to VP, just as one would expect of standard cyclic movement. In ((82)a), every teacher can adjoin to IP in both conjuncts, since this operation complies with Scope Economy (i.e., it yields a semantic effect of scope reversal), as demonstrated in ((83)a) (omitting extraneous details). On the other hand, ((82)b) contains the scopally inert element Mary. So, every teacher “freezes” on the edge of VP: its adjunction to IP is ruled out by Scope Economy (such movement would result in a semantically vacuous configuration). Given the parallelism requirement, the

\[^{13}\text{See Antonyuk-Yudina (2006, 2009) for independent arguments that Russian obeys Scope Economy.}\]
universally quantified expression in the antecedent clause in ((82)b) likewise cannot move to IP, as sketched in ((83)b). Hence, the only possible reading for ((82)b) is the wide scope of the existential (∃>∀).

(82)  a. A boy admires every teacher, and a girl does, too.   [∃>∀]
   b. A boy admires every teacher, and Mary does, too.   [∀>∃]

(83)  a. every teacher₁ [a boy [VP admires t₁]], and every teacher₁ [a girl [VP admires t₁]]
   b. *every teacher₁ [a boy [VP admires t₁]], and Mary [every teacher₁ [VP admires t₁]].

Fox (2000: 63) observes that Scope Economy makes an unexpected prediction with respect to clauseboundedness. He argues that when Spec, CP is filled with an element that the QP can potentially interact with scopally, the clauseboundedness can be overridden. In other words, Scope Economy predicts that the adjunction of QP to CP₂ in (84) is possible as long as it can yield a semantic effect. If correct, the paradigmatic examples of clauseboundedness in ((78)b) are ruled out in a straightforward fashion as instances of Scope Economy/locality violations: since there are no scope-inducing elements in Spec, CP of the embedded clause in ((78)b), the QP cannot move out of TP, and hence it cannot undergo further movement.

(84)  [TP₁ QP…[CP₂ …tQP [CP₂ scopally active element [TP₂ …tQP…]]]]

Interestingly, the prediction in (84) is borne out in (85), which has a reading under which the universal quantifier scopes over the matrix subject. The necessary scopally active element here is the wh-word in Spec, CP₂. The intermediate CP-adjunction of QP hence complies with Scope Economy and locality. Once

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14 But see Moltmann and Szabolcsi (1994), Potsdam (2013) and reference therein for a dissenting view on the possibility of crossclausal QR.
on the edge of CP, every play can move to the higher TP position and take scope over the subject in the usual manner.15

(85) a. A reviewer knows when every play will fail. [∀ > ∃]

b. [TP1 every play1 [a reviewer knows [CP2 t1 [CP2 when2 [TP2 t1 will fail t2]]]]]

These are all the preliminaries that I need to make my point, which is actually quite simple. Compare (84) with the proposed structure in (77). In both cases we have a scope-inducing element in Spec, CP (a wh-phrase). This means that Scope Economy should in principle allow the adjunction of the quantified element to CP. So, what looks like a bizarre structure is, in effect, predicted by an aggregate of independently necessary principles, motivated in turn by crosslinguistic data.

Given this, we have several predictions. First, we expect the movement in HWh questions to obey the same locality constraints as the instances of “normal” QR, which is precisely what (86) demonstrates.

(86) *Vse1 li i kto skazal, čto Maša prodala t1 knigi?
all Q and who said that Masha sold books

‘Did somebody say that Masha sold all the books, and who said that sold all the books?’

While extraction out of čto-clauses in Russian is assumed to be independently prohibited, in colloquial Russian long-distance movement of non-quantified NPs as in (87) is possible, albeit somewhat degraded. At the very least, there is a palpable contrast between (86) and (87), suggesting again that in the case of the former we are dealing with more than just extraction out of a čto-clause.

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15 The data in (85) are actually due to Potsdam (2013: 674). Fox (2000: 64) cites the following pair, drawn in turn from Moltmann and Szabolcsi (1994):

(i) One girl knows that every boy bought a present for Mary. *∀ > ∃

(ii) One girl knows what every boy bought for Mary. √∀ > ∃
(87) ???Ètot ëčebnik, Ivan skazal, ëto nužno kupit’ t dlja zanjatij?
this book Ivan said that necessary to buy for lessons
‘Was it this book that Ivan said that was necessary to buy for class?’

On the other hand, subjunctive ëtoby-clauses are more amenable to long distance extractions, as (88) demonstrates.

(88) Ètot ëčebnik Ivan xotel, ëtoby Maša kupila t dlja zanjatij?
this book Ivan wanted thatSUBJ Masha bought for lessons
‘Was it this book that Ivan wanted for Masha to buy for class?’

Crucially, the clauseboundedness effect in HWh contructions persists even with ëtoby-clauses, as shown in (89): the quantifier here may not cross a clausal boundary, much as it is prohibited from doing so in ëto-clauses.

(89) *Vse i kto xotel, ëtoby Maša prodala t knigi Olegu?
all and who wanted thatSUBJ Masha sold books OlegDAT
Intended: ‘Did somebody want for Masha to sell all the books to Oleg, and who wanted for Masha to sell all the books to Oleg?’

All the sentences above are then ruled out by Scope Economy/Locality: the quantifier has no semantic reason to move out of the embedded clause (presumably in the sentences above it only goes as high as the edge of lower vP). One may at this point conjecture that the extraction out of an embedded wh-clause in HWh constructions ought to lead to improvement (on parallelism with (85)), i.e., as the hypothetical derivation in (90) would suggest (note that there is a potentially scope-inducing element in each clause – viz., wh-phases). This prediction, however, is not borne out, as (91) demonstrates.

(90) QP li [CP1 tQP [CP1 wh […][CP2 tQP [CP2 wh [TP2 tQP … ]].]
(91) a. *Každyj, li i kto uznal, kogda počinjat t₁ samolet?
   every Q and who found.out when fix plane
   Intended: ‘Did somebody find out when they will fix all the planes, and who found out when they will fix all the planes?’
b. *Vse, li i kto uznal, kogda t₁ gosti pridut?
   every Q and who found.out when guests will.arrive
   Intended: ‘Did somebody find out when all the guests will arrive, and who found out when all the guests will arrive?’

However, this is not a problem for the analysis developed here for two reasons. First, the QPs in HWhs pattern with wh-extractions, as in (92), rather than the non-quantified NPs in (93). Observe that the extraction of a wh-word in (92) and a quantifier in (91) out of a wh-clause is sharply ungrammatical. However, NP-scrambling out of a wh-island, as in (93) is entirely acceptable in colloquial Russian (see Baylin 2001, Bošković 2004, Peretsvaig 2008, Stjepanović 1999a). I will return to the patterning of wh-words and quantified NP briefly in the next section. The main argument here is this: it cannot be the case that the quantified NPs undergo some kind of a scrambling operation (rather than QR), because if they did, we would expect them to pattern with the non-quantified NPs in (93) rather than the wh-phases in (92).

(92) a. *Čto, Ivan uznal, kogda počinjat t₁?
   what Ivan found.out when fix
   Intended: ‘What did Ivan find out when they will fix?’
b. *Kto, Ivan uznal, kogda t₁ pridet?
   who Ivan found.out when will.come
   Intended: ‘Who did Ivan find out when __ will come?’
c. *Čto kto uznal, kogda počinjat t₁?
   what who found.out when fix
   Intended: ‘What did who find out when they will fix t₁?’
Second, consider my modification of (85) provided in (94). The novel observation here is that the inverse scope is no longer available if the wh-clause containing the quantifier is embedded under the wh-matrix clause. Observe that to derive (94) with the universal wide scope we would have to posit a derivation similar to the one in (90). This means that HWh questions in (91) are unacceptable for the same reason the inverse scope in (94) is impossible.\textsuperscript{16}

\textsuperscript{16}I am putting aside a detailed discussion of the reason for this. Whatever the explanation, the point stands. The scopal interactions in (85)/(94) and Russian HWhs (91) pattern together: extraction out of one wh-clause is fine, but long distance movement over two wh-clause boundaries is prohibited. See Fox (2000: 65, ft. 54) for a potential explanation.

It should also be noted that the nature of the wh-phrase seems to be irrelevant: in (94) it is the subject wh-phase, but the inverse scope is likewise impossible if the quantifier is embedded under the wh-clause with a fronted wh-object:
I conclude, hence, that QR is operable in HWh contexts for the following reasons:

(i) Only quantified NPs can occupy the pre-\textit{li} position in HWh questions;

(ii) Quantified NPs in HWh question pattern with wh-words (rather than non-quantified NPs) in wh-island environments;

(iii) The extraction of a quantified expression in HWh environments is constrained in the same way "normal" QR is (i.e., it is "clausebounded").

The level of adjunction (high CP-segment) is predicted to be possible in principle by Fox’s (2000) approach to QR. In the cases of HWh coordination, it is the only landing site for the quantifiers that would result in a configuration from which the traces can be bound.

The second component of my analysis implicates ATB-movement, whereby the quantifier is extracted out of each conjunct. This is what I turn to next.

\subsection{Evidence for ATB-movement}

By way of introduction, consider the paradigms in (95) and (96). The former is an instance of wh-ATB movement. It is a well-established fact that movement out of just one conjunct is illicit in such contexts (cf. ((95)a) and ((95)b)). QR is parallel to wh-extractions in coordinated environments. The inverse scope is possible in ((96)a), but not in ((96)b) presumably for the same reason: raising out of just one conjunct is blocked.

(95) a. *Which movie did you see \textit{t} and appreciate ‘‘The House of Mirth’’?

 b. Which movie did you see \textit{t} and appreciate \textit{t}?
(96)  a. A (different) student likes every professor.

\[ \forall \forall > \exists \]

b. A (# different) student likes every professor and hates the dean.

\[ \forall \forall > \exists \]  

(Cecchetto 2004: 250)

Russian is parallel to English. Extraction out of conjuncts can proceed only in the ATB-manner, as shown in (97). The scope facts in (98) replicate the English paradigm in (96). Though it is true that the surface scope is the immediate reading reported for instances in ((98)a), the inverse scope is possible for my informants when facilitated by the right intonational contour (with prosodic prominence on dva studenta). No amount of emphasis helps to obtain the inverse scope reading in ((98)b).

(97)  a. Kakoj fil’m vy posmotreli t i obsudili t?

which movie you watched and discussed

‘Which movie did you watch and discuss?’

b. *Kakoj fil’m vy posmotreli t i obsudili Zavodnoj apel’sin?

which movie you watched and discussed Clockwork Orange

‘Which movie did you watch and discuss Clockwork Orange?’

(98)  a. Dva studenta obožajut každogo profesора.

two students adore every professor

\[ \forall \forall > 2 \]

b. Dva studenta obožajut každого profesора i nenavidjat dekana.

two students adore every professor and hate dean

\[ \forall \forall > 2 \]

I have shown earlier that HWh questions are underlyingly biclausal, coordinated at the CP level. In the previous section I argued that QPs in HWh questions undergo QR. Combining these two insights with the
observations above, we have no choice but to admit ATB movement, since it is impossible to extract a quantified element out of just one conjunct, as ((97)b) and ((98)b) show (but see Bošković and Franks 2000).

There are three additional pieces of evidence in favor of ATB movement in HWh questions. Binding facts, the parallelism of HWh questions with the “standard” ATB extraction pattern, and the “repair-by-ellipsis” effects, which all point to an analysis under which the quantifier must be extracted out of each conjunct.

The first argument rests on the binding facts. The extracted quantifier binds a reflexive in the second conjunct, as in ((99)a). Since this is the case, a copy of každyj učastnik ‘every participant’ must be present in the second conjunct in order to establish a local binding configuration. Similarly, in ((99)b) the quantified expression appearing before li contains a bound reflexive, which must have been local to its binder at some point.\(^\text{17}\) Such an outcome is expected under the current analysis.

\[(99)\quad\]
\[
\begin{align*}
\text{a. } & \text{Každyj li učastnik, i } skol’ko svoix èkzempljarov} \\
& \text{each Q participant and how many self's samples} \\
& \text{predstavil na vystavke?} \\
& \text{presented on exhibition} \\
& \text{‘Has each participant presented his samples at the exhibition and how many samples did he present?’} \\
\text{b. } & \text{Mnogo li svoix izdelij i kto, iz učastnikov peremestil} \\
& \text{many Q self’s products and which from participants moved} \\
& \text{iz ètogo paviliona?} \\
& \text{from this pavilion} \\
& \text{‘Has one of the participants moved many of his products from this pavilion, and which of the} \\
& \text{participants moved many of his products?’}
\end{align*}
\]

\(^\text{17}\) It is also the case that the QNP containing the possessive can be bound by the wh-indefinite in the first conjunct.
The second argument hinges on the exact parallelism between HWh questions and “standard” ATB extraction facts. In particular, the two configurations impose the same set of restrictions on left-branch extraction (LBE) out of certain positions: while LBE out of object positions results in acceptable surface strings, LBE out of subject positions is prohibited. Furthermore, certain quantifiers are more amenable to LBE than others.

Consider first the extraction of *mnogo* ‘many’ out of object positions. In both the HWh questions in ((100)a) and the ATB constructions in ((101)a), LBE of *mnogo* is not only possible, but, in fact, preferred (my informants consistently choose the (a) over (b) examples in (100) and (101)). This preference is manifested for both HWh questions and ATB-sentences.\(^\text{18}\) Here and subsequently I will be using the underlining notation to indicate the position of the gap.

(100) a. Mnogo li i kto prines [__ vina] na večerinku?
    much Q and who brought wine to party
    ‘Was it lots of wine that somebody brought to the party, and who brought lots of wine to the party?’

b. Mnogo li vina i kto prines [__] na večerinku?
    much Q wine and who brought to party

(101) a. Mnogo li Ivan prines __, a Sergey vypil __ vina?
    much Q Ivan brought and Sergey drank wine
    ‘Did Ivan bring, and Sergey drank lots of wine?’

b. Mnogo li vina Ivan prines __, a Sergey vypil __?
    much Q wine Ivan brought and Sergey drank

By contrast, LBE of *kažđi*-type quantifiers is worse than LBE of *mnogo*-type quantifiers from object

\(^{18}\) In the (a) examples the sole extractee is Q *mnogo*, but in the (b) examples the entire QP *mnogo vina* is fronted. The placement of *li* in ((100)b) and ((101)b) is due to a PF reordering mechanism, which places the complementizer after the first prosodic word. See Section 2.4 for details.
positions in both HWh questions in (102) and “standard” ATB constructions in (103). QPs with každyj-type quantifiers exhibit a strong preference for pied-piping their complements.

(102)  a. ??Každago li i kto poxvalil na vystavke ___ učastnika?
    each Q and who praised on exhibition participant
    ‘Did somebody praise each participant at the exhibition, and who was it?’
    b. Každago li učastnika i kto poxvalil na vystavke?
    each Q participant and who praised on exhibition

(103)  a. ??Každago li na vystavke Ivan poxvalil __, a Maša osudila
    each Q on exhibition Ivan praised but Masha denounced
    ___ učastnika?
    participant
    ‘Did Ivan praise, and Masha denounce every participant?'
    b. Každago li učastnika Ivan poxvalil __, a Maša osudila ___
    each Q participant Ivan praised but Masha denounced
    na vystavke?
    on exhibition

The generalization concerning the parallelism between ATB and HWh object LBE contexts likewise extends to the restrictions on extraction out of a subject position. Regardless of the quantifier type, LBE out of subject positions is uniformly prohibited in both HWh questions and ATB constructions. ((104)a) and ((105)a) show that LBE of mnogo-type quantifiers is illicit in HWh and ATB sentences, respectively. The examples in ((104)b) and ((105)b) indicate that the entire subject QP must be pied-piped (which results in a configuration necessitating subsequent PF reordering. See Section 2.4). The same holds of každyj-type

19 Some speakers reject examples ((102)a) and ((103)a) altogether.
quantifiers in (106) and (107), the former capturing the behavior of *každyj* in the HWh pattern, the latter—in the “standard” ATB strings.

(104) a. *Mnogo  li  i  kakie  imenno  èkzempljary  poxvalili
many  Q  and  which  specifically  samples  praised
na  vystavke  __  ljudej?
on  exhibition  people

Intended: ‘Was it many people that praised some samples at the exhibition, and which samples did they praise?’

b. Mnogo  li  ljudej  i  kakie  imenno  èkzempljary  __  poxvalili
many  Q  people  and  which  specifically  samples  praised
na  vystavke?
on  exhibition

(105) a. *Mnogo  li  na  vystavke  poxvalili  Mišiny  èkzempljary,
many  Q  on  exhibition  praised  Misha’s  samples
no  osudili  Mašiny  obrazcy  __  ljudej?
but  denounced  Masha’s  samplings  people

Intended: ‘Was it many people at the exhibition who praised Misha’s samples, but denounced Masha’s samplings?’

b. Mnogo  li  ljudej  na  vystavke  __  poxvalili  Mišiny  èkzempljary,
many  Q  people  on  exhibition  praised  Misha’s  samples
no  osudili  Mašiny  obrazcy?
but  denounced  Masha’s  samplings

(106) a. *Každyj  li  i  kakie  imenno  èkzempljary  poxvalil
each  Q  and  which  exactly  samples  praised
na vystavke ___ učastnik
on exhibition participant

Intended: ‘Was it each participant that praised some samples at the exhibition, and which samples did he praise?’

b. Každyj li učastnik i kakie imenno ěkzempljary ___ poxvalil
each Q participant and which exactly samples praised
na vystavke?
on exhibition

(107) a. *Každyj li na vystavke poxvalil Mišiny ěkzempljary,
each Q on exhibition praised Misha’s samples
no osudil Mašiny obrazcy ___ učastnik?
but denounced Masha’s samplings participant

Intended: ‘Did each participant at the exhibition praise Misha’s samples, but denounced Masha’s?’

b. Každyj li učastnik na vystavke ___ poxvalil Mišiny ěkzempljary,
each Q participant on exhibition praised Misha’s samples
no ___ osudil Mašiny obrazcy?
but denounced Masha’s samplings

TABLE 1 summarizes all the data discussed.

**TABLE 1. SUMMARY OF FACTS**

<table>
<thead>
<tr>
<th></th>
<th>HWhs Q li &amp; [wh…]</th>
<th>Standard ATB Q li […[e]] &amp; […]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Object positions: LBE pattern</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mnogo ‘many, much’</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Vše ‘all’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vsë ‘everything’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

74
The most curious fact is the ungrammatical LBE pattern out of subject positions. Here is why. In root Y/N-interrogatives LBE of the quantified element is perfectly fine, as demonstrated by (108). Likewise, the extraction of *každyj* out of object positions in polar questions, as in (109), does not lead to the degradedness observed in HWh questions and standard ATB examples. I will not offer an explanation for the peculiar behavior of certain quantifiers in various syntactic context. However, whatever reason is ventured for the ban on extractions out of subjects and the degraded status of LBE’ed *každyj* out of object positions in standard ATB contexts, it will be directly transferable to HWh questions.

(108)  
(a) Skaži, *mnogo* li pridet __ ljudej (na našu vystavku)?

*Tell me, are there a lot of people coming to our exhibition?*

(b) Skaži, *každyj* li zadejstvovan __ akter v novoj postanovke?

*Tell me, is every actor engaged in the new play?*
(109) Každuju li pridetsja čitat’ stat’ju?  
   each Q have.to to.read article  
   ‘Would we have to read every article?’

So, in short, the consistently uniform behavior of HWh questions and ATB constructions with respect to the possibility of LBE strongly suggests that the same mechanism is implicated in their derivations.

The strongest piece of evidence for ATB-movement emerges in ellipsis contexts. It has been argued extensively that locality violations improve under ellipsis (Bošković 2011, 2013b, Merchant 2001, Ross 1969, among others). Consider the well-cited example in (110): while the overt movement of the wh-phrase over a conditional clause in (a) leads to a deviant result; the deletion of the island in (b) apparently repairs the ungrammatical sequence.

(110)   a. *Ben will be mad if Abby talks to one of the teachers, but she couldn’t remember which (of the teachers) Ben will be mad if she talks to.  
        b. Ben will be mad if Abby talks to one of the teachers, but she couldn’t remember which, (of the teachers) [Ben will be mad if she talks to ti].  
               (Merchant 2001: 88)

Under the standard analysis (Chomsky 1972), * is assigned to an island if an element crosses it. So, in ((111)a), the wh-phrase crossing the if-island causes a violation, which leads to the * marking on the site from which the extraction took place (see Bošković (2013b) for arguments that the * is placed on the head of the island). Since nothing else happens in ((111)a), the * remains in the final representation. Hence, ((110)a) is ruled out by ((111)b). To salvage the derivation some rescue operation needs to apply. Ellipsis is one such operation: it results in the deletion of an island and the *-bearing element along with it, as in ((111)c).

(111)   a. Ben will be mad if Abby talks to one of the teachers, but she couldn’t remember which, (of the teachers) [Ben will be mad *[if she talks to ti]]. 

   ┌────────────────────────────────────┐
   |                                    |
   └────────────────────────────────────┘
b. *Ben will be mad if Abby talks to one of the teachers, but she couldn’t remember which, (of the teachers) [Ben will be mad *[if she talks to tₙ]].

c. Ben will be mad if Abby talks to one of the teachers, but she couldn’t remember which, (of the teachers) [Ben will be mad *[if she talks to tₙ]].

Earlier I demonstrated that quantifiers in HWh questions, being subject to QR, cannot cross a clause boundary. But if the clauseboundedness of QR is reducible to locality conditions, we then expect to see amelioration of the clauseboundedness effect under ellipsis. This is borne out, as shown in (112) for čto-clauses and (113) for čtoby-clauses.

In ((112)a) and ((113)a) the elided constituent contains a *-marked element, which identifies the locality violation site. The elided constituents are shown in ((112)b) and ((113)b). Their ungrammaticality is due to the clauseboundedness effect discussed earlier. The extraction of vse ‘all’ triggers the assignment of * to the island (much like in the English cases above). Ellipsis is predicted to salvage the derivation, as it would delete the *-bearing culprit. If this rescue procedure fails to apply, then the violation remains.

This is precisely what happens in the sentences below: the site containing the violation is deleted in PF in ((112)a) and ((113)a), producing acceptable strings. However, no such PF operation applies in ((112)b) and ((113)b), triggering the observed ungrammaticality.²⁰

(112) a. Ja uverena, čto naš zlобnyj dekan sčitaet, čto kakoj-to
    I sure that our evil dean thinks that some

²⁰ Observe that in principle, vse ‘all’ is subject to LBE, so this cannot be the source of degradedness in ((112)b) and ((113)b).

(i) Vsex li i kogda Ivan priglasil na novyj god ___ kolleg?
    all Q and when Ivan invited to new year __ colleagues
    ‘Was it all the colleagues that Ivan invited to the New Year’s Eve party, and when did he invite all the colleagues to the New Year’s Eve party?’
naš student nepremенно provalit èkzameny, no ne
our student inevitably failFUT exams but not
uverena vse li [naš zlobnyj dekan sčitaet, čto kakov-to naš
sure all Q our evil dean think that some our
student nepremенно provalit èkzameny].
student inevitably fail exams

‘I am sure that our evil dean thinks that some student of ours will inevitably fail the exams, but I am not sure if it is all the exams (that the dean thinks the student will fail).’
b. *Vse li naš zlobnyj dekan sčitaet, čto kakov-to naš student nepremенно provalit __ èkzameny?

(113) a. Ja uverena, čto naš zlobnyj dekan xočet, čtoby kakov-to
I sure that our evil dean wants thatSUBJ some
naš student nepremенно provalil èkzameny, no ne uverena
our student inevitably failed exams but not sure
vse li [naš zlobnyj dekan xočet, čtoby kakov to naš student
all Q our evil dean wants thatSUBJ some our student
nepremенно provalil __ èkzameny].
inevitably failed exams

‘I am sure that our evil dean wants for some student of ours to fail the exams, but I am not sure if it is all the exams (that the dean wants for the student to fail).’
b. *Vse li naš zlobnyj dekan xočet, čtoby kakov-to naš student nepremенно provalil __ èkzameny?

Now consider (114) and (115) in light of the above. Had the quantifier been extracted just out of the
first conjunct, we would expect to see the improvement we observe in ((112)a) and ((113)a). However, the status of (114) and (115) is parallel to that of ((112)b) and ((113)b). So, while the locality violation in the first conjunct can be repaired by ellipsis, the clauseboundedness effect apparently persists in the second conjunct, as sketched in (116). Hence, it must be the case that in (114) and (115) the quantifier is extracted out of both conjuncts, not just the first conjunct.

(114) *Vse li i kto sčitaet, čto kajo-to naš student
call Q and who thinks that some our student
nepremenno provalit ___ ěkzameny?
inevitably fail\textsubscript{FUT} exams

Intended: ‘Does somebody think that some student of ours will inevitably fail all the exams, and who thinks some student of ours will inevitably fail all the exams?’

(115) *Vse li i kto xočet, čtoby kajo-to naš student
call Q and who wants that\textsubscript{SUBJ} some our student
nepremenno provalil ___ ěkzameny?
inevitably failed exams

Intended: ‘Does somebody want for a student of ours to fail all the exams, and who wants for a student of ours to fail all the exams?’

(116) *Vse li [CP\textsubscript{1} [CP\textsubscript{2} t\textsubscript{VSE} ]] \& [CP\textsubscript{1} [CP\textsubscript{2} t\textsubscript{VSE} ]]
^repair by ellipsis ^locality violation

This section presented four arguments in favor of unifying movement in HWh questions and standard ATB-extraction patterns, summarized below.
(i) In coordinated contexts QR is parallel to wh-movement in that it has to proceed in an ATB fashion. Since HWh questions are biclausal and the QNP appears in pre-

(ii) The binding facts demonstrate that the quantified NP has to have been local to the bindee/antecedent at some point in the derivation. Otherwise, there is no way to bind the anaphoric possessive contained in the fronted QNP or in the second conjunct.

(iii) The LBE pattern is identical for ATB questions and HWh questions, which distinguishes both from root Y/N interrogatives. This parallelism suggests that the mechanism involved in the derivations of the former two is identical.

(iv) The locality violations in the second conjunct cannot be salvaged by ellipsis, hence it has to be the case that the pre-

2.3.3 Consequences for ATB-movement

So far I have been rather taciturn about the precise mechanism involved in ATB-derivations. Here I discuss some of the treatments proposed in the literature that capture various properties of such constructions, pointing out how my data bear on the issues. One potential ramification of my analysis is that ATB-movement is not reducible to movement out of just one conjunct.

Generally speaking, it is possible to distinguish two main camps of thought on the matter: one envisions ATB movement as extraction out of both conjuncts one way or another (Citko 2003, 2005, Nunes 2004, Fernández-Salgueiro 2008, Goodall 1978, Williams 1978); the other argues for some variant of an asymmetric treatment, whereby an extractee belongs in one conjunct only (Kochovska 2010, Larson 2013, Munn 1993).

I begin with the latter. Larson (2013) argues for a variant of this derivation in Macedonian ATB constructions: under his account the extracted element belongs only in the first conjunct, while the second conjunct contains literally nothing. At LF a semantic mechanism ensures the correct construal of the moved
element. This allows him to explain the absence of weak crossover and weak island effects in Macedonian ATB configurations as well as the optionality of clitics in the second conjunct. His approach fails to explain the Russian facts in (113) and (114), however. If there is no gap in the second conjunct, then the absence of repair under ellipsis effects remains puzzling.

The second problem for Larson-style treatment is the position of the remnant NP. Presumably, his analysis would derive ((101)a) in the manner of (117). Suppose only the “remnant” is merged in the second conjunct. First, some mechanism needs to ensure that this “remnant” NP gets the right case – in ((101)a) vina must be in genitive (cf. ungrammatical (118) with vino in accusative). Quantifiers like mnogo assign genitive to their associates. Under the standard treatments (Bošković 2006, Bošković 2013a, Despić 2011, Franks 1994, 1995, and references therein) mnogo vina ‘much wine Gen’ implicates an additional functional projection – QP – responsible for the assignment of case. In fact, this QP is presumably responsible for the assignment of partitive genitive in the absence of overt quantifiers (which is compatible with the meaning of the predicate to “drink”). Let us assume that this is precisely what happens in (117), vina is assigned genitive by Q0. Crucially the quantifier does not appear in the second conjunct – it is only merged in the first conjunct. The problem then is how to get the right construal of the sentence, whereby the first conjunct is understood to contain the entire QNP.

Even more problematic are examples like (119). Here it is the preposition that assigns instrumental case to all the elements inside its complement NP. If the second conjunct contains only the noun (rather than the entire PP), the source of its case assignment is mysterious under this type of analysis.

(117) Mnogo li [... t_{mnogo}] & [...[QP vina]]
much Q wine_{GEN}

(118) *Mnogo li Ivan prines __, a Sergej vypil __ vino?
much Q Ivan brought and Sergey drank wine_{ACC}
Munn (1993) derives ATB-sentences via wh-movement in the first conjunct and operator movement in the second conjunct, as demonstrated in (120). The latter operation is subject to locality constraints as desired (so, it does predict the lack of repair under ellipsis in (113) and (114)), but it faces the same “remnant” problem discussed above in connection with Larson-style analysis in that it cannot be easily extended to the LBE examples in ((100)a) and ((101)a), in which the first conjunct contains a gap and the second conjunct a remnant NP, as schematized in (121).

Both of these analyses also predict that the remnant can appear in the first conjunct (rather than the second). But the reality is exactly the opposite: the remnant is prohibited in the first conjunct, as I will show shortly (the relevant paradigm is found in (127)) when considering the symmetric approaches to ATB, to which I now turn.
Here I will discuss two very similar analyses of ATB, one couched in terms of sideward movement, the other relying on Multidominance (MD) structures. The former is argued for in Nunes (2004) with subsequent application to Spanish and English data in Fernández-Salgueiro (2008). According to these analyses, the wh-phase undergoes sideward movement from the second conjunct to be remerged in the first conjunct. It subsequently moves to Spec,CP with the requisite Form Chain/ Copy deletion mechanism that follows.

The Multidominance accounts appear to be very similar to the sideward movement mechanism. Here I briefly review the specific proposals made in Citko (2003, 2005). Citko (2005) argues for the existence of a merge mechanism (dubbed Parallel Merge) that essentially combines the properties of External Merge and Internal Merge. Merging the two distinctly rooted objects, α and β in (122), is like External Merge. However, merging an element dominated by α with β is akin to Internal Merge. In the resulting structure γ has two mothers – α and β. The object created by Parallel Merge is symmetric, the symmetry of which is broken in the course of a derivation. This theoretical innovation covers a great deal of empirical terrain, capturing the properties of Right-Node-Raising, ATB constructions, Coordinated Multiple Wh-Questions, gapping and many other natural language phenomena (Citko 2005, Gračanin-Yüksek 2007, Citko and Gračanin-Yüksek 2011, Citko 2011, and references therein).

I will concentrate on the analysis of ATB proposed in Citko (2003). There she argues that in ATB constructions the extracted element is shared. Successful linearization depends on the absence of overt phonetic material in the gap. That is, to become asymmetric (and linearizable), a shared element must vacate its base-generation site.
She further hypothesizes that the possibility of constituent sharing hinges on economy: whenever the constituent can be shared, it must be shared in order to minimize the number of applications of Merge. This happens when the gaps in each conjunct contain traces of identical material. For this reason, her Polish example in ((123)a) is ruled out: the entire NP *którego studenta* ‘which student’ is shared, so it must be ex-situ as in ((123)b) to render the structure linearizable. A simplified derivation of this example is provided in (124).

(123) a. *

\[
{\text{którego}} \ \text{on} \ \text{polecił} \quad _{\text{__ studenta} \ i \ firma \ zatrudniła \ __ studenta}? \\
\text{which he recommended student and company employed student}
\]

‘Which student did he recommend and the company employed?’

b. 

\[
{\text{którego studenta}} \ \text{on} \ \text{polecił} \quad _{\text{__}} \ i \ firma \ zatrudniła \ __? \\
\text{which student he recommended and firm employed}
\]

(124)
By contrast, (125) with distinct remnants in each conjunct is an instantiation of determiner sharing, where only the wh-word – *ile* ‘how many’ – is shared. Note that the NP remnants in each conjunct are distinct. Once *ile* vacates the shared node, the structure becomes linearizable, as demonstrated in (126).

(125) *Ile* on kupił ___ książek, a ona przeczytała ___ artykułów?

  how many he bought books and she read articles

  ‘How many books did he buy, and how many papers did she read?’

(126)

Now consider again ((100)a) and ((101)a) (the latter repeated in (127)). On Citko’s account, the entire QP – *mnogo vina* ‘much wine’ – is shared (since the gaps in each conjunct contain non-distinct material).
It follows that this entire QP must front to render the configuration eligible for linearization, contrary to the facts.\textsuperscript{21}

Further, it is impossible to strand a remnant in the first conjunct as in ((127)b) or to leave the remnant in each conjunct, as in ((127)c); cf. ((123)a).

\begin{align*}
(127) & \quad \text{a. Mnogo li Ivan prines _, a Sergej vypil _ vina?} \\
& \quad \text{much Q Ivan brought and Sergey drank wine} \\
& \quad \text{‘Was it lots of wine that Ivan brought, and Sergey drank?’} \\
& \quad \text{b. ?*Mnogo li Ivan prines _ vina, a Sergej vypil _?} \\
& \quad \text{much Q Ivan brought wine and Sergey drank} \\
& \quad \text{c. ?*Mnogo li Ivan prines _ vina, a Sergej vypil _ vina?} \\
& \quad \text{much Q Ivan brought wine and Sergey drank wine}
\end{align*}

Given the above, Citko’s MD treatment of LBE ATB needs to be amended as follows: (i) either the quantifier can be shared in the presence of identical nominal complements (but then what precludes ((123)a) and ((127)c)?); or (ii) the mechanism of linearization needs to be revised to allow for shared in-situ remnants in order to accommodate ((127)a) (or any configuration with a stranded remnant).

Finally, consider some problematic points my data present for Nunes’s (2004) sideward movement mechanism. An English ATB sentence in (128) has the (simplified) derivation in (129) (Nunes 2004:128-21 Right-Node-Raising cannot be implicated here, since the remnant can be followed by an adjunct na večerinu ‘to the party’, as in ((100)a) (under standard analyses of RNR, the raised constituent has to be in the sentence final position). The same is true of ((101)a)/((127)a), in which an adjunct like včera ‘yesterday’ and a locative adjunct na večerinke ‘at party’ can appear at the end of the sentence, as shown in (i). It should be noted that the predicate in the first conjunct is incompatible with the locative PP, as in (ii); it can only have originated in the second conjunct.

\begin{align*}
(128) & \quad \text{a. Mnogo li Ivan prines _, a Sergej vypil _ vina včera na večerinke?} \\
& \quad \text{much Q Ivan brought and Sergey drank wine yesterday on partyLOC} \\
& \quad \text{‘Was it lots of wine that Ivan brought, and Sergey drank yesterday at the party?’} \\
(129) & \quad \text{(i) Mnogo li Ivan prines _, a Sergej vypil _ vina včera na večerinke?} \\
& \quad \text{much Q Ivan brought and Sergey drank wine yesterday on partyLOC} \\
& \quad \text{‘Was it lots of wine that Ivan brought, and Sergey drank yesterday at the party?’} \\
& \quad \text{(ii) a. *…prines na večerinke ‘brought to partyLOC’ b. ✓…prines na večeriniku ‘brought to partyACC’}
\end{align*}
TP2 is constructed first, as in ((129)a). Next the computational mechanism makes a copy of the object wh-phrase and merges it with *file*, as in ((129)b). Once the vP in the higher conjunct is built, *did* is likewise sideward moved (((129)c)). The structure is built further, resulting in the object in ((129)d). The procedure Form Chain creates the wh- and T-chains, as demonstrated in ((129)e). The non-distinct copies are then deleted in accordance with Chain Reduction, stated in ((129)f).

(128) Which paper did John file ___ and Mary read ___?

(129) a. [TP did^4 [Mary [read [which paper]^3]]]
   b. file [which paper]^4
   c. [TP did^4 [John [file [which paper]^4]]]
   d.  
      CP
       &P
       [which paper]^1
       &'
       TP1
         did^1
         &
         did^2 John file
         [which paper]^2
   e. CH1: [did^1, did^2]; CH2: [did^1, did^3];
   f. Chain Reduction: Delete the minimal number of constituents of a nontrivial chain CH that suffices for CH to be mapped into linear order in accordance with the LCA.

There are two possible scenarios here. The first entails movement of the entire phrase: *mnogo vina* undergoes sideward movement, resulting in the structure (130) (given with English glosses for convenience). In principle, Nunes’s analysis allows for scattered deletion (for him, it is not a matter of
convergence, rather of economy: the scattered parts of copies are pronounced to satisfy some formal features). Let us assume that is what happens with the highest copy of much wine, where the NP subpart of the copy is deleted. The problem is how to rule out the pronunciation of the intermediate copy in the first conjunct, as demonstrated below. Under his analysis, the highest link usually survives Chain Reduction. This hinges on economy: deleting the highest copy results in the fewer applications of Formal Feature-elimination (when the element moves up, it checks and eliminates more features). But a lower copy can be pronounced, if the higher copy causes some sort of a violation (like the contiguous homophonous wh-words in BCS in (69)). In the structure below [much wine]₂ and [much wine]₃ are presumably equally eligible for deletion, since they are non-distinct in terms of the number of features they checked, and there is no obvious PF violations that would arise if wine in TP1 is pronounced. Hence, nothing in this system rules out ungrammatical ((127)b).

(130)

\[
\begin{array}{c}
\text{CP} \\
\text{[much wine]}_1^{1} \\
\text{li} \\
\text{TP1} \\
\text{Ivan brought [much wine]}_2^2 \\
\text{^why can’t this copy be pronounced?} \\
\text{TP2} \\
\text{Sergey drank [much wine]}_3^3
\end{array}
\]

The second alternative is to say that only much undergoes sideward movement to TP1 and Spec CP. The problem then is obvious: how to get the right construal obtaining in the gap position in the first conjunct?

With this I turn to the alternative that does accommodate my data. I will be arguing for the system developed in An (2007). His analysis relies on Fox and Pesetsky’s (2005) cyclic linearization mechanism, raison d’etre of which is to derive the edge requirement in the cases of cyclic movement. Unlike PIC, it is
conceived as a condition on the syntax-phonology interface. Suppose D in ((131)a) represents the spellout domain. Once D is spelled out, the order of elements established there cannot be revised in higher domains. This is why ((131)b) is expected to be good, but ((131)c) bad: in the latter, the spellout order in the higher domain contradicts the order in the lower domain. This system allows them to derive Homberg’s generalization. For example, the Swedish paradigm in (132) demonstrates that it is impossible to extract an object skipping over the verb. ((132)a) instantiates the configuration in ((131)b). Assuming VP is the spellout domain, the order of elements, i.e. V>O, is preserved in the clausal domain. On the other hand, ((132)b,c) are ruled out, because the order in the clausal domain contradicts the underlying order in the V-domain.

(131)  a. \([D X Y Z]\) order: X>Y>Z
      b. \([D' X Y [t_X t_Y Z]\) order: X>Y>Z
      c. \(*[D' Y [X t_Y Z]\) order: Y>X>Z

(132)  a. Jag kysste henne inte \([_{VP t_v t_o}]\)
         I kissed her not
      b. * … att jag henne inte \([_{VP kysste t_o}]\) …
         that I her not kissed
      c. *Jag har henne inte \([_{VP kysst t_o}]\)
         I have her not kissed (Fox and Pesetsky 2005:17)

An assumes this mechanism. For him, the CP-conjuncts are constructed independently of each other in the separate work spaces. Each conjunct is then spelled out, and only then are they conjoined. The evaluation procedure Scan ensures that no ordering conflicts arise in the final representation and establishes, which candidates can be deleted under identity. Consider the Romanian ATB-paradigm in (133), which evinces a remarkable similarity to the Russian ATB facts in (127). Romanian, a MWF language like BCS (69), imposes a PF ban on contiguous homophonous wh-words, prohibiting the configurations in ((133)a)
and forcing the pronunciation of the lower $O_{wh}$ copy.

Since the order in the final representation must preserve the initial Spellout order of individual conjuncts (as determined by Scan), ((133)b) is unproblematic: $S_{wh}$ precedes, while $O_{wh}$ follows, both verbs. But in ((133)c) the surface position of $O_{wh}$ leads to a contradiction with the underlying position of $O_{wh}$ in the second conjunct, resulting in ungrammaticality.

(133) a. *Ce ce a precedat și a influențat?
   what what has preceded and has influenced
   ‘What preceded and has influenced what?’

   $S_{wh}>O_{wh}$:*PF ban: contiguous homophonous wh-words

   b. Ce a precedat și a influențat ce?
   what has preceded and has influenced what

   $\checkmark S_{wh}>V1>O_{wh}$ & $S_{wh}>V2>O_{wh}$
   $\checkmark$ linear order preserved in both conjuncts

   c. *Ce a precedat ce și a influențat?
   what has preceded what and has influenced

   *$S_{wh}>V1>O_{wh}$ & $S_{wh}>V2>O_{wh}$
   *ordering conflict: $wh_{OBJ}>influențat>wh_{OBJ}$ (Niinuma 2011: 163)

It is very tempting to transfer An’s analysis wholesale to (127). Consider the schematic replica of (127) in (134) below: ((134)a), corresponding to ((127)a), is the only configuration, in which the underlying linear order of the remnant is preserved in the final representation ($vina$ follows the verbs in each conjunct). Predictably, ((127)b) and its simplified rendition in ((134)b) along with the pair ((127)c) and ((134)c) are ruled out, since they result in ordering conflicts, whereby the pronunciation of the remnant in the first conjunct induces a contradiction with the Spellout order in the second conjunct. This would work well if not for one problem: if the “___” indicates the underlying gap of $mnogo$ in each conjunct, then we do have
a ordering paradox, after all: in ((134)a) _mnogo_ both precedes V1 and V2 (by virtue of being in Spec,CP) and follows them if the trace position is identified correctly.

(134)  

a. ✓_mnogo_ li Subj1 V1 ____ _vina_ & Subj2 V2 ____ _vina_  
✓linear order preserved: V1>vina and V2>vina  

b. *_mnogo_ li Subj1 V1 ____ _vina_ & Subj2 V2 ____ _vina_  
*ordering conflict: *_vina_>V2 and V2>vina  

c. *_mnogo_ li Subj1 V1 ____ _vina_ & Subj2 V2 ____ _vina_  
*ordering conflict: *_vina_>V2 and V2>vina  

I seem to have argued myself into the corner. However, just one small amendment in the procedure in (134) will remedy the problem. First, I am assuming that An’s mechanism is correct. The conjuncts are CPs constructed in the separate work spaces. The final procedure _Scan_ determines whether there are any contradictions within the spellout domains and determines the candidates for deletion. Deletion then applies. Following much recent wisdom, I am assuming that LBE is phrasal movement out of NP (Bošković 2005) rather than, e.g., an instance of scattered deletion (Fanselow and Ćavar 1997) or remnant movement (Franks and Progovac 1994). This means that _mnogo_ has to move locally in each conjunct in the manner of ((135)a) and (135)b) (omitting intermediate landing sites). The lower copies of _mnogo_ ‘much’ in CP1 and CP2 are deleted by the regular copy deletion mechanism. Now the spellout order in the conjuncts is fixed: in both cases _mnogo_ ‘much’ precedes the subjects and the verbs; _vina_ ‘wine’, on the other hand, follows both in both conjuncts. Once the two conjuncts are assembled into the final structure ((135)c), the procedure _Scan_ establishes that _vina_ ‘wine’ in CP1 and _mnogo_ ‘much’ must be deleted. This deletion mechanism is unlike the regular copy deletion: it is deletion under identity, which is akin to ellipsis (I am indicating this by highlighting notation in (136)). We then end up with the linear order, demonstrated in (135)c). Observe that it retains the order of the previous spellout cycles, as desired.

(135)  

a. CP2:[_TP_ Sergey [drank [much wine]]] → much [CP Sergey [drank [[much] wine]]]  

91
This concludes my discussion of ATB-movement. The crucial example that seems to be problematic for a variety of existing proposals involves LBE, whereby the remnant can only appear once and only in the lower conjunct. I proposed a unified analysis of Russian LBE ATB movement examples and Romanian wh-ATB pattern that hinges on the constraints imposed by the cyclic spellout mechanism.

2.4 Placement of *li*

While there seems to be a consensus in the literature regarding the base-generation position of the interrogative Y/N-marker *li* (Bošković 2001, Franks and King 2000, King 1994, Rivero 1993, Rudin 1993, a.o., all converge on the notion that *li* is generated in C⁰ in a variety of Slavic languages), there is some controversy regarding the syntactic position of the material that appears before *li* on the surface.
There are two plausible alternatives here: either the pre-
li material is lower than li in syntax (Franks
and King 2000) or it moves to a position above C0 (Bošković 2001). So far, I have been assuming the latter
approach. This section discusses some motivation for this.

Before delving into the details, I should remind the reader of the basic properties of Russian li. In root
polar interrogatives any element can precede li – a verb in ((137)a) or an argument in ((137)b). The pre-li
XP fronting is invariably associated with focus interpretation (King 1994, Franks and King 2000), roughly
corresponding in meaning to English cleft constructions. The neutral interpretation is only possible with
the fronted verb (although contrastive focus is not excluded if the context calls for it), which suggests that
some formal feature may be implicated in the derivations of Y/N questions with preposed verbs.

Furthermore, the Y/N marker li is an enclitic that must appear after the first prosodic word (abbreviated to
W1 here) within its intonational phrase, often causing an apparent splitting of a constituent, just like in
((137)c). Observe that it cannot follow the object NP in ((137)d), as it would presumably lead to a PF
violation, since the W1 requirement is not satisfied.

(137)  a. Pojmal li Fandorin glavnogo zloumyšlennika?
cought Q Fandorin main evildoer

‘Did Fandorin catch the main evildoer?’

b. Fandorin li pojmal glavnogo zloumyšlennika?
‘Was it Fandorin who caught the main evildoer?’

c. Glavnogo li zloumyšlennika pojmal Fandorin?
‘Was it the main evildoer that Fandorin caught?’

d. *Glavnogo zloumyšlennika li pojmal Fandorin?
‘Was it the main evildoer that Fandorin caught?’

With this basic pattern in mind, consider first the analysis I will argue against proposed in Franks and
King (2000). They crucially rely on the mechanism of Prosodic Inversion (PI) developed in Halpern (1992,
1995). Generally speaking, it is an automatic mechanism that applies in PF in the following way. An enclitic

which ends up without a host to its left, as in ((138)b), is automatically placed to the right of the relevant prosodic unit. As conceived, PI is blind to the nature of this potential host or its syntactic properties; as long as the host is heavy enough to support the enclitic, the enclitic is predicted to be able to follow this host. The mechanism has a clear last resort flavor, since it only takes place when there is no host to its left (i.e., no reordering applies in the case of ((138)a)).

(138)  

| a. ✓XP enclitic → nothing happens |
| b. enclitic [XP Yω Zω] |

Prosodic Inversion

Consider now a particular implementation of this analysis for Russian *li*. Franks and King (2000) and Franks (1998) defend the position that in Russian an FP (a projection responsible for focus interpretation) is selected by C⁰, as in ((139)a). The Spec of this projection hosts focalized material. In PF, Prosodic Inversion places *li* after the first stressed word of the XP, as in ((139)c). The reason for this is in (140): had the entire PP moved to Spec, CP, *li* would have a host to its left. Since this is ungrammatical, Franks and King reason that this movement does not take place. To derive (141) with the fronted verb, they suggest the mechanism in ((139)b): in the absence of overt material in Spec, FP, the clitic lowers in PF via PI to the first available prosodic word. In this case, the first prosodic unit is a cluster V⁰+V⁰ on the assumption that V-raising satisfies a [focus] feature on the FP in the absence of XP in its Spec, as shown in ((139)d). The crucial component though is this: if Spec, CP were filled, no PI should take place, as the clitic’s need for a host would be thus satisfied.

(139)  

| a. |
| b. |
Bošković (2001) argues against the PI analysis. Under his proposal, it is $C_0$ itself that is responsible for focus licensing (rather than the lower focus-head); only an element in the checking domain of $li$ (i.e., in its Spec or adjoined to it) can be focused. On this type of analysis, movement in front of $li$ is syntactic with two possible landing sites depending on the nature of the moved element, demonstrated in (142)(a,b). My innovation is a PF-reordering mechanism that derives the surface sequence. An XP has to move to Spec,CP to be $li$ licensed as a focal element: (142)a) is a structure that feeds PF. In PF, the constituent preceding $li$ is parsed into prosodic words. The marker $li$ is placed after the first one. So, in fact, the spirit of this PF-reordering analysis is quite reminiscent of the PI: it moves an element in PF when it has to.

---

22 Actually, this is not precisely the argument he makes for BCS or Bulgarian. His analysis is somewhat more involved. He argues that $li$ in BCS is defective in that it cannot support a Spec, which precludes the possibility of unambiguous phrasal movement to that position. That is how he derives the one prosodic word restriction on $li$. There are additional restrictions with respect to Bulgarian that he discusses, ultimately offering a syntactic analysis as well. Here, I am essentially adopting the spirit of his proposal with a number of modifications. See also King (1994), Rudin (1993), Rudin, King, and Izvorski (1998), a.o. for arguments that $li$ licenses focus.
So, now there are two analyses – the PI analysis (under which the pre-
li element does not occupy the position above C\textsuperscript{0} in syntax) and the modified syntactic analysis, which entails movement to Spec,CP/adjunction to C\textsuperscript{0} with subsequent word order changes in PF. Bošković (2001) provides a number of arguments against the former for a variety of Slavic languages, which I will not review here, save for one curious observation that pertains to the interaction of li with topicalized constituents. Consider the schematic representation of the linear structure in (143). It is a well-established wisdom that in Slavic topicalized constituents (TC) end up very high in the structure, presumably CP-adjoined (Bošković 2001, 2002, Rudin 1993), so higher than li on both analyses entertained here (i.e., in (139) and (142)). Usually topicalized constituents are accompanied by a pause (in Russian they are often introduced by the coordinator a ‘and’).

(143) \[ \text{[XP]}_{\text{TOPIC}} \_\_ li \]

Consider now what predictions the two analyses make. On Franks and King’s structure, we would expect for [XP] \text{TOPIC} to interact with li, insofar as movement to the higher position is deemed a sufficient step in satisfying the requirements of li. This configuration with an unambiguously high XP is expected to provide sufficient prosodic support for the enclitic. The syntactic analysis I am defending makes no such predictions, as movement to Spec, CP/adjunction to C is triggered by the focus/formal feature licensing
requirement, i.e. the movement to pre-

li position is obligatory. TCs, being “given”, cannot be focalized, so they are ineligible to check [focus] on C°.

As it turns out, the interaction of the Y/N marker with a TC is impossible, as (144) demonstrates. The Y/N marker cannot break the TC in ((144)b) nor can it follow the TC in ((144)c). The TC apparently does not count in the calculations of placement of li. The immediate objection from the proponents of the PI camp is that the TCs in the examples below have to be accompanied by a heavy pause, which presumably marks an intonational phrase (I-phrase henceforth, indicated by “#” in the glosses) boundary. So, it is not implausible that li cannot encliticize to a constituent followed by such a boundary (and hence has no other recourse but to lower in PF in the manner of ((139)c)).

(144) a. A ètot čelovek# na ètom li zavode rabotaet?
    and this man on this Q plant works
    ‘And talking about this man, is it this plant that he works at?’

b. *A ètot li čelovek# na ètom zavode rabotaet?

c. *A ètot čelovek# li na ètom zavode rabotaet?

Bošković (2001) observes that topics do not always require pauses, as, e.g., in the Bulgarian examples in (145). Interestingly, even in such cases the TCs still cannot host li (I am following Bošković’s gloss convention by indicating the TC with T in (145)).23 The only possible way to render ((145)a) grammatical is by fronting the verb to the pre-li position in the manner of ((145)b). Now a PI analysis along the lines of (140) has no way out: there is no interfering intonational phrase boundary between kolata and li. The former is higher than li, so it ought to serve as a licit host, yet the sentence is bad, contrary to the predictions.

(145) a. *KolataT li prodade Petko včera?
    car-def Q sold Petko yesterday
    [Bulgarian]
    ‘As for the car, did Petko sell it yesterday?’

---

23 This, incidentally, distinguishes li from pronominal clitics in Bulgarian: the latter can be supported by TCs.
b. Kolata prodade li Petko včera?

In fact, Russian behaves in a similar way with respect to TCs: not all contexts necessitate a pause between a topic and the word following it. For example, (146) with the topic preposed before the wh-word is perfectly fine without the hiatus that accompanies the TC in (144): here the main pitch accent falls on the stressed vowel of the topicalized noun (the “_” encodes the absence of the long pause; the latter I take to be indicative of the I-boundary).24 This then establishes that TCs do not in principle require an I-boundary in Russian.

(146) [It is known that Modest and Erast sold their cars. It has been already ascertained when Modest sold his car. The speaker may then ask the following.]

A ÈrAst kögda prodal mašinu?
and Erast when sold car
‘And as for Erast, when did he sell the car?’

Now consider the Y/N environment in (147): the only two felicitous questions that can be asked in this context are in (a) and (b). The former involves a li Y/N-question strategy. Here, the I-boundary after the TC is required. On the other hand, the intonational strategy in (b) does not entail an obligatory pause after the TC. The example in ((147)c) is identical to Bulgarian ((145)a): li cannot follow the TC (and that is despite the fact that the TC does not require an I-boundary, as (b) demonstrates). Finally, (d) reconfirms the

24 The following is also possible, of course. If there is a pause after the TC, then the main pitch accent is reassigned to the stressed syllable of kögda.

(i) A ÈrAst kögda prodal mašinu?
and Erast when sold car
‘And as for Erast, when did he stop by?’

Preliminary measurements indicate that the difference between (i) and (146) is quite significant: the pause in examples like (i) in this footnote (and those marked with “#” in the subsequent discussion) is on average twice as long as that in (146). Likewise, the impressionistic pitch variations that I am reporting are confirmed by the instrumental measurements.
point already made: the pause is obligatory after a TC and before the $V+li$ sequence. All these generalizations are summarized in (148).

(147)  [It is known that Modest and Erast were planning to sell their cars. It has been ascertained that Modest has already sold his. The speaker may then ask either (a) or (b), but not (c) or (d).]

   a. A Ėrast$_T$# prodal li mašinu?
       and Erast sold Q car
       ‘And as for Erast, did he sell the car?’
   b. A Ėrast$_T$ prodal mašinu?
   c. *A Ėrast$_T$ li prodal mašinu?
   d. *A Ėrast$_T$ prodal li mašinu?

(148)  a. TC # $V$ li NP $\rightarrow$ required # [li Y/N-formation strategy]
   b. TC (#) $V$ NP $\rightarrow$ optional # [intonation Y/N-formation strategy]
   c. *TC li $V$ $\rightarrow$ li after TC is impossible

In fact, there are a few additional tests that can aid in determining whether the I-boundary is present. One such test is proposed for BCS in Radanović-Kocić (1988, 1996). She shows that degemination is blocked by the I-phrase boundary. Since there is no I-boundary in (149) between the possessive and the noun, degemination is possible. On the other hand, the heavy PP in (150) precludes degemination, which is taken to be indicative of the I-boundary.

(149)  Moj jorgan je od perija. [✓mojorgan]
       my sweater is of down
       ‘My sweater is made of down.’
The same test can be applied to Russian with the following result. In the contexts that are reported above to require an I-boundary (i.e., TC# V li string), degemination is likewise prohibited, as shown in (151). This contrasts with the no-li Y/N question in (152), where degemination is apparently possible for some speakers.

(151) A Andrej /j/est malinu? [✓andrejjest; OK for some andrejest]
and Andrey eats raspberries
‘Does Andrey eat raspberries?’

(152) A Andrej# /j/est li malinu? [✓andrejjest; *andrejest]
and Andrey eats Q raspberries

Finally, there is another test that shows that we are dealing with two intonational phrases in (152), but only one in (151). Consider the simplified pitch contour pattern in (153). In ((153)a) one pitch peak is possible: it is assigned to the stressed syllable of the verb. But in ((153)b) with V+li complex following TC two pitch peaks are required – one per I-boundary. The pitch contour of ((153)a) with one peak is impossible for sentences with li in ((153)c).

(153)     
H
a. A Èrast prodal mašinu? [TC V NP: ✓1 H]
and Erast sold car
      H   H
b. A Èrast# prodal li mašinu? [TC V li NP: ✓2 H]
and Erast sold Q car

100
These data strongly militate against the PI treatment of the kind in (139). If the I-boundary is optional after TCs in root interrogatives without *li, then such TCs are predicted to be able to serve as prosodic hosts for *li. So the degraded status of ((148)c) on this analysis is unexplained.

My analysis, on the other hand, handles the facts in a straightforward way. Consider the derivation of ((147)a) shown in (154): an element is required to move to Spec, CP or adjoin to C₀ in syntax. TCs are not eligible to occupy Spec, CP, since this is a focus licensing position (being “given”, they cannot check the [focus] feature of C₀). The syntactic output of ((147)a) is provided in ((154)a). No reordering is necessary here, since *li already has a prosodic host to its left (viz., the verb). The I-boundary is then automatically inserted before this unit to ensure that the W₁ restriction on *li is satisfied, as sketched in ((154)b). The automatic I-boundary insertion rules out examples like ((147)d): they are bad because # insertion fails.

(154) a. Syntax: [CP [A Èrast] [CP [prodal+li [t₁ t₁] prodal mašinu]]]? [=((147)a)]

and Erast sold+Q car

b. PF: [A Èrast] [eenprodal] li [...] 
^automatic insertion of # ^host available: no reordering

The ungrammatical ((147)c), with the derivation in (155), is ruled out in syntax. Since nothing moves to Spec,CP (or adjoins to C₀), the derivation crashes independent of any PF requirements.²⁵

(155) Syntax: [CP [A Èrast] [CP [ ____ li [t₁ prodal mašinu]]]? [=*((147)c)]

and Erast Q sold car

^nothing moves to pre-*li; ruled out in syntax

²⁵ This requirement to move overtly to Spec, CP/C₀ may, in fact, be explained in terms of obligatory overt focus association in Russian. This property of *li is entirely akin to the behavior of toľ′ko ‘only’ and overt contrastive focus markers -tožě. The focalized XP-associate must be adjacent to all these elements. See Chapter 4 of this dissertation for an extensive discussion of focus association in Russian.
Finally, the paradigm in (144) can be captured by the same mechanism: on my analysis, ((144)a) has the derivation in (156). The constituent na ètom zavode ‘on this plant’ can check the focus feature of li, so it moves to Spec, CP, as in ((156)a). In PF, li is reordered after the first word. This is followed by the automatic I-boundary insertion after the TC. Now the prosodic requirements of li are satisfied, as it appears after W1 within its intonational phrase.

(156) a. Syntax: [CP[A ètot čelovek]1[CP[na ètom zavode]2[ li [t1 rabotaet t2]]]?

and this man on this plant Q works

b. PF: [_[æA ètot] [_[æčelovek]]]# [_[æNa ètom] [_[æzavode] li [...] \^automatic insertion of # PF reordering]

The examples in ((144)b,c) are ruled out for the same reason ((147)c) is: the derivation crashes in syntax, since nothing moves to Spec, CP/adjoins to C, as shown in (157).

(157) Syntax: [CP[A ètot čelovek]1[CP[ li [t1 rabotaet [ na ètom zavode]2]]]? and this man Q works on this plant

*: nothing moves to Spec, CP/adjoins to C

With this analysis in place, let us return to the HWh configurations with fronted arguments/verbs in (158), repeated from ((11)a,b). Recall that on my analysis the missing obligatory element leads to the observed ungrammaticality in these examples. The analysis in the nutshell is as follows: an element merged in the first conjunct and appearing in pre-li position has not been merged in the second conjunct, hence the deviant status of such sentences.

Given the discussion here, we have an alternative derivation that would rule out ungrammatical strings involving arguments and verbs in pre-li positions. On the assumption that non-quantified arguments target Spec,CP and verbs adjoin to C, ATB movement would result in the configurations (159). The problem with (159) is obvious: the XP arguments/verbs do not c-command their traces in the second conjunct. So, none of these elements can move to pre-li positions in syntax. Hence, (158) incurs the same violation as
(157). Observe also that the introduction of TCs in (160) has no effect on the grammaticality status of ((158)a,b), much like in the cases of root interrogatives discussed above and for precisely the same reason.

(158) a. *Daril li i kogda Ivan Lena cvety?
\hspace{1em} \text{gave Q and when Ivan Lena_{DAT} flowers_{ACC}}
\hspace{1em} \text{Intended: ‘Did Ivan give flowers to Lena, and when did he give her the flowers?’}

b. *Ivan li i kogda daril Lena cvety?
\hspace{1em} \text{Ivan Q and when gave Lena_{DAT} flowers_{ACC}}

(159) a. 
\hspace{1em}
\hspace{1em}
\hspace{1em}CP_1
\hspace{1em}BP
\hspace{1em}CP_1
\hspace{1em}B
\hspace{1em}V+li
\hspace{1em}wh...tV

\hspace{1em}b. 
\hspace{1em}
\hspace{1em}
\hspace{1em}CP_1
\hspace{1em}BP
\hspace{1em}CP_1
\hspace{1em}B
\hspace{1em}XP
\hspace{1em}li
\hspace{1em}wh...tXP

(160) a. *A Ivan# daril li i kogda Lena cvety?
\hspace{1em} \text{And Ivan gave Q and when Lena_{DAT} flowers_{ACC}}
\hspace{1em} \text{Intended: ‘As for Ivan, did he give flowers to Lena, and when did he give her the flowers?’}

b. *A Lena# Ivan li i kogda daril cvety?
\hspace{1em} \text{and Lena_{DAT} Ivan Q and when gave flowers_{ACC}}

The felicity of adjuncts in pre-\textit{li} positions in HW\textit{h} question follows as well: they need not be present in CP₂, hence their movement to Spec, CP₁ causes no problems in syntax (there is no trace to bind in the second conjunct) or in PF.

Finally, the quantifiers are argued to QR to the higher segment of CP₁, as shown below. From this position the QNP can bind both traces. Since nothing else can move to the pre-\textit{li} position in such configurations (cf. (158)/(159)), the only recourse for \textit{li} is to be prosodically supported by the QNP.
Notice that on the analysis above only quantified expressions and TCs can adjoin to CP. This higher position is inaccessible to non-quantified XPs and verbs, as summarized in TABLE 2. The question is why is it impossible to extract the verbs and non-quantified arguments in the manner of QNPs?

TABLE 2. INTERMEDIATE SUMMARY

<table>
<thead>
<tr>
<th>Pre-li position</th>
<th>Type of element</th>
<th>Host for li?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Spec,CP</td>
<td>Non-quantified XPs</td>
<td>yes</td>
</tr>
<tr>
<td>b. Adjunction to C^0</td>
<td>Verbs</td>
<td>yes</td>
</tr>
<tr>
<td>c. Adjunction to CP</td>
<td>QNPs</td>
<td>yes</td>
</tr>
<tr>
<td>d. Adjunction to CP</td>
<td>TCs</td>
<td>no</td>
</tr>
</tbody>
</table>

The checking domain of li includes three positions – Spec,CP, adjunction to C^0 and adjunction to CP headed by li (Chomsky 1995). Bošković (2001) argues that certain configurations are not available to drive movement (see fn. 22). He observes that in BCS the li-construction with the preposed non-quantified elements sounds distinctly antiquated: for many speakers only verbs and wh-words (as in ((162)a) with the interpretation approximating the provided English translations) can appear in pre-li slots. In Russian, too, the li-construction is in the process of becoming obsolete. Unlike its South Slavic counterparts, e.g., the Russian pre-li position cannot tolerate wh-words (cf. ((162)a) and ((162)b)). This I take as support for Bošković’s idea that not all checking configurations are available to drive movement – viz., none are accessible to wh-phrases. In a similar vein, I propose that CP-adjunction is a configuration that cannot drive...
feature checking movement. Hence, non-quantified XPs and Vs can only move to Spec,CP and adjoin to C⁰, respectively.

(162)  

a. Koga li Petar voli?  
who Q Peter loves  
‘Who on Earth does Peter love?’  
(Bošković 2001: 26)  

b. *Kogo li Petja ljubit?  
who Q Peter loves  

It has long been observed that QR is not a feature-driven operation (Fox 2000, Kennedy 1997), as it is a free adjunction operation, not triggered by an “attracting” head.²⁶ So, QR is the only operation that drives adjunction to CP. Now the crucial point is this: a QR’ed QNP is still in the checking domain of li. In other words, though adjunction to CP is not available to drive movement for feature checking, it is still the position, in which features can be checked.

This is summarized below. Since adjunction to CP is not available to drive feature checking movement, verbs and non-quantified expressions can target only lower positions. For this reason they cannot participate in HWh questions, as they end up too low to c-command their traces in both conjuncts. Independently a QNP can be adjoined to CP via QR, ending up in the checking domain of C⁰ and can serve as eligible hosts for li. Of course, TCs are unable to check the features of C⁰: in the absence of other material in the pre-li position, such configurations fail to converge in syntax.

²⁶ But see Hornstein (1995) for arguments that QR is reducible to independently necessary A-movement. Beghelli & Stowell (1997) likewise argue that QR is feature driven, whereby different quantifier types have specially designated positions.
Given the above consider again the fully grammatical sentences in (100)–(103) repeated below. The odd-numbered examples show the behavior of HWh questions, and the even-numbered ones are the examples of ATB extractions. As I demonstrated earlier, certain quantifiers are more amenable to LBE than others in both contexts: *mnogo*, e.g., tolerates LBE just fine, as in ((163)a) and ((164)a), but *každyj* does not, as ((165)a) and ((166)a) show. Both quantifiers are fine, however if the entire QNP is pied-piped to the edge of the clause, as attested by the (b)-examples below. I suggest that the LBE examples unsurprisingly involve LBE, derived by extracting only the part that appears before *li* (for the precise mechanism deriving such strings see Section 2.3.3). In (b) examples, on the other hand the entire QNP undergoes movement to the edge of CP.

(163)  
a. Mnogo li i kto prines [ __ vina] na večerinku? [HWh]
much Q and who brought wine to party

‘Was it lots of wine that somebody brought to the party, and who brought lots of wine to the party?’

b. Mnogo li vina i kto prines [ ___ ] na večerinku?
much Q wine and who brought to party

(164)  
a. Mnogo li Ivan prines __, a Sergey vypil __ vina? [ATB]
much Q Ivan brought and Sergey drank wine
‘Was it lots of wine that Ivan brought and Sergey drank?’

b. Mnogo li vina Ivan prines __, a Sergej vypil __?
much Q wine Ivan brought and Sergey drank

(165) a. ??Každoho li i kto poxvalil na vystavke __ učastnika? [HWh]
each Q and who praised on exhibition participant
‘Was it each participant that somebody praised at the exhibition, and who praised each participant?’

b. Každoho li učastnika i kto poxvalil __ na vystavke?
each Q participant and who praised on exhibition

(166) a. ??Každoho li na vystavke Ivan poxvalil __, a Maša osudila [ATB]
each Q on exhibition Ivan praised but Masha denounced
__ učastnika?
participant
‘Was it each participant Ivan praised and Masha denounced?’

b. Každoho li učastnika Ivan poxvalil __, a Maša osudila __
each Q participant Ivan praised but Masha denounced
na vystavke?
on exhibition

The sample derivation is in (167): (167)b is the output of syntactic operations. In PF, li undergoes reordering to the left in order to be supported by the first prosodic word. The same mechanism applies to all the (b) examples in (163) – (166).
This is a good juncture to track the logic of my argumentation again, summarized in the flowchart below. In the beginning of this chapter I demonstrated that non-quantified arguments and verbs are excluded in pre-*li* positions in HWh questions. This was initially couched in terms of argument structure preservation, as the appearance of these obligatory elements before *li* signals that something obligatory is missing in the second conjunct.

In this section I argued for an alternative derivation whereby the “missing” element ends up in a position from which it cannot c-command its trace in the second conjunct. The proposal has to do with the inaccessibility of CP-adjunction for feature checking movement in Y/N questions in Russian. QR, however, is different. The quantified argument moves out of both clauses and adjoins to the higher CP segment (a step motivated on independent grounds). As such, this raised QNP is still in the checking domain of the complementizer; and it serves as the only available host that is accessible to *li*. So, on the PF side there is no choice but to pronounce the result of the QR to support *li* in compliance with other restrictions on *li* (i.e., reordering it where necessary).
I will conclude in the same vein that I started: HWh questions are problematic for the PI analysis of the kind I have considered here. Given Franks and King’s (2000) account of W1 restriction, it is impossible to get the right surface order in ((167)a) because of the height of adjunction.

Furthermore, there seems to be no principled way to derive the difference between the behavior of QNPs and non-quantified arguments in HWhs (and ATB questions), if lowering is the mechanism responsible for the placement of li in both (158) and, e.g., ((163)a).

Therefore, I conclude that Y/N questions in Russian are derived via syntactic movement to pre-li positions. The moved constituent may be split in PF via the mechanism of PF reordering, whereby li is placed after the first prosodic word. This conspiracy of licit syntactic operations and PF requirements explains an aggregate of facts, including root Y/N questions, the behavior of topicalized constituents in such environments, and the pattern found in HWh questions.
2.5 Conclusion

In this chapter I explored the properties of HWh questions, cataloguing the ways in which they diverge from their non-coordinated counterparts. I argued that HWh questions are underlyingly biclausal, with surface strings derived via TP-ellipsis in the first conjunct. The main distinction between HWh questions and root Y/N questions has to do with the material that can appear in pre-li positions. As it turns out, the pre-li position is more restricted in HWh questions. The following table demonstrates possible configurations in HWh interrogatives:

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Adjunct li &amp; wh</td>
<td>OK</td>
</tr>
<tr>
<td>(2) Non-quantified argument li &amp; wh</td>
<td>?*</td>
</tr>
<tr>
<td>(3) V li &amp; wh</td>
<td>*</td>
</tr>
<tr>
<td>(4) Quantified argument li &amp; wh</td>
<td>OK</td>
</tr>
</tbody>
</table>

The observed asymmetry between pre-li adjuncts vs. arguments/verbs is due to the preservation of argument structure in both conjuncts: HWh questions are licensed only if both conjuncts contain all the obligatory elements. This was further shown to be contingent on the positions that such elements target: non-quantified XPs can be extracted to Spec,CP, while verbs adjoin to C₀ in both root polar questions and HWh questions. This, in turn, leads to syntactic violations, as such configurations ensure that the trace of the extracted element in the second conjunct is not c-commanded. Since adjuncts are not required by the argument structure of the predicate, they need not be present in the second conjunct, hence are licit in pre-li positions.

The behavior of quantifiers is a consequence of QR, which proceeds in an ATB-fashion out of both conjuncts. Several arguments were given for QR in Russian. First, the very fact that only quantified arguments are licit in pre-li positions suggests that the mechanism underlying their derivations is distinct from that involving non-quantified elements. Second, just like in cases of “normal” QR, the extraction of the quantified NPs in HWh questions cannot take place over a tensed clause boundary (in the absence of...
the potential scope inducing element). Finally, quantified NPs pattern with wh-words (rather than non-quantified arguments) in wh-island environments. The unusual adjunction site of QNPs in the hybrids (higher segment of CP) is derived from the conspiracy of two factors: Scope Economy in conjunction with locality constraints (the QNP is predicted to raise over the scope inducing element, a wh-word in HWh environments). In addition, the QNP must be extracted to a position from which it can c-command its traces in both conjuncts.

The movement of QNPs in such contexts was argued to proceed in an ATB fashion. In coordinated contexts QR proceeds just like wh-movement: the extraction has to take place out of both conjuncts. Second, the binding facts suggest that the QNP must have been local at some point to its binder/bindee to bind the anaphoric possessive. Third, LBE extractions in HWh questions and “standard” ATB sentences pattern together. In this property they are distinct from root Y/N-interrogatives. Finally, locality violations cannot be repaired by ellipsis in the first conjunct; it follows, therefore, that the QNP is extracted out of the second conjunct as well. My analysis bears on the conception of ATB-movement. I have pointed out a few problems for existing treatments based on the LBE patterns: the issue has to do with developing a mechanism that would accommodate the possibility of LBE and the restrictions on the placement of the remnant in such configurations. I proposed a unified analysis of Russian LBE ATB-sentences and Romanian ATB constructions, based on the mechanism of cyclic linearization.

I also discussed the properties of the Y/N-marker *li* in conjunction with two types of analyses: the Prosodic Inversion approach and the syntactic movement analysis. I argued against the former, opting instead for a syntactic treatment. On the analysis developed here the elements move overtly to pre-*li* positions in syntax. I further showed that the positions available for such movement are restricted: CP-adjunction being the configuration unavailable to drive movement. The possibility of quantified expressions to adjoin to CP hinges on QR. A PF reordering mechanism, a variety of Last Resort, then places the Y/N-enclitic after the first prosodic word by moving it to the left where necessary. In addition to capturing the behavior of *li* in HWh constructions, this mechanism also explains the behavior of Topicalized Constituents in polar interrogatives.
Chapter 3. Reverse Hybrid Wh-Coordination

3.0 Introduction

Chapter 2 dealt with HWh questions like (1), argued to be underlyingly biclausal. I showed that the conjuncts are coordinated at the level of CP. The TP in the first conjunct undergoes ellipsis. In the first conjunct the presence of *li* requires indefinite pronoun construal of the wh-word, while in the second conjunct it is understood as a true wh-word. I demonstrated that, in contrast to root polar interrogatives, the position before *li* is restricted: it can accommodate only quantifiers and adjuncts.

(1) a. Skoro *li* i *kto* pridet?
soon Q and who comeFUT
‘Will someone come soon and who will come?’

b. Vsem *li* i kogda budut davat’ kompensaciju? [www]
allDAT Q and when will3.PL to.give compensation
‘Is it to all that they will distribute remuneration, and when will they distribute the remuneration?’

The analysis for (1) is sketched in (2). Recall that non-quantified expressions and verbs are ineligible in pre-*li* positions for one of two reasons: either (i) they are not merged in the second conjunct at all (which results in a deviant argument structure) or (ii) since they can only be extracted to Spec CP₁/adjoined to C₁₀, their traces cannot be bound in the second conjunct. Adjuncts are free to appear in the pre-*li* position in the higher conjunct, because they are not required by the argument structure of the predicates, as in ((2)a). Quantifiers, on the other hand, move in an ATB-fashion out of each conjunct to adjoin to the higher segment of CP. The operation that drives this movement is QR. From this position the QNP can bind its traces in both conjuncts.
This chapter is dedicated to constructions like (3), which looks remarkably similar to the HWh configuration in (1). The obvious point of divergence pertains to the order of the relevant elements: in (1) the wh-word appears before the Q-marker (\textit{li}), whereas (3) evinces a permutation of this order. I will refer to such examples as reverse hybrid wh-questions (rHWh). Apart from this superficial distinction, schematized in (4), a number of restrictions operate in rHWh contexts which are not found in the “regular” hybrids.

(3) Kto i skoro li pridet?
who and soon Q come

(4) a. HWh: [ ___ \textit{li} ] \& [wh…]
b. rHWh: [wh… ] \& [ ___ \textit{li}]

As it turns out, the apparent similarity between the two constructions is not symptomatic of identical derivations. An aggregate of facts sets rHWhs apart from their “regular” counterparts.

First, the position before \textit{li} is even more restricted for rHWh than for HWh questions. Second, within the rHWh class a distinction is warranted between the sentences with D-linked wh-phrases (\textit{which}-phrases henceforth for ease of reference) and non-D-linked wh-phrases (\textit{who}-phrases). Both will be ultimately shown to be biclausal; the dissimilarity lies in the ultimate syntactic position that the wh-phrase occupies.
and the type of the null element involved in the second conjunct. As (5) demonstrates, the pre-\textit{li} position can tolerate quantifiers and adjuncts in the presence of a \textit{which}-phrase; on the other hand, only adjunct are felicitous in pre-\textit{li} positions with \textit{who}-phrases.

(5)  

\begin{align*}
\text{a. } & \text{[which-phrase } \& \_\_ \text{ li...]} \\
& \quad \Wedge \\
& * \text{ Verbs} \\
& ? \text{ Arguments} \\
& \checkmark \text{ Quantifiers} \\
& \text{ } \\
\text{b. } & \text{[who-phrase; ] } [\& \_\_ \text{ li...<who>}_1\ldots] \\
& \quad \Wedge \\
& * \text{ Verbs} \\
& ?* \text{ Arguments} \\
& ?* \text{ Quantifiers} \\
& \checkmark \text{ Adjunct}
\end{align*}

Before I delve into the details of the proposals and the data, I briefly sketch the analysis I will be defending in this chapter. Both types of rHWh have a biclausal structure with TP-ellipsis in the first conjunct. The derivation for examples like ((5)a), involving a fronted \textit{which}-phrase, is given in ((6)a). The behavior of \textit{which}-phrases in such constructions is assimilated to that of left-dislocated (topicalized) constituents (TCs) in that they target a high CP-adjoined position as is standardly the case for TCs (Rudin 1993). The \textit{wh}-phrase in such cases is extracted in the ATB-fashion out of each conjunct. The rHWhs in ((5)b) are derived as in ((6)b). The crucial difference between ((6)a) and ((6)b) is rooted in the nature of the element in the second conjunct: with non-D-linked wh-words it is essentially a null wh-indefinite, but with D-linked wh-words it is a trace variable.

(6)  

\begin{align*}
\text{a. } & \text{[[CP Kakoj student}_1 [TP t}_1 \text{ pridget]] [BP i skoro li } t}_1 \text{ pridget]?} \\
& \quad \text{which student } \text{come}_{FUT} \text{ and soon } Q \text{ come}_{FUT} \\
& \quad \text{‘Which student will come and will he come soon?’} \\
\text{b. } & \text{Kto}_1 [\_\text{skoro } t}_1 \text{ pridget] i skoro li } <\text{kto}>_1 \text{ pridget?} \\
& \quad \text{who soon } \text{come}_{FUT} \text{ and soon } Q \text{ who } \text{come}_{FUT}
\end{align*}
The fact that we are dealing with two distinct patterns and slightly different analyses suggests the organization of the chapter. I will first consider the behavior of rHWh questions with fronted who-phrases (Section 3.2). The section has some bearing on the general properties of wh-indefinites, their licensing requirements, semantics of questions, and restrictions on ellipsis. I then turn to the distribution of rHWhs with which-phrases (Section 3.3). This part of the chapter also includes a discussion of the behavior of topicalized constituents in various environments, a few observations regarding the nature of argument drop in Russian and ellipsis in quantified contexts. Section 3.4 is the conclusion. But first I present the core empirical base of this chapter in the next section.

3.1 rHWh questions: basic facts

The goal of the section is to present a set of facts demonstrating the split between rHWh configurations involving two kinds of wh-phrases, as schematized in (5). A few words of warning are necessary before I proceed. These constructions are not particularly ubiquitous, so there is some variation among speakers as to how willing they are to accept them. Some speakers, for example, can judge these sentences only when they are embedded. For many speakers, the sentences with D-linked wh-words are acceptable only if there is a pause that accompanies the wh-phrase. What I am reporting here is more or less the consensus opinion. For the most part I will not be providing the embedded contexts in my glosses to avoid emcumbering the dataset with extraneous information. It should be kept in mind, however, that my arguments extend to both embedded and root rHWhs. The same caveat holds of the “#”-notation (which indicates a pause) in the examples with which-phrases. Though I will not indicate it consistently throughout the chapter, my analysis, in fact, accommodates this pause requirement.

The paradigms in (7) – (9) show what happens when an adverbial adjunct is merged in the position preceding li. The examples in (a) all implicate argument who-phrases (in nominative, accusative, and dative in ((7)a), ((8)a), and ((9)a), respectively). The rHWh configurations with fronted which-phrases are provided in (b), replicating the case assignment pattern (nominative in ((7)b), accusative in ((8)b), and
The felicity of such examples then demonstrates that the configurations where the element preceding $li$ is an adjunct tolerate all manner of argument wh-phrases, whether they are D-linked or not.

(7) a. Kto i skoro li pridet?
   who\textsubscript{NOM} and soon Q come
   ‘Who will come and will somebody come soon?’

   b. Kakoj student i skoro li pridet?
   [which student]\textsubscript{NOM} and soon Q come
   ‘Which student will come and will he come soon?’

(8) a. Čto i naročno li zdes’ opjat’ razlil Ivan?
   what\textsubscript{ACC} and on.purpose Q here again spilled Ivan
   ‘What did Ivan spill here and did he spill something on purpose?’

   b. Kakuju knigu i naročno li porval rebenok?
   [which book]\textsubscript{ACC} and on.purpose Q tore child
   ‘Which book did the child tear, and did he tear it on purpose?’

(9) a. Komu i davno li dekan postavil dvojku?
   whom\textsubscript{DAT} and long.time.ago Q dean gave F
   ‘To whom did the dean give an F and did he give it to somebody a long time ago?’

   b. Kakomu studentu i davno li dekan postavil dvojku ?
   [which student]\textsubscript{DAT} and long.time.ago Q dean gave F
   ‘To which student did the dean give an F and did he give it to him a long time ago?’

In addition to argument wh-phrases, adjunct wh-phrases can be likewise preposed whenever the pre-$li$ position is occupied by an adverbial adjunct, producing completely acceptable surface strings: ((10)a) implicates a who-phrase, while ((10)b) – a which-phrase.
(10) a. Kogda i naročno li on porval etu knigu?
when and on.purpose Q he tore this book
‘When did he tear this book, and did he tear this book on purpose?’
b. V kakom otdele i davno li ty pokupala eti polzunki?
in which department and long.time.ago Q you bought this onesie
‘In which department did you buy this onesie and did you buy this onesie a while ago?’

The data above are summarized in (11).

(11) Generalization 1. Contexts in (i) with a pre-\textit{li} adverbial adjunct tolerate any type of wh-phrase.

\begin{align*}
  &\text{(i) wh…} & \text{\& ADJUNCT li …?} \\
  &\checkmark \text{non-D-linked argument/} & \checkmark \text{non-D-linked adjunct} \\
  &\checkmark \text{D-linked argument/} & \checkmark \text{D-linked adjunct}
\end{align*}

The second obvious environment to test involves the pre-\textit{li} arguments and verbs. Recall that neither are licit in HWh questions. As it turns out, the pattern is maintained for rHWhs, as demonstrated below. The worst examples involve the pre-\textit{li} verbs, as in (12). The most degraded sentence in the set below contains a preposed \textit{who}-phase in nominative case in ((12)a), while the least deviant instantiation is evinced by ((12)f) with a dative \textit{which}-phrase. Furthermore, there is a slight difference between \textit{who}-phrases and \textit{which}-phrases in the configurations with pre-\textit{li} verbs: viz., the rHWhs with D-linked wh-elements sound slightly better to my informants. Still, their status is incomparable to the fully grammatical examples in (7)–(10).

(12) a. *Kto i prineset li nam podarki?
who\textsc{nom} and bring Q us\textsc{dat} presents
Intended: ‘Who will bring us presents, and will someone bring us presents?’
b. ?*Kakoj student i sdal li ěkzamen professoru Petrovu?
[which student]\textsc{nom} and passed Q exam professor\textsc{dat} Petro\textsc{vdat}
Intended: ‘Which student passed Professor Petrov’s exam, and did he pass Professor Petrov’s exam?’

c. *Čto i prineset li nam papa?

what<sub>ACC</sub> and bring Q us<sub>DAT</sub> dad

Intended: ‘What will dad bring us, and will he bring us something?’

d. ?*Kakoj èkzamen i sdal li Ivan professoru Petrovu?

[which student]<sub>ACC</sub> and passed Q Ivan professor<sub>DAT</sub> Petrov<sub>DAT</sub>

Intended: ‘Which exam has Ivan passed with Professor Petrov, and did Ivan pass some Professor Petrov’s exam?’

e. ?*Komu i prineset li papa podarki?

What<sub>DAT</sub> and bring Q dad<sub>NOM</sub> presents<sub>ACC</sub>

Intended: ‘To whom will dad bring presents, and will he bring someone presents?’

f. ???Kakomu professoru i sdal li Ivan èkzamen?

[which professor]<sub>DAT</sub> and passed Q Ivan<sub>NOM</sub> exam<sub>ACC</sub>

Intended: ‘Which professor’s exam has Ivan passed, and did Ivan pass some professor’s exam?’

No improvement in the contexts involving pre-<i>li</i> verbs in rHWh configurations is observed when the wh-phrase is an adjunct, as demonstrated by (13).

(13) a. *Kogda i prineset li nam papa podarki?

when and bring Q us<sub>DAT</sub> dad<sub>NOM</sub> presents<sub>ACC</sub>

Intended: ‘When will dad bring us presents, and will he bring us presents some time?’

b. *V kakom otdele i pokupala li ty ëti polzunki?

in which department and bought Q you this onesie

Intended: ‘In which department did you buy this onesie and did you buy this onesie in some department?’

118
The pattern of ungrammaticality is maintained with wh-arguments of all flavors (nominative in (a)/(b), accusative in (c)/(d), and dative in (e)/(f), each pair instantiating a who-/which-phrase configurations), when the pre-
li position is occupied by a non-quantified argument.

(14) a. ?*Kto i vino li zdes’ opjat’ razlil?
   whom_{NOM} and wine_{ACC} Q here again spilled
   Intended: ‘Who spilled wine here again and was it wine that someone spilled here?’

b. ?*Kakoj student i dvojku li polučil?
   [which student]_{NOM} and F_{ACC} Q got
   Intended: ‘Which student got an F, and was it an F that some student got?’

c. ?*Čto i Ivan li zdes’ opjat’ razlil?
   what_{ACC} and Ivan_{NOM} Q here again spilled
   Intended: ‘What did Ivan spill here and was it Ivan that spill something here?’

d. ?*Kakuju knigu i rebenok li porval?
   [which book]_{ACC} and child_{NOM} Q tore
   Intended: ‘Which book did the child tear, and was it the child who tore it?’

e. ?*Komu i dvojku li dekan postavil?
   whom_{DAT} and F_{ACC} Q dean gave
   Intended: ‘To whom did the dean give an F and was it an F that he gave to somebody?’

f. ?*Kakomu studentu i dvojku li dekan postavil?
   [which student]_{DAT} and F_{ACC} Q dean gave
   Intended: ‘To which student did the dean give an F and was it an F that he gave to some student?’

There is a slight contrast between adjunct D-linked and non-D-linked phrases whenever the non-
quantified arguments occur before li: the former are rather deviant, as ((15)a) shows, but the latter provided
in ((15)b), are a little better.
(15) a. *Kogda i papa li nam prineset podarki?
    when and dad Q us\textsubscript{DAT} bring presents\textsubscript{ACC}

    Intended: ‘When will dad bring us presents, and will it be dad that will bring us presents
    some time?’

b. ???V kakom otdele i mama li polzunki pokupala?
    in which department and mom Q onesie bought

    ‘In which department did mom buy this onesie and was it this onesie that mom bought
    in some department?’

(16) \textit{Generalization} 2. A. Contexts in (i) with pre-\textit{li} verbs do not tolerate any type of
    wh-phrase.

    \begin{itemize}
    \item[(i)] *wh… \& \ VERB li …?
    \end{itemize}

    *non-D-linked argument/ *non-D-linked adjunct
    ?*D-linked argument/ ?*D-linked adjunct

    B. Contexts with pre-\textit{li} arguments in (ii) only tolerate adjunct \textit{which}-phrases
    and nothing else.

    \begin{itemize}
    \item[(ii)] wh… \& \ ARGUMENT li …?
    \end{itemize}

    ?*non-D-linked argument/ ?*non-D-linked adjunct
    ?*D-linked argument/ ?*D-linked adjunct

Finally, the most obvious point of divergence appears in the contexts where the pre-\textit{li} element in the
second conjunct is a quantified expression. The generalization is thus: D-linked wh-phrases are significantly
better than their non-D-linked counterparts in rHWh contexts. The data below are organized in the
following way: there are three batches of facts divided according to the argument status of the initial wh-
phrase (subjects in (17), direct objects in (18), and indirect objects in (19)). Each grouping is further split
according to the type of the wh-phrase (\textit{who}-phrases are in (a)/(c) and \textit{which}-phrases are in (b)/(d)).
Furthermore, to demonstrate that the pattern holds for a variety of quantified expressions, each numbered
entry includes two types of quantifiers in the positions preceding \textit{li}. Tested here are the “usual” suspects,
i.e., the quantifiers that can participate in HWh questions.
Nominative wh-phrases

(17) a. *?Kto i každomu li rebenku prines podarok?

who_{NOM} and each_{DAT} Q child_{DAT} brought present

Intended: ‘Who brought a present to each child and was it to each child that somebody brought a present?’

b. ?Čej papa i každomu li rebenku podaril po igruške?

[whose dad]_{NOM} and each_{DAT} Q child_{DAT} gave for_{DIST} toy

‘Whose dad gave each child a toy, and was it to each child that he gave a toy?’

c. *?Kto i vse li èkzameny zavalil?

who_{NOM} and all_{ACC} Q exams_{ACC} failed

Intended: ‘Who failed all the exams and was it all the exams that somebody failed?’

d. ?Kakoj student i vse li èkzameny zavalil?

[which student]_{NOM} and all_{ACC} Q exams_{ACC} failed

Which student failed all the exams and was it all the exams that he failed?’

Accusative wh-phrases

(18) a. *Kogo i vse li očevidcy zdes’ videli?

whom_{ACC} and all_{NOM} Q eyewitnesses_{NOM} here saw

Intended: ‘Who did all the eyewitnesses see here, and was it all the eyewitnesses that saw somebody here?’

b. ?Kakogo prestupnika i vse li očevidcy zdes’ videli?

[which criminal]_{ACC} and all_{NOM} Q eyewitnesses_{NOM} here saw

‘Which criminal did all the eyewitnesses see here, and was it all the eyewitnesses that saw him here?’

c. *Kogo i mnogie li agenty zdes’ doprašivajut?

whom_{ACC} and many_{NOM} Q agents_{NOM} here interrogated
Intended: ‘Who do the agents interrogate here, and is it many agents that interrogate somebody here?’

d. ?Kakix prestupnikov i mnogie li agenty zdes’ doprašivajut? [which criminals]ACC and manyNOM Q agentsNOM here interrogated

‘Which criminals do the agents interrogate here, and is it many agents that interrogate them here?’

Dative wh-phrases

(19) a. *Komu i vse li vzroslye podarili igrušku?
whomDAT and all NOM Q adults NOM gave toy

Intended: ‘To whom did all the adults give a toy, and was it all the adults that gave somebody a toy?’

b. ?Kakomu rebenku i vse li vzroslye podarili po igruške? [which child]DAT and allNOM Q adultsNOM gave forDIST toy

‘To which child did all the adults give a toy, and was it all the adults that gave him a toy?’

c. ?*Komu i každyj li učenik podaril cvety na 1 sentjabrja?
whomDAT and eachNOM Q pupilNOM gave flowers for 1 September

Intended: ‘To whom did each pupil give flowers for Sept 1st, and was it each pupil that gave somebody flowers?’

d. ?Kakomu učiteleju i každyj li ego učenik podaril cvety na 1 sentjabrja? [which teacher]DAT and eachNOM Q his pupilNOM gave flowers for 1 September

‘To which teacher did each pupil give flowers for Sept 1st, and was it each pupil of his that gave him flowers?’

For some speakers (though not all), the examples with D-linked wh-phrases become fully grammatical if a resumptive-like element is introduced in the second conjunct. In contrast, no such amelioration
strategies are observable for rHWh cases with fronted non-D-linked wh-phrases. In fact, the latter evince quite the opposite effect: they become downright unacceptable. These facts are shown in (20) – (22).

(20) a. *Kto i každomu li rebenku on prines podarok?

whoNOM and eachDAT Q childDAT heNOM brought present

b. Čej papa# i každomu li rebenku on podaril po igruške?

[whose dad]NOM and eachDAT Q childDAT heNOM gave for toy

(21) a.*Kogo i vse li zdes' ego videli?

whomACC and allNOM Q here himACC saw

b. Kakogo prestupnika# i vse li zdes' ego videli?

[which criminal]ACC and allNOM Q here himACC saw

(22) a. *Komu i každyj li emu podaril pljuševogo medvedja?

WhomDAT and eachNOM Q himDAT gave plush bear

b. Kakomu rebenku# i každyj li (vzroslyj)emu podaril po igruške?

[which child]DAT and each Q adult himDAT gave for toy

Finally, both D-linked and non-D-lined wh-adjuncts maintain the (un)grammaticality patterns when the pre-li position hosts a quantifier, as demonstrated by (23).

(23) a. ?*Kogda i vsem li položena kompensacija?

when and allDAT Q determined compensation

Intended: ‘When is everybody entitled to the compensation, and is it everybody that is entitled to compensation?’

b. V kakoj moment do vyxoda na pensiju i vsem li položena

at which moment before going to retirement and allDAT Q determined kompensacija?

compensation
‘At which moment before the retirement is everybody entitled to the compensation, and is it everybody that is entitled to compensation?’

This then leads us to Generalization 3 stated in (24).

(24) Generalization 3. A. Contexts in (i) with pre-li quantifiers do not tolerate who-phrases in contrast to which-phrases.

(i) \*wh\… & QUANTIFIER li \…?
  \*non-D-linked argument/ \*non-D-linked adjunct
\?D-linked argument/ √D-linked adjunct

B. For some speakers the insertion of the resumptive-like element in the second conjunct of rHWh with preposed which-phrases induces an amelioration effect. This strategy is unavailable for who-phrases.

(ii) wh\… & QUANTIFIER li \…pronoun\…?
  \*non-D-linked argument
√D-linked argument

The profusion of data presented thus far may appear somewhat disorienting. TABLE 3 is meant as a visual guide for the reader: it summarizes all the considered patterns. This concludes an overview of the basic empirical domain. The subsequent discussion is organized according to the type of wh-phrase involved: I first consider the behavior of who-phrases, then turn to the distribution of which-phases, touching upon some issues that arise in conjunction with my analysis.

TABLE 3. DATA SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>…&amp; V li</th>
<th>… &amp; ADJUNCT li</th>
<th>… &amp; QUANT li</th>
<th>… &amp; ARGUMENT li</th>
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<td>✓</td>
<td>✓, ?*</td>
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<td>*</td>
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<td>Which-argument</td>
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<td>(?) ✓</td>
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3.2 rHWh questions with non-D-linked wh-words

I begin with fully grammatical examples like (25). Recall that rHWh constructions are felicitous with *who-*phrases as long as the pre-*li* element is an adverbial adjunct.

(25) Kogo i davno li zdes’ agent doprašival?

who and long.ago Q here agent interrogated

‘Who did the agent interrogate here, and did he interrogate someone a while ago?’

The analysis in a nutshell amounts to the following. There are two CP clauses in (25), coordinated in the familiar manner (via Munn’s BP-adjunction structure). The wh-phrase moves in the first conjunct to Spec,CP. The second conjunct contains a null wh-indefinite (an element that is reminiscent of indefinite pro argued for in Giannakidou and Merchant 1997, 1998), coreferential with its antecedent (viz., the wh-phrase). The usual Y/N-related operations take place in CP₂, whereby the element moves to the designated pre-*li* position (i.e., to Spec,CP in this case).

The rHWh construction with *who*-words are biclausal for the following reason. As discussed in Chapter 2, wh-words in Russian function as indefinites given the right environment (i.e., in the presence of the particular licensers). One such context is a polar interrogative. The interrogative complementizer need not be overt, as ((27)a) demonstrates. The sentence is obligatorily understood as a Y/N question with an indefinite pronoun, since the licensing head outscopes the wh-word (I will return to the nature of the licenser...
shortly, for now it suffices to acknowledge that interrogative contexts tolerate wh-indefinites). This contrasts with ((27)b), which must be construed as a wh-question.

(27) a. Zaxodil kto segodnja?
    stopped.by who today
    = ‘Did somebody stop by today?’
    ≠ ‘Who stopped by today?’

b. Kto zaxodil segodja?
    ≠ ‘Did somebody stop by today?’
    = ‘Who stopped by today?’

Another licensing context involves certain epistemic operators (see Yanovich 2005 and Chapter 2 of this dissertation).

(28) Možet, agent kogo doprašival.
    maybe agent who interrogated
    = ‘Maybe the agent interrogated somebody.’
    ≠ ‘Who may the agent have interrogated?’

Let us consider (25) again in view of the above. In ungrammatical ((29)a), kogo ‘whom’ can only be construed as a true wh-element, since it is outside the scope of the potential licenser. By contrast in ((29)b) and ((29)c) the wh-word is obligatorily interpreted as an indefinite ‘somebody/anybody’. Observe that the former combination in ((29)a), intended as an amalgam of a wh- and Y/N-interrogative in a single proposition, is impossible. So, clause initially the wh-phase can only be understood as a true wh-element. Hence, in the cases like (25), there must be two coordinated clauses – a reduced wh-question and a Y/N-question.
(29) a. *Kogo davno li agent doprašival?

who long.ago Q agent interrogated

Intended: ‘Was it a long time ago when the agent interrogated somebody?’

b. Doprašival li kogo agent?

interrogated Q whom agent

‘Did the agent interrogate somebody?’

c. (Pointeresujsja) davno li agent kogo zdes’ doprašival.

find.out long.ago Q agent who here interrogated

‘Find out whether it was a while ago that the agent interrogated somebody.’

If it is indeed the case that the wh-word in rHWh configurations functions as a true interrogative, there is a prediction linked to the contexts in (28). The introduction of an epistemic operator like možet requires the indefinite interpretation of the wh-word in its scope. So, if the first conjunct contains a true wh-interrogative možet is predicted to be illicit. On the other hand, the wh-element would be expected to be compatible with možet if it realizes an indefinite function. The former is borne out, as demonstrated by (31).27

(30) \([\text{CP}_1 \text{wh}…] \& \ [\text{CP}_2 \text{adjunct li}…]\)

^if true wh-word: * with možet

^if indefinite: ✓ with možet

(31) *Možet kogo i davno li zdes’ agent doprašival?

maybe who and long.ago Q here agent interrogated

Finally, applying Tomaszewicz’s (2011) test, which entails conjunction with the clausal coordinator – a – in the presence of high speaker-oriented adverbs like glavnoe ‘importantly’, we get the felicitous result

\footnote{27 In fairness, it needs to be said that možet is also incompatible with the second Y/N conjunct (i.e., it cannot be preposed before davno li).}
in ((32)a): apparently, an *a+glavnoe* complex can intervene between a wh-phrase and a second conjunct. The absence of the coordinator leads to the ungrammatical result in ((32)b).

(32) a. Kto i/a glavnoe skoro li sobiralsja segodnja zajti?
   who and importantly soon Q was.going today to.stop.by
   ‘Who will stop by today, and, most importantly, will it be today that somebody will stop by?’

b. *Kto glavnoe skoro li sobiralsja segodnja zajti?
   who importantly soon Q was.going today to.stop.by

With this I consider the matter settled: since a Y/N question and a wh-question are incompatible in a single proposition and *who*-words are interpreted as true wh-elements in such configurations, there is no other option than to posit biclausal coordination.

The scope of the ensuing exposition will be constrained by the following questions:

(i) On the analysis in (26), the second conjunct contains a null element coreferential with the wh-word in the first conjunct. The question is what is the nature of this element?

(ii) Why are only adjuncts fully grammatical in the pre-\textit{li} position in rHWhs with *who*-phrases? What precludes quantifiers, non-quantified arguments and verbs from being preposed before \textit{li} in the Y/N-conjunct?

(iii) What are the potential alternatives to the analysis I am defending here?

I will deal with each question in turn in the following subsections.

3.2.1 Null wh-indefinite

The analysis that I endorse for this type of rHWhs implicates simple wh-movement in the first conjunct and the introduction of a wh-indefinite, coreferential with its antecedent (the wh-word), in the second conjunct, as demonstrated below. This wh-indefinite is subject to PF-deletion.
The idea that Russian has a null wh-indefinite is inspired by Giannakidou and Merchant (1997, 1998)’s “indefinite pro”. However, my analysis departs from their implementation in a substantive way. To appreciate the difference, I will first present their analysis and then turn to the details of my proposal.

Giannakidou and Merchant (1997) distinguish indefinite pro from the referential (or generic) null pro found in pro-drop languages. The pro\textsubscript{INDEF} gives rise to the quantificational matching effect, which is a process supplying the same quantificational force and descriptive content as the indefinite antecedent.

Giannakidou and Merchant (1997) invoke this null entity to account for the following paradigm in Modern Greek: the definite clitic is illicit when the contextual antecedent is indefinite (a weak quantifier) in (34a). This contrasts with (34b), where the antecedent is a strong DP. The omission of the pronominal clitic in the latter case is impossible. Instances like (34a) are dubbed indefinite argument drop (IAD), contended to be realized in syntax by the indefinite pro, which is the source of the quantificational matching effect: the number indicated in the question has to be matched in the answer. Giannakidou and Merchant emphasize that pro\textsubscript{INDEF} is simply shorthand nomenclature for the empty DP, specified as [+pronominal].

(34) a. Q: Efere o Andreas deka/ø vivlia?
   ‘Did Andreas bring 10/ø books?’
   A: Ne, (*ta), efere  $\epsilon$ =pro\textsubscript{INDEF}.
      yes def brought [10/ ø books]

b. Q: Efere o Andreas ola ta/ta vivlia?
   ‘Did Andreas bring all the/the books?’
   A: Ne, *(ta), efere.
     Yes def brought
Now with this analysis in mind consider the reverse sluicing cases in English in (35) and Greek (36), reported in Giannakidou and Merchant (1998: 234). The construction is remarkably similar to the Russian hybrids considered here (and has already been mentioned in the introductory chapter as a species of an analogous phenomenon). Just like in Russian hybrids, the coordinates here are the Y/N complementizer and the wh-phrase. The crucial difference between English (35) and Greek (36) has to do with the type of the wh-word. In English, but not in Greek, argument wh-words are banned in this construction.

(35)  a. It’s not clear if and when the police arrested the demonstrators.
     b. *It is not clear if and who the police have arrested.

(36)  a. Dhem ine akomi safes an ke pote sinelave i
       not is yet clear if and when arrested.3SG the
       astinomia tus dhiadhilotes.
       police the demonstrators

       b. Dhem ine akomi safes an ke pjon sinelave i astinomia.
       not is yet clear if and who arrested.3SG the police
       Lit. ‘It is not yet clear if and whom the police arrested.’

Giannakidou and Merchant’s analysis entails CP coordination, whereby the interpretation of the elided IP in the first conjunct is achieved via an LF-copying operation. Specifically, in (37), the IP of CP₂ is copied into C₀₁’s complement position. In English ((37)a) this operation results in a configuration whereby the trace in the higher conjunct is not bound, which rules out instances like ((35)b) with the wh-arguments. Greek ((36)b), on the other hand, is acceptable, precisely because the language has recourse to indefinite
pro. Hence, in ((37)b) the higher trace is converted into the indefinite pro of the same type as in ((34)a).28

Note that this analysis entails a parametric treatment: proINDEF is available in Greek, but not in English.

(37)  

a. English: *[CP1 if [IP the police arrested t₁]] & [CP2 who₁ [IP the police arrested t₁]].

b. Greek: √[CP₁ if [IP the police arrested [pro]]] & [CP₂ who₁ [IP the police arrested t₁]].

The one issue for their analysis is the specification on pro, which is shown to be [+ pronominal] in conjunction with IAD data. But it is standardly taken to be the case that the trace of the wh-phrase is [- anaphoric, - pronominal]. If the content of the lower IP is copied, the trace of the wh-phase needs to be converted into a pronominal entity in the higher conjunct. They accomplish this via Fiengo and May’s (1994) Vehicle Change, essentially applying the following mechanism to ((37)b):[- a, - p] (wh-trace) → [- a, + p] (pro).

The upshot of the above is the following: (i) certain languages allow indefinite argument drop (where “drop” is construed as the introduction of an empty DP with certain properties matching those of its antecedent) and (ii) it has been shown on the basis of independent crosslinguistic data that this argument drop can be licensed in the contexts very similar to those under consideration here.

There are now two options for Russian. Either, following Giannakidou and Merchant, we can assume that Russian indeed counts proINDEF in its inventory of available elements. The alternative that I will pursue here is to argue that the null element in the second conjunct of rHWh questions is a deleted wh-indefinite. Note that the two approaches are not equivalent: under Giannakidou and Merchant’s analysis there exists a null element endowed with certain semantic and syntactic properties; my analysis presupposes no null entities. The proposal developed here entails an introduction of the wh-indefinite in the second conjunct, whose deletion is conditioned by a PF mechanism. My approach appears to be simpler for two reasons. First, it precludes the proliferation of null elements. Furthermore, it does not require any additional

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28 The instances in ((35)a) and ((36)a) are analyzed in the same terms via a copying mechanism. However, Giannakidou and Merchant argue that in such instances the wh-adjunct trace (being non-obligatory) is pruned in the first conjunct, which then resolves the binding issues.
mechanisms that derive the correct interpretation or certain syntactic restrictions that obtain in rHWh environments.

One consistent observation appearing throughout this dissertation has been that the Russian wh-words are obligatorily interpreted as wh-indefinites in certain positions, such as, e.g., ((27)b) (see also Chapter 2). Zavitnevich (1999) argues that Russian wh-words are polarity items, which, unlike English wh-words, lack inherent quantificational force. Cheng (1991) defends a similar analysis for Polish and Bulgarian: the wh-words acquire interrogative force if they are merged with a null D0. Obligatory wh-fronting is a consequence of a licensing requirement, which induces movement to Spec,CP (or Spec,IP in the case of Polish). For Yanovich (2005) wh-words appearing inside a Y/N interrogative are Hamblin pronouns that are existentially closed in the scope of the question, distinct from elements with identical form in normal wh-questions. I will simply assume here this dual nature of wh-words: some contexts require their interpretation as true wh-elements, others necessitate the indefinite construal.

Consider now the analysis of rHWhs with who-words. For explicitness I assume that conjuncts are constructed independently of each other (as in An 2007, Chapter 2 of this thesis) with the resulting pre-ellipsis structure taking the form of (38).

(38) Kto [kto prixodil] i davno li kto prixodil?

who who came and long.ago Q who came

‘Who came and was it a while ago that somebody came?’

Now we have three instances of kto: the first one in the higher conjunct is understood as an interrogative pronoun, the one in the second conjunct is obligatorily interpreted as instantiating the indefinite series, since it is in the scope of the licenser, as in ((39)a). Crucially, the sequence of elements within each TP in both conjuncts is identical. Next applies ellipsis in ((39)b): the TP in the first conjunct is elided; the phonological (but not semantic) content of the wh-phrase in the lower conjunct is deleted as well.

This elided NP seems to be an appropriate candidate for being analyzed as proINDEF (a null DP) much like in Greek ((37)b). However, I argue against this, proposing instead that we are dealing with a deleted
wh-indefinite for two reasons. The first one is grounded in the conceptual simplicity inherent in my proposal. The second is couched in empirical terms.

Regarding the former, there is no need to appeal to any additional semantic mechanisms that would render this “pro” pronominal (along the lines of Vehicle Change mentioned earlier): what is deleted on my account are the indefinite’s PF features, but its semantic and syntactic properties are retained. The derivation for examples like ((39)c) proceeds via the steps in ((39)a,b) with the usual ellipsis in the first conjunct and the deletion of the lower wh-word in the second conjunct. The crucial point is that the TP-internal who in in the second conjunct of ((39)b) is simply an unpronounced indefinite pronoun, which is endowed with the same properties as its overt counterpart, discussed in Section 3.2.

(39)  a. Kto₁ [ₜₚ kto₁ prixodil] & davno li [ₜₚ kto₁ prixodil]?
    \(\bigcirc\)                              \(\bigcirc\)
    interrogative series                      indefinite series

b. Ellipsis:

    Kto₁ [ₜₚ kto₁ prixodil] & davno li [ₜₚ kto₁ prixodil]?
    \(\bigcirc\)                              \(\bigcirc\)
    interrogative series                      indefinite series

c. Surface result:

    Kto i davno li prixodil?

    ‘Who came and was it a while ago that anybody came?’

Given that only PF features are deleted in cases like (39), a particular empirical prediction follows. From the standpoint of syntax, there is no difference between an overt wh-indefinite and a non-overt wh-indefinite (as the deletion process is entirely confined to the interface). Hence, they are expected to be non-distinct with respect to their syntactic properties. This turns out to be precisely the case. Apparently, overt wh-indefinites (in root contexts) and deleted wh-indefinites (in rHWh environments) are both illicit in the presence of other quantified expressions, as in (40). I will return to the instances like (40) in Section 3.2.4, arguing that the rHWh question in ((40)b) is bad for the same reason its root counterpart in ((40)a) is. For
now, however, it is sufficient to see that my analysis does not only accommodate (40), but, in fact, predicts it.

(40)  a. ?*(Ne) každago li mal’čika kto iščet?
        neg every Q boy_{ACC} who_{NOM} looks.for

Intended: *‘Is it every boy that anybody is looking for?’

b. ?*Kto i každogo li mal’čika <kto> iščet?
        who and every Q boy_{ACC} who_{NOM} looks.for

Intended: *‘Who is looking for every boy and is it every boy that anybody is looking for?’

The natural follow-up question now is how to constrain the spellout: i.e., why must this indefinite be silent? I suggest that the reason why it must be deleted is due to a familiar mechanism based on Fox and Pesetsky’s cyclic linearization and further developed in An (2007) (Section 3.2.2 of Chapter 2 for the details of the implementation of his proposal). It amounts to the following: the order of elements in the final representation must not contradict the spellout order in the earlier cycles. Consider the derivation in (41).

Assuming the CP-conjuncts instantiate “earlier” spellout cycles in ((41)c), the only way to avoid the ordering conflict is by deleting the highlighted elements. In other words, the first conjunct in ((41)c) has the order wh>V, while the second one fixes the PF sequence by spelling out Adjunct>li>wh>V. Once the final structure is assembled, however, the final operation Scan detects a conflict: the who-phrase appears to both precede and follow Adjunct+li. This necessitates the deletion of the lower who-phrase to avoid the problem. Had kto remained in the final representation in the second conjunct, it would have led to the linearization crash evinced in (41)d.29

29 I will not try to extend this analysis to reverse sluices in Greek or English. However, I will make one point with respect to Greek. Greek, just like Russian and a variety of other languages, uses bare wh-phrases in modal existential constructions, like (i):

(i) Exo [me pion na miliso] otan ime lipimenos.
    have_{1SG} with whom_{ACC} PRT talk when am sad
     ‘I have somebody to talk to when I am sad.’ (Caponigro 2001)
The final point pertinent to this discussion concerns the matter of interpretation. This section argues that the conjuncts in (39)/(41) are instantiated by (42). Observe that in ((42)b), which is a root polar context, the wh-indefinites kto ‘who’ means “anybody whatsoever”. This is not quite the case in rHWh questions: the indefinite here must be obligatorily construed as denoting the same individual as the one identified in the answer to the first conjunct. In other words, the most appropriate paraphrase of (39)/(41) has the following form “who will come, and will that who come soon?”. This, I suggest, is the consequence of coindexing between a higher wh-phrase and the indefinite in the second conjunct. Who-questions lack the uniqueness presupposition. Once the answer is provided, as in ((42)a), however, there emerges a unique referent, which has to be associated with “anybody whatsoever” in the second conjunct. I will put aside the issues of formalization, as this intuitive idea should suffice for my purposes.

(42) a. Kto prixodil?

who came

‘Who came?’

Šimík (2009) argues (with respect to Slavic) that wh-words appearing in such constructions are best treated as Hamblin pronouns, i.e., on a par with Russian wh-words appearing inside the polar interrogatives. My (very) tentative suggestion is that there exists a link between the availability of indefinite pro and the dual function of wh-words (as wh-indefinites and true wh-words): i.e. if the language has the latter, it will also have the former.
A: [John came.]

b. Davno li kto prixdil?

Long.ago Q who came

‘Was it a while ago that somebody (=anybody) came?’

The analysis makes an additional prediction. Recall that in the cases of HWh questions with fronted arguments, some amelioration effects are possible: viz., the insertion of a resumptive-like element improves the unacceptable strings for some speakers. I have reported earlier that rHWh constructions are likewise degraded with arguments preposed before *li*, as in ((43)a) (thus far presented as a descriptive generalization; I will return to the issue of why they are bad in Section 3.2.3). On the logic of the analysis developed here, since there is an empty argument in the second clause, the addition of the resumptives is not expected to alter the grammaticality of such sentences. This is indeed the case, as ((43)b,c) demonstrate. In other words, the relevant theta position is already filled by an element – namely, a wh-indefinite.

(43)  a. *Kogo i Ivan li zdes’ videl?

whom and Ivan Q here saw

Intended: ‘Who did Ivan see, and was it Ivan who saw somebody here?’

b. *Kogo i Ivan li zdes’ *ego* videl?

whom and Ivan Q here *him saw

Intended: ‘Who did Ivan see, and was it Ivan who saw him here?’

b. *Kogo i Ivan li zdes’ *ètogo* *duraka* videl?

whom and Ivan Q here *this* *fool* saw

Intended: ‘Who did Ivan see, and was it Ivan who saw this fool here?’

The next task is to explain why certain pre-*li* elements are impossible. Nothing in the analysis so far precludes the possibility of fronted verbs and arguments, yet they are illicit in rHWh questions with *who*-phrases. The next section focuses on the infelicity of pre-*li* verbs.
3.2.2 Pre-li verbs

Under consideration in this section are strings in (44) (repeated from ((12)a) and ((13)a)), judged to be sharply ungrammatical. I will argue that their status follows from semantic and pragmatic factors. The basic idea is actually quite simple. The normal information-eliciting sequence starts off with a polar question. Once the affirmative presupposition to the Y/N-interrogative has been secured, a constituent question may follow. In (44) this sequence is reversed. In effect, the wh-interrogative presupposes an affirmative response, which has not yet been supplied.

(44) a. *Kto i prines li nam podarki?
  Who$_{NOM}$ and brought Q us$_{DAT}$ presents
  Intended: ‘Who brought us presents, and did anyone bring us presents?’

b. *Kogda i prines li nam papa podarki?
  When and brought Q us$_{DAT}$ dad$_{NOM}$ presents$_{ACC}$
  Intended: ‘When did dad bring us presents, and did he bring us presents at some point?’

In fact, an identical claim is made in Giannakidou and Merchant (1998: 251) with respect to the reverse sluicing paradigm in (45). The difference between (35)/(36) and the examples below has to do with the ordering of coordinated elements: apparently, the if>wh sequence is acceptable, but its permutation (*wh>if) is not.

(45) a. *Dhem ine akomi safes pote ke an sinelave i
  not is yet clear when and if arrested$_{3SG}$ the
  astinomia tus dhiadhilotes.
  police the demonstrators
  *‘It is not clear when and if the police arrested the demonstrators.’
b. *Dhem ine akomi safes pjon ke an sinelave i astinomia.

not is yet clear who and if arrested.3SG the police

Lit. *‘It is not yet clear whom and if the police arrested.’

Giannakidou and Merchant attribute this dichotomy to the requirement prescribing a particular progression of information from more general to more specific. They argue that this requirement militates against a distinct treatment of Y/N questions and wh-questions. Both denote sets of propositions. The former contains a set of two propositions – a negative and a positive one, as in (46).30

(46)  a. Did Lister eat vindaloo?

   b. \( \lambda p \ [p = ^\neg[\text{eat} \ (\text{Lister}, \text{vindaloo})]] = A \)

   c. A = [Lister ate vindaloo, Lister did not eat vindaloo].

They assume the tripartite structure in ((47)b) for wh-questions. The crucial difference between (46) and (47) is this: at the time of the utterance the speaker does not know which of two propositions in ((46)c) provides a true answer to the Y/N question. But in (47), the speaker presupposes that somebody ate vindaloo, i.e. “the former presupposes ignorance of the truth or falsity of the interrogated propositional content, whereas the latter presupposes its truth” (Giannakidou and Merchant 1998: 251).

(47)  a. Who ate vindaloo?

   b. \( \lambda p \ [(\exists x: \text{person} \ (x)) \ [p = ^\neg[\text{eat} \ (x, \text{vindaloo})]]] = A \)

   c. A = [Lister ate vindaloo, Rimmer ate vindaloo, Cat ate vindaloo, …].

If so, the examples in (45) are ruled out due to the presuppositional clash.

Precisely the same reasoning applies to the Russian rHWh cases in (44). Recall from Chapter 2, Section 2.4 that li induces a focusing effect. Pre-li XP-material is automatically interpreted as bearing contrastive focus. However, verbs are distinct in that their appearance in pre-li positions normally encodes the neutral

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30The analysis in (46) and (47) is entirely due to Giannakidou and Merchant, applied to my examples.
polar interrogative. Compare ((48)a) with the rest of the paradigm in (48): the former is the only way to express the equivalent of English ‘Did Lister eat the pizza?/…whether Lister ate the pizza.’ This question has exactly the denotation in (46), i.e., it lacks the presupposition of the truth of the proposition.

In contrast, ((48)c–e ) do presuppose the truth of the proposition. For example, in uttering (c), the speaker knows that somebody ate the pizza is true, but wishes to ascertain or confirm the identity of the glutton (observe that similar reasoning applies to ((48)d,e)). In fact, that same interpretation obtains in the English clefts that I use to translate the relevant Russian li-interrogatives. Finally, ((48)b) with a heavy prosodic emphasis on the verb contains a presupposition that Lister did something to the pizza, which is compatible with the continuation in parentheses. Presumably this question would denote a possibly infinite sets of propositions like [Lister ate the pizza, Lister threw away the pizza, Lister fed the pizza to his cat,…].

(48)  a. (Ja ne znaju,) s”el li Lister pizzu.
     I neg know ate Q Lister pizza
     ‘I don’t know whether Lister ate the pizza.’

b. (Ja ne znaju,) S”EL li Lister pizzu, (no ona so stola isčezla).
     ‘I don’t know whether Lister ATE the pizza, (but it disappeared from the table).’

c. (Ja ne znaju,) LISTER li s”el pizzu.
     ‘I don’t know whether it was Lister who ate the pizza.’

d. (Ja ne znaju,) PIZZU li s”el Lister.
     ‘I don’t know whether it was the pizza that Lister ate.’

e. (Ja ne znaju,) DAVNO li Lister s”el pizzu.
     ‘I don’t know whether it was a while ago that Lister ate the pizza.’

So, in effect, the focus li constructions in ((48)b–e) are like the wh-questions in (47). Returning now to the paradigm in (44): the second conjunct is understood as involving a “normal” polar interrogative (with the neutral interpretation). The first conjunct, containing a wh-question, presupposes an affirmative response in the second conjunct. The problem is that the second conjunct does not supply this presupposition. This
leads to the presuppositional conflict, just like in Greek and English reverse sluicing cases in (45), hence the deviance of such examples.

Interestingly, there is a slight contrast between pre-\textit{li} arguments and pre-\textit{li} verbs in rHWhs: the former are judged to be slightly better, as stated in (49). I have not yet provided an explanation for the degraded status of the pre-\textit{li} arguments. However, assuming that instances like ((48)b) with a heavily stressed verb pattern with arguments (rather than verbs in the neutral Y/N environments like ((48)a)), we expect to see some improvement over examples in (44), if the constructed context facilitates the contrastive focus interpretation of the verb.

(49) a. ?*\textit{who}-phrase & argument \textit{li}…

b. * \textit{who}-phrase & verb \textit{li}…

This appears to be confirmed in (50): my informants assign both sentences a value between 2-2.5 on the 4 point scale (4 encoding the best, most natural examples, and 1 – the most degraded ones), whereas the examples in (44) predominantly receive a value of 1.

(50) a. ?*Kogda i papa li nam prines podarki?
when and dad Q uSDAT bring presentsSACC

Intended: ‘When will dad bring us presents, and will it be dad that will bring us presents some time?’

b. ?*Ja ne znaju, kogda i S”EL li Lister pizzu (.no na stole ee net).
I neg know when and ate Q Lister pizza (but it’s not on the table)

Intended: ‘I don’t know when and whether Lister ATE the pizza, but it is not on the table.’

The natural question now is why the arguments are bad in pre-\textit{li} position in rHWh questions. This section showed that it cannot be due to the presuppositional conflict: their interpretation appears to be consistent with the prediction that wh>argument \textit{li} ordering should be felicitous. I consider this question in the next section.
### 3.2.3 Non-quantified arguments vs. adjuncts

Under consideration here are the examples with *who*-phrases in (14)–(15), which show that the arguments before *li* in rHWhs give rise to deviant sentences. The generalization concerning the distribution of pre-*li* arguments is stated in (16). On the other hand, the adverbial adjuncts, listed in (7)–(10) (with the summary in (11)) may be preposed before *li* in rHWhs. For the convenience of the reader, the basic schematic pattern is provided in (51) with select examples replicated in (52), where (a)/(b) correspond to ((51)a), while (c)/(d) instantiate ((51)b).

(51)  
\[ \text{(a) \ ?*wh & argument li...?} \]
\[ \text{(b) \ ?*wh & adjunct li...?} \]

(52)  
\[ \text{(a) \ ?*Kto \ i \ vino \ li \ zdes’ \ opjat’ \ razlil?} \]
\[ \text{who}_{\text{NOM}} \text{ and wine}_{\text{ACC}} \text{ Q here again spilled} \]
\[ \text{Intended: ‘Who spilled wine here again and was it wine that someone spilled here?’} \]
\[ \text{(b) \ ?*Kogda \ i \ rebenok \ li \ porval \ åtu \ knigu?} \]
\[ \text{when and child \ Q tore this book} \]
\[ \text{Intended: ‘When did the kid tear this book, and was it the kid who tore the book?’} \]
\[ \text{(c) \ Čto \ i \ naročno \ li \ zdes’ \ opjat’ \ razlil \ Ivan?} \]
\[ \text{what}_{\text{ACC}} \text{ and on.purpose Q here again spilled Ivan} \]
\[ \text{‘What did Ivan spill here and did he spill something on purpose?’} \]
\[ \text{(d) \ Kogda \ i \ naročno \ li \ on \ porval \ åtu \ knigu?} \]
\[ \text{when and on.purpose Q he tore this book} \]
\[ \text{‘When did he tear this book, and did he tear this book on purpose?’} \]

There are two key components implicated in the derivation of sentences like ((52)a,b) – focus and ellipsis. The interaction of their properties is what induces the observed ungrammaticality. Essentially, the
obligatory focus interpretation of the material preceding *li leads to a conflict with the corresponding material in the first conjunct. The analysis hence boils down to the following: it is impossible to elide a constituent whose antecedent is focalized. Let us first consider well-studied English cases in view of this claim.

Tancredi (1992:131), discussing English VP-ellipsis, shows that (i) the elided material must be identical to an antecedent VP, and (ii) the VP can be deleted only if it is deaccented as well, which can only happen if that identical VP occurs in the active context (where “active context” is understood either as the presence of a contextual or linguistic antecedent).

A particularly strong supporting case is presented in Hankamer (1971:184-5) in (53). He argues that the deletion operation must be ordered before focalization, otherwise the gapping example with the focalized verb in ((53)a) is predicted to be acceptable, as shown in ((53)b). Or put in other way: a constituent with a focalized antecedent cannot be deleted.

(53) a. *John PLAYS the bugle, and Harry the saxophone.

b. *John PLAYS the bugle, and Harry PLAYS the saxophone.

This is further confirmed by the bare remnant ellipsis cases cited in Rooth (1992:98) replicated in (54). The paradigm demonstrates that the focalized element in the antecedent part has to have an overt correspondent in the remnant (see also Sag 1975, Heim 1985). The interpretation under which the remnant constituent is understood as bearing an association with a non-focal element is missing (I am following Rooth’s gloss convention by using ‘[ ]’ notation to indicate focus):

(54) a. She beats [me]F more often than Sue (= than she beats Sue; ≠ than Sue beats me).

b. [She]F beats me more often than Sue (= than Sue beats me; ≠ than she beat Sue).

c. She likes [me]F well enough, but not Sue (= she does not like Sue; ; ≠ Sue does not like me).

d. [She]F likes me well enough, but not Sue (= Sue does not like me; ; ≠ she does not like Sue).
The consensus seems to be that ellipsis needs to be preceded by destressing (see also Szczegielniak 2004). If so, the TP in the first conjunct in rHWH cases must be presupposed and destressed. The problem is, however, the obligatory focus association of the pre-\(li\) material. This focalized element cannot have a counterpart in the first conjunct, since the material in the first conjunct has to be deaccented before deletion, as demonstrated in (55) (which is a sample derivation for ((52)a)).

\[
\begin{align*}
(55) & \quad \text{?*Kto} \begin{VBox}
\text{tv} & \text{t} \\
\text{vino} & \text{zdes’ razlil}
\end{VBox} \\
& \quad i \begin{VBox}
\text{vino} & \text{li} \\
\text{\langle kto\rangle zdes’ opjat’ razlil} & \text{t_{vino}}
\end{VBox}?
\end{align*}
\]

\text{Material presupposed and deaccented before ellipsis}

\text{Pre-\(li\) position contains focalized material: nothing corresponds to it in the first conjunct}

The adjuncts, on the other hand, as in ((52)c,d), are fine in pre-\(li\) positions, because they need not be present in the elided part of the first conjunct. They are introduced solely in the second conjunct (I am agnostic on whether they are base-generated in pre-\(li\) positions or appear there via a movement operation; the point is they are absent in first conjunct, so there is no mismatch in the features of the elided and “surviving” constituents), as sketched in (56) for ((52)c).\(^{31}\)

\[
\begin{align*}
(56) & \quad Čto \begin{VBox}
\text{Ivan} & \text{zdes’ opjat’ razlil} \\
\langle čto\rangle & \text{\text{\langle čto\rangle}}
\end{VBox} \\
& \quad i \begin{VBox}
\text{naročno} & \text{li} \\
\text{\langle zdes’ opjat’ razlil} & \text{\text{\langle čto\rangle Ivan}}\text{\\rangle}
\end{VBox}?
\end{align*}
\]

\text{‘material presupposed and destressed before ellipsis}

\text{Corresponds to presupposed material in the second conjunct}

The claims above are testable. Suppose we construct an example involving an additional focalized constituent in the second conjunct. We can achieve this by focalizing the verb in-situ. It is possible to do so in both matrix wh-questions, as in ((57)a), and simple Y/N interrogatives with a fronted adverb, as in ((57)b). If the analysis above is on the right track, we expect to see the deterioration of grammatical examples in (52) in the contexts with a focalized verb.

\[
(57) \quad a. \text{Context: I am not asking who BOUGHT the car, I am asking…}
\]

\(^{31}\) See also ft. 28 for the proposal that the trace of the non-obligatory element is subject to pruning.
Kto POZAIMSTVOVAL mašinu?
who borrowed car
‘Who BORROWED the car?’

b. Context: I am not asking whether he BOUGHT the car a while ago, I am asking…

Davno li on POZAIMSTVOVAL mašinu?
Long.ago Q he borrowed car
‘Was it a while ago that he BORROW a car?’

This prediction is borne out, as demonstrated in (58), which is distinctly odd with a focus on pozaimstvoval ‘borrowed’. Since the elided material in the first conjunct is devoid of focus, we get the expected mismatch between the conjuncts, which leads to the observed degradedness, as shown in (59).

The effect of (58) is akin to English ((53)a).

(58) Context: I am not asking whether somebody BOUGHT a car a while ago, I am asking…

???Kto i davno li POZAIMSTVOVAL mašinu?
who and long.ago Q borrowed car

Intended: ‘Who BORROWED the car and was it a while ago that somebody BORROWED the car?’

(59) ???Kto [kto] pozaimstvoval mašinu i davno li [kto] POZAIMSTVOVAL mašinu?
^material deaccented  ^nothing corresponds to [V] in the first conjunct

Hence, the inability of non-quantified arguments to be preposed before li in these configurations follows from the properties of ellipsis. In order to be felicitous, the presupposed material in both conjuncts has to match, which only happens with pre-li adjuncts (since the latter do not need to be merged in the TP that subsequently undergo ellipsis). In other words, an element cannot be deleted if it has a focalized antecedent: arguments are hence illicit in pre-li positions (their appearance there guarantees this mismatch between conjuncts), but adjuncts are fine.
3.2.4 Quantified arguments

The remaining batch of facts to be explained, first presented in (17)–(23) (with the summary in (24)), involves a quantifier in the pre-

li position in rHWh configurations with a fronted who-phrase, as in (60). ((61)a), repeated from ((17)a), and ((61)b), repeated from (23), attest to the infelicity of such combinations. The curiosity here is that the permutation of the conjunct order results in acceptable strings: viz., the configurations “Q li > wh tend to be much better than” wh > Q li. The former were considered in Chapter 2. Their behavior was argued to stem from a conspiracy of two factors. First, in syntax they undergo QR in an ATB fashion, adjoining to the higher CP-segment. For PF reasons (to support the enclitic interrogative marker) they are pronounced. Being within the checking domain of C⁰, they check the focus feature associated with the interrogative complementizer. Hence, they are construed as contrastively focused elements much like their non-quantified counterparts in pre-

li positions.

(60) ?*wh & quantifier li…?

(61) a. ?*Kto i každomu li rebenku prines podarok?

Intended: ‘Who brought a present to each child and was it to each child that somebody brought a present?’

b. ?*Kogda i vsem li položena kompensacija?

Intended: ‘When is everybody entitled to the compensation, and is it everybody that is entitled to compensation?’

I will show that rHWh questions with non-D-linked wh-words and pre-

li quantifiers are unacceptable due to certain intervention effects. The problem is localized in the second conjunct: the (non-overt) wh-

indefinite cannot be licensed in the quantified contexts.
As a first approach to the issue, let me take a brief crosslinguistic detour. I concentrate on an aggregate of relevant facts from a variety of typologically different languages that bear on the Russian issues. It has long been observed that a quantificational element induces a blocking effect in wh-environments (Beck, 1996, Beck and Kim 1997, Miyagawa 1998, Pesetsky 2000, a.o.). Japanese (62) demonstrates the point: though it is a wh-in-situ language, the universal subject may not appear before the wh-object. Only if the wh-phrase scrambles over the quantifier overtly does the sentence become grammatical. A non-quantified NP in the position of *dare-mo-ga ‘everybody’ is perfectly acceptable.

(62) a. *Dare-mo-ga nani-o katta no? [Japanese]
everybody what bought Q
b. Nani-o, dare-mo-ga t, katta no?
what everybody bought Q
‘Everyone bought what?’ (Hoji 1985 as cited in Miyagawa 2004)

The phenomenon is not unique to Japanese. Neither is it limited to universal quantifiers *sui generis. NPIs in some languages trigger the same barrierhood effect as Japanese *dare-mo ‘everybody’ in wh-questions, as attested by Korean and Turkish, another two representatives of the wh-in-situ type. Both prohibit configurations in which the NPI precedes the wh-phrase (i.e., *NPI>wh), but permit a permutation of this order (√wh>NPI).

Specifically, in Korean ((63)a) the NPI *amuto ‘anyone’ is illicit in the position from which it c-commands the wh-phrase. The grammatical sequence in ((63)b) results from the scrambling of the wh-object over the NPI. Observe that Turkish paradigm (64) is identical to Korean (63): the wh-phrase has to surface in a higher position than that occupied by the NPI.

anyone whatACC read-CHI not.do-Past-Q

146
b. Muô-sûl amuto ilk-chi anh-ass-ni?

what<sub>ACC</sub> anyone read-CHI not.do-Past-Q

‘What did no one read?’ (Beck and Kim 1997)

(64) a. *Kimse kimi görmedi?

anyone who<sub>ACC</sub> see-Neg-Past

[Turkish]

b. Kimi kimse görmedi?

who<sub>ACC</sub> anyone see-Neg-Past

‘Who did nobody see?’ (Beck 1996)

German, too, allows for wh-in-situ in certain contexts. The difference between ((65)a) and ((65)b) lies in the nature of the constituent appearing before the in-situ wh-word. If it is a quantifier, as in ((65)a), then the familiar blocking effect emerges. The non-quantified DP in ((65)b), substituting for niemand, causes no such problems.

(65) a. *Wen hat niemand wo gesehen?

who has nobody where seen

‘Who has nobody seen where?’

[German]

b. Wen hat Luise wo gesehen?

who has Luise where seen

‘Who has Luise seen where?’ (Beck and Kim 1997)

Beck (1996) and Beck and Kim’s (1997) explanation of the German and Korean facts hinges on LF movement. For them, the intervening quantificational element prevents the movement of the wh-phrase in LF, as schematized in (66) and formalized in (67). Observe that the proposed formalism covers substantial empirical ground: it is intended as a unified explanation for the behavior of wh-in-situ with NPIs in Korean/Turkish as well as German/Japanese-type quantifier-induced blocking effects in wh-interrogative contexts.
The first node that dominates a quantifier, its restriction, and its nuclear scope is a Quantifier Induced Barrier (QUIB).

b. Minimal Quantifier Structure Constraint (MQSC)

If an LF trace $\beta$ is dominated by a QUIB $\alpha$, then the binder of $\beta$ must also be dominated by $\alpha$.

A different approach is pursued in Hwang (2008), who argues that Korean intervention effects follow from the disrupted dependency between an NPI and its licenser. Under this view, it is the wh-phrase that acts as an intervener between an NPI and its [+neg] licenser. On the assumption that no operator with quantificational force can interfere between a polarity item and its licenser, the paradigm in (68) and (69) follows: the former is unacceptable, since there is a logical operator wedged in between $amwuto$ and negation; the latter is fine, as no other quantified elements are within the immediate scope of negation.

(68)  a. *Amwuto mwues-ul ilk-ci anh-ass-ni?
      anyone whatACC read-Comp Neg-Past-Q
      ‘What did no one read?’

      b. *[CP [TP NPI [VP wh-phrase [VP V-Neg]]] Q]

(69)  a. Mwues-uli amwuto ti ilk-ci anh-ass-ni?

      b. [CP wh-phrase [TP NPI [VP V-Neg]] Q]
Note that a Hwang-style approach derives the NPI facts, but does not easily extend to the Japanese/German data. Yet, an analysis along these lines is what I will pursue for Russian, to which I now turn.

Recall that TP-internally Russian wh-words have to be understood as indefinites. Furthermore, to be licensed they require a local “trigger”: bare wh-indefinites are licit in Y/N-interrogatives, with a subset of epistemic operators, in conditionals, and subjunctive clauses (see Chapter 2 for details, examples, and references). Here I will concentrate on polar questions. Consider the root environments in (70) and (71): when the position before *li* is occupied by an adjunct or an argument, the wh-indefinite can appear just fine.\(^{32}\)

\[(70)\]
\begin{align*}
a. \text{Davno } & \text{li kogo ostanavlivali za otsustvie značka SH?} & \text{[www]} \\
& \text{long.ago Q whom}_{\text{ACC}} \text{ stopped for absence sign}_{\text{GEN}} \text{ Sh} \\
& \text{‘Was it a while ago that anybody was stopped for the absence of a sign indicating winter tires?’} \\
b. \text{Skoro } & \text{li kto pridet?} \\
& \text{soon Q who}_{\text{NOM}} \text{come} \\
& \text{‘Will anybody come soon?’}
\end{align*}

\[(71)\]
\begin{align*}
a. (\text{Ne}) & \text{Miša li kogo pervyj tolnul?} & \text{[www]} \\
& \text{(neg) Misha Q whom}_{\text{ACC}} \text{ first pushed} \\
& \text{‘Was it Misha who pushed somebody (=anybody) first?’} \\
b. (\text{Ne}) & \text{nas li kto iščet?} & \text{[Russian National Corpus]} \\
& \text{(neg) us}_{\text{ACC}} Q \text{ who}_{\text{NOM}} \text{ looks.for} \\
& \text{‘Is it us that somebody (=anybody) is looking for?’}
\end{align*}

\(^{32}\) For some of my informants, the sentences in (71) are acceptable only if negation precedes the fronted NP. I will not attempt a coherent explanation of this fact, leaving this issue open. The crucial point is this: (71) contrasts with (72) and (73) in that the latter two are unacceptable regardless of whether the negative marker is present or not. See also fn. 33.
On the other hand, analogous sentences with preposed quantifiers are rather degraded. Shown in (72) and (73) are the two quantifiers that are in principle eligible to appear in pre-\textit{li} positions. In (72) the QNP is the subject and the wh-indefinite is the object. Their roles are reversed in (73), which demonstrates that the accusative QNP cannot move over the nominative wh-indefinite.

(72) a. *(Ne) vse li kogo videli?
    (neg) all\textsubscript{NOM} Q whom\textsubscript{ACC} saw
    Intended: *‘Was it everybody that saw anybody?’

    b. *(Ne) každyj li mal’čik kogo poceloval?
    neg every Q boy\textsubscript{NOM} whom\textsubscript{ACC} kissed
    Intended: *‘Was it every boy that kissed anybody?’

(73) a. *(Ne) vsex li kto videl?
    (neg) all\textsubscript{ACC} Q who\textsubscript{NOM} saw
    Intended: *‘Was it everybody that anybody saw?’

    b. *(Ne) každogo li mal’čika kto iščet?
    neg every Q boy\textsubscript{ACC} who\textsubscript{NOM} looks for
    Intended: *‘Is it every boy that anybody is looking for?’

Given that both the subject and the object QNPs are incompatible with wh-indefinites, one may wonder at this point about the relevance of the intervention effects I brought up earlier. My objective is to demonstrate that (72)–(73) fall within the same empirical range and are amenable to a treatment under which the question operator fails to license the indefinite in the presence of an interfering quantified element. Before I do that, however, I need a bit of technology to account for the licensing effects. This is what I discuss next.

Higginbotham (1993) assumes that all Y/N-questions contain an overt or tacit \textit{whether} generated in Spec,CP. \textit{Whether} under his analysis has universal quantificational force and it must co-occur with the
disjunction *or*. A polar interrogative realizes a partition of two cells, one representing an affirmative and the other representing a negative answer. The scope of *whether* includes the entire clause, which means that all the elements appearing in the clause are within the restriction of universal quantification. Since NPIs are only licit in the downward entailing contexts (Ladusaw 1983), it follows that they can be licensed by the universally quantified *whether* in a Y/N-question.

Progovac (1993) pursues the matter from a different standpoint. An NPI can be licensed either by local negation or a non-overt polarity operator generated in Spec,CP.

The crucial takeaway point for my purposes is that positing a null operator, which also functions as a polarity item licenser, is not without precedent in the literature.\(^{33}\) Hence I assume that this null operator, base-generated high on the periphery serves as the appropriate licensor for the wh-indefinite.\(^{34}\) Another technical device that will be necessary for my purposes is the Immediate Scope Constraint (along the lines of Linebarger’s (1987)), which prohibits the intervention of the logical elements between an NPI and its licensor (see also den Dikken and Giannakidou 2002).

Given the above, it follows that the ungrammatical instances in (72) and (73) are ruled out in the manner of (74). The QNP moves to the pre-*li* position for focus and/or QR (see Chapter 2 for arguments that the entire QNP moves to pre-*li* positions). The licenser must be in a local relationship with the wh-indefinite. Observe, however, that in such configurations the scope-inducing element interferes between the operator and the indefinite. This contrasts with cases where the preposed material is not a quantifier, as in (70) and (71), in which the indefinite-licensing is not disrupted by a potential blocker.

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\(^{33}\) Note, incidentally, that *ne* ‘neg’ appearing before the preposed material in (71) and (76) is a plausible candidate for the overt realization of this operator. Some support for this comes from the fact that *ne* does not encode constituent negation *per se* in such instances. Instead its meaning can be paraphrased in the following way: “Is it (not) the case that…?”.

\(^{34}\) I am assuming here a split CP, whereby the focus-licensing is divorced from Y/N-licensing, whereby the interrogative C is higher than the focus-operator.
In fact, there is one seemingly unreported but pertinent fact that holds of English. Consider (75). In (a) the NPI is licensed, since *anybody is within the immediate scope of the tacit whether. On the other hand, this operation is blocked by the universal quantifier in (b), which induces the same effect as Russian QNPs in (72)/(73).

(75)  a. Did anybody see everybody?
      
      b. *Did everybody see anybody?

Returning now to Russian, even in the contexts where the position before *li is occupied by a verb, the licensing of the indefinite may not go through. Consider (76) (examples are modified slightly from the Russian National Corpus): (a) and (b) demonstrate that the indefinite is licit as long as no other quantificational elements are present. On the other hand, the minimally different (c) and (d) with quantifiers in lieu of *him and my son are distinctly odd. I interpret the facts in ((76)c,d) as further evidence that Russian has QR: the QNP targets some peripheral edge (presumably CP), as schematized in (74)), inducing the blocking effect, as it disrupts the immediate scope between Op and the wh-indefinite.35 Observe also that the higher “blocking” copy is covert, since in these environments it is the lower QNP that gets to be realized in PF. I argued in Chapter 2 that only under special circumstances, conditioned by the exigencies of articulatory interface, can the higher QNP copy be pronounced: viz., to support the enclitic Y/N-marker. In

35 One additional point here is this. Even if we posit IP-adjunction in such cases (as the target for QR), it would be enough to block licensing. Consider why. It has been claimed that the elements that are subject to deletion do not move. Takahashi (1996, 2000, 2001) makes this claim for Japanese *pro. On the assumption that the analysis of *pro can be couched in terms of argument ellipsis, it follows that in the relevant Russian cases cited in the text, the wh-indefinites stay in their *vP-internal theta positions. This means that even adjunction to *vP would be sufficient to block licensing in such contexts.
cases of (76), however, the enclitic *li already has a host (the verb), so no caveats implicating “special circumstances” apply.

(76)  

a. Podumaj, poverit li kto emu.

think believe Q whoNOM himDAT

‘Think whether anybody will believe him.’

b. (Ne) obidel li kogo moj syn?

(neg) hurt Q whoNOM my sonNOM

‘Did my son hurt anybody?’


think believe Q whoNOM allDAT / eachDAT

d. *(Ne) obidel/i li kogo každyj / vse?

(neg) hurt Q whoNOM eachNOM / allNOM

The bulk of this section was dedicated to exploring the licensing requirements imposed on wh-indefinites in root Y/N-contexts. The analysis amounts to (77): the operator is unable to license the indefinite due to the blocking effect of the QNP. By now it should be relatively clear that this same analysis is transferable to rHWh questions with pre-*li quantifiers in (61), repeated in (78).

(77)  

Op QNP wh-indefinite


(78)  

a. *Kto i každomu li rebenku prines podarok?

whONOM and eachDAT Q childDAT brought present

Intended: ‘Who brought a present to each child and was it to each child that somebody brought a present?’
b. ?*Kogda i vsem li položena kompensacija?

when and allDAT Q determined compensation

Intended: ‘When is everybody entitled to the compensation, and is it everybody that is entitled to compensation?’

The analysis of rHWhs presented thus far entails CP-coordination. The first conjunct causes no difficulties: the wh-phrase undergoes its usual movement to Spec,CP; the TP is subsequently elided. The source of degradedness observed in (78) is in the second conjunct. I argued earlier that the empty element there is, in fact, a deleted wh-indefinite. If so, it must be licensed, as shown in (79). This licensing, however, is blocked by the interfering QNP, exactly like in (72) and (73).

(79) [CP kto [TP ...]] [AP & [CP OP každomu rebenku li <kto> prines podarok]

Earlier I reported that pre-ili adjuncts in rHWh questions are felicitous. Indeed, this is so as long as the constituents within the sentence are non-quantificational, as in ((80)a). Given the analysis just developed, however, we expect to see the deterioration of these acceptable sentences if they contain a quantified expression. ((80)b) demonstrates that this prediction is borne out.

(80) a. Čto i davno li podaril Vova Lena?

what and long.ago Q gave Vova Lena_{DAT}

‘What did Vova give to Lena, and was it a while ago that Vova gave something to Lena?’

b. ??Čto i davno li podaril každyj gost’ Lena?

what and long.ago Q gave every guest Lena_{DAT}

Intended: ‘What did every guest give to Lena, and was it a while ago that every guest gave something(=anything) to Lena?’
The rHWh questions behave on a par with the root Y/N-interrogatives in (81), whereby the introduction of the QNP renders the sentence somewhat odd.

(81) a. Davno li čto Vova Lene daril?
    long.ago Q what Vova to.Lena gave

b. ???Davno li čto každyj gost’ Lene podaril?
    long.ago Q who every guest Lena_DAT gave

Intended: ‘Was it a while ago that every guest gave something(=anything) to Lena?’

I conclude that the infelicity of rHWh questions with pre-li quantifiers hinges on the infelicity of wh-indefinites in these contexts. The quantified expression blocks the licensing of wh-indefinites, as it intervenes between the licensor and the wh-element in a way reminiscent of crosslinguistic intervention effects that obtain in wh-environments.

This then gives us the full paradigm that I set out to explain. The next section discusses a potential alternative to the analysis developed here and points out certain issues that arise when one attempts to extend it to rHWh constructions. I conclude this part of the chapter with an intermediate summary in Section 3.2.6 before turning to the behavior of rHWh questions with D-linked wh-words.

3.2.5 Multidominance alternatives

One potentially compelling alternative to the analysis defended here is developed in much recent work on multidominant structures (e.g., Citko 2003, 2005, Gračanin-Yüksek 2007, and Citko and Gračanin-Yüksek 2013, and numerous references therein). Though my partiality to such analyses is undeniable, there are unfortunately a few problematic areas that rHWh questions present for them.

The key feature of such approaches is rooted in the theoretical acquiescence to the possibility of multiply dominated (MD) constituents. In fact, Citko (2005) argues that nothing in the current generative framework prohibits MD configurations (for a dissenting view see Larson and Hornstein 2010). Moreover,
they constitute a rather utilitarian tool for capturing some peculiar empirical phenomena, such as parasitic gaps, free relatives, ATB constructions, and coordinated multiple wh-questions (CMWs). I will not pretend to give a comprehensive overview of the MD literature here. Instead, to demonstrate how such analyses might fare for the structure at hand, I will concentrate on a particular proposal articulated in Citko and Gračanin-Yüksek (2013).

They explore the crosslinguistic distribution of examples like (82), dubbed CMWs, which involve two (or more) wh-words coordinated on the clausal periphery. Citko and Gračanin-Yüksek propose the range of structures in (83) to account for the aggregate of properties of CMW constructions in various languages. ((83)a) involves simple DP-coordination. The unorthodox MD structures are demonstrated in ((83)b) and ((83)c). The former has ‘bulk-shared’ material, whereby a single node (i.e., TP) has two mothers – CP₁ and CP₂. All the material inside that TP is shared between the two conjuncts (i.e., it is identical in both). In ((83)c), which represents a non-bulk-shared structure, the two CPs are built in parallel with a number of shared nodes.

(82) a. Kto i kogo pobil? [Russian]
   who and whom beat
   ‘Who beat whom?’ (*‘Who and whom beat?’)

b. What and why did he eat? [English]

c. *What and why did you devour?

(83) a. 

```
CP
  \&P
  C
  \& wh1
  \& wh2
  twh
  twh2
```

156
These three structures make different predictions with respect to the properties of CMWs. We can safely put aside the structure in ((83)a), as rHWhs seem to be genuinely biclausal (per discussion in Section 3.2). This leaves ((83)b) and ((83)c).

The former is compatible with the coordination of two argument wh-words in the presence of obligatorily transitive verbs (like devour or beat). Both points are demonstrated by Russian ((82)a): the material inside the shared TP is “accessible” to both Cs and the theta-requirements of the predicate are satisfied by the two wh-phrases.

On the other hand, ((83)c) predicts grammaticality with optionally transitive verbs (like eat) in languages that lack multiple wh-fronting. The latter is instantiated by English ((82)b): what is merged once in VP1, while why belongs only to VP2. Both wh-phrases can front to the left periphery of their respective
clauses (this then produces the effect of multiple wh-fronting in a language lacking this mechanism in non-coordinated environments). The fact that the object wh-phrase is merged only once is confirmed by the particular construal inherent in ((82)b). It is obligatorily understood to mean ‘What did you eat and why did you eat at all?’ and crucially not ‘What did you eat and why did you eat it?’. Further evidence for the validity of this conclusion comes from ungrammatical ((82)c): the obligatorily transitive verb devour is missing an argument in the second CP.

Returning now to rHWh constructions, let us assume the two structures in (84) replicating the CMWs above. The first conjunct hosts a wh-word, the second is the locus of the polar interrogative headed by li.

The bulk-shared structure in ((84)a) correctly predicts the co-occurrence of wh- and Y/N interrogatives in a single sentence. It also explains the absence of amelioration effects upon the introduction of the resumptive elements in cases like (43), repeated in (85), since the wh-phrase, originating inside the shared TP, is the only possible theta-bearing element in such cases.

But that same (85) and the rest of the ungrammatical HWhs with pre-li quantifiers, non-quantified arguments, and verbs instantiate a problem for such an analysis. Bulk-shared structures overgenerate, since there seems to be no principled way to exclude the fronting of any element from the shared TP into the position X.
(85) a. *Kogo i Ivan li zdes’ videl?
   whom and Ivan Q here saw

   Intended: ‘Who did Ivan see, and was it Ivan who saw somebody here?’

   d. *Kogo i Ivan li zdes’ ego videl?
   whom and Ivan Q here him saw

   Intended: ‘Who did Ivan see, and was it Ivan who saw him here?’

   b. *Kogo i Ivan li zdes’ ètogo duraka videl?
   whom and Ivan Q here this fool saw

   Intended: ‘Who did Ivan see, and was it Ivan who saw this fool here?’

Now, the non-bulk-shared structures in ((83)c)/((84)b), argued to be the source of the contrast between English ((82)b) and ((82)c), entail non-parallel argument structure of the two conjuncts: essentially, the predicate in the first conjunct can be interpreted as transitive, but it is construed as intransitive in the second conjunct. The issue here with respect to rHWh questions is that the latter require parallel argument structures.

The above is testable. Consider (86): ((86)a) shows a transitive incarnation of pit’ ‘to drink’. The usual transitive meaning obtains in this context. The intransitive version of the verb in ((86)b) allows for the idiomatic reading, whereby the sequence receives the interpretation, under which Egor has an alcohol problem. This idiomatic meaning is missing in the rHWh question in ((86)c), as demonstrated by the English paraphrases. This means that the object wh-phrase must have been present in some form in both conjuncts.

(86) a. Čto Egor p’ët?
   what Egor drinks

   ‘What is Egor drinking (now or habitually)?’

   b. Davno li Egor p’ët?
   long.ago Q Egor drinks
‘Has Egor been a drinker for a long time?’

c. Čto i davno li Egor p’ët (na večerinke)?
what and long.ago Q Egor drinks at party

= What is Egor drinking and has it been a while that he been drinking something?
≠ What is Egor drinking and has he been a drinker for a long time?

The inverse case implicates an obligatorily transitive verb like sožrat ‘to devour’, as in ((87)a). Observe that it is illicit in an objectless Y/N interrogative in ((87)b). The coordinates of the non-bulk-shared structure are essentially those in ((87)a) and ((87)b). Since one of the conjuncts is missing an obligatory element, the entire structure is expected to be ungrammatical, yet, as ((87)c) shows, such coordination is perfectly acceptable.

(87)  
a. Čto Egor sožral?
what Egor devoured
‘What did Egor devour?’

b. *Davno li Egor sožral?
long.ago Q Egor devoured

c. Čto i davno li Egor sožral?
what and long.ago Q Egor devoured
‘What did Egor devour, and was it a while ago that he devoured something?’

Hence, neither structure captures the facts associated with rHWh cases in a straightforward way. Note that the HWh facts from Chapter 2 are also not easy to accommodate by this MD account. Recall that in HWh questions the pre-li position is available only to (a subset of) quantifiers and adjuncts, but not non-quantified arguments and verbs. The issue then is how to preclude the movement of the latter from the shared positions to Spec, CP/C₀. It appears that in both cases there is no other recourse but to posit two independent conjuncts with various additional mechanisms regulating the restrictions on the pre-li material.
3.2.6 Intermediate summary

This section dealt with the distribution of non-D-linked wh-phrases in rHWh questions. A summary of the available patterns is provided in (88). The only acceptable sequence includes a wh-word followed by the adjunct preposed before li. All the other combinations are illicit.

(88) Distribution of who-phrases in rHWhs:
   a. *wh & verb li
   b. ?*wh & argument li
   c. ?*wh & quantifier li
   d. ✓wh & adjunct li

I argued for biclausal coordination with wh-movement in the first conjunct. In the second conjunct the copy of the wh-word within the scope of the interrogative operator is interpreted as a wh-indefinite. Examples with the form in ((88)a) are ruled out due to a presuppositional mismatch: a neutral Y/N question must precede a wh-question. In rHWh cases involving verbs this order is reversed, which leads to the observed degradedness. ((88)b) is excluded due to the focus/ellipsis requirement. The XP element preceding li must be focalized. However, this leads to a mismatch between conjuncts: since the elided material must be presupposed and destressed, nothing in it can correspond to the pre-li element. The adjuncts in ((88)d) are felicitous in such configurations, because they only appear in the second conjunct. No focus/ellipsis requirement tensions arise for those. The infelicity of quantifiers in constructions like ((88)c) stems from the constraints resulting from their interaction with wh-indefinites: in such configurations their appearance in pre-li positions induces a blocking effect, whereby a local licensing relationship cannot be established between an operator and the wh-indefinite. Their distribution replicates the distribution of root Y/N questions with fronted QNPs in the presence of wh-indefinites. Having settled on this analysis, I turn to the behavior of D-linked wh-phrases in rHWh constructions.
3.3 rHWh questions with D-linked wh-phrases

*Which*-phrases distinguish themselves from *who*-phases in rHWh constructions in the following two ways. First, they are markedly better in rHWhs with quantifiers in the positions preceding *li*. Second, for some speakers the introduction of a resumptive-like pronoun is possible (and often even improves the slightly degraded sequence, as indicated in ((89)c)). The data from the descriptive Section 3.1 are summarized in the schematic format in (89).

(89) Distribution of *which*-phrases in rHWhs:
   a.  *wh & verb *li
   b.  ?*wh & argument *li
   c.  ?wh & quantifier *li  //  ✓wh₁ & quantifier *li* pronoun₁
   d.  ✓wh & adjunct *li

The analysis to be defended for *which*-phrases in rHWh contexts is sketched in (90). I will argue that such constructions are likewise underlyingly biclausal: the wh-phrase moves in an ATB fashion out of each conjunct, adjoining to the higher segment of CP. The TP of CP₁ is elided. The high adjunction of the wh-phrase is due to the topicalized nature of this element. The proposal to assimilate the behavior of D-linked wh-phrases in rHWh contexts to that of topicalized constituents is grounded in several additional findings that are specific to rHWh questions with *which*-phrases. Concretely, rHWh constructions do not behave like normal root D-linked interrogatives, rather they pattern with topicalized constituents (TCs) in a variety of contexts. The distribution of rHWhs tracks the behavior of TCs in prohibiting LBE, evincing a uniform patterning in strong crossover (SCO) environments, and the identical pattern of sensitivity to strong and

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36 The analysis developed in this section is a departure from my earlier proposals in Zanon (2014). There I argued that rHWh questions involve a monoclausal structure with base-generation of which-words. What I neglected to take into consideration are some issues involved in Russian argument drop.
weak islands. In these three contexts topicalized constituents/rHWhs, on the one hand, set themselves apart from root d-linked wh-questions.

The bulk of the subsequent discussion is dedicated to highlighting the points of affinity between rHWh questions and “regular” topicalized contexts. Next I turn to explaining the empirical array summarized in (89). Some facts (the behavior of pre-\textit{li} verbs, arguments, and adjuncts) invite a unified analysis of rHWh questions with \textit{who}-phrases and HWhs with \textit{which}-phrases.

3.3.1 \textit{D-linked wh-phrases as topicalized constituents}

3.3.1.1 \textbf{Impossibility of LBE}

Recall from Chapter 2 that HWh examples pattern exactly like standard ATB examples with respect to LBE: the quantified element is extractable out of each conjunct, as demonstrated below for HWh questions in (91) and standard ATB-sentences in (92). However, the reverse hybrid wh-strings with potentially left branch-extractable material impose a ban on the movement of this material: that is, the equivalent of (91) with LBE of \textit{which}-phrase is impossible.
(91) a. Mnogo li i kto prines na večerinku __ vina?
    many Q and who brought to party wine
    ‘Did someone bring a lot of wine to the party, and who was it?’
b. Vsex li i kogda Ivan priglasil na novyj god __ kolleg?
    all Q and when Ivan invited to new year colleagues
    ‘Did Ivan invite all the colleagues to the New Year’s party, and when did he invite them?’

(92) a. Mnogo li Ivan prines __, a Sergej vypil __ vina?
    many Q Ivan brought and Sergey drank wine
    ‘Was it lots of wine that Ivan brought and Sergey drank?’
b. Vsex li Ivan vstretil __, a Sergej provodil __ kolleg?
    all Q Ivan met and Sergey saw.out colleagues
    ‘Was it all the colleagues that Ivan met and Sergey saw out?’

To appreciate the point, first consider root wh-contexts with D-linked wh-phrases. The quantificational part (i.e., kakoj ‘which’ or čej ‘whose’) can be fronted, stranding its NP-associate, as in (93). Such sentences are perfectly natural and often even preferred over the versions where the entire wh-phrase is pied-piped to the periphery.

(93) a. Kakoj pridet __ student?
    which will.come student
    ‘Which student will come?’
b. Kakomu dekan __ studentu postavil dvójku?
    to.which dean student gave F
    ‘To which student did the dean give an F?’
The surprising fact in light of the above is that D-linked wh-phrases cannot be discontinuous in rHWh constructions, as shown in the (a)-examples in (94)–(97). Apparently, in such configurations there is a requirement to pied-pipe the entire constituent, as the (b)-examples attest. Note that the species of the pre-
li element is immaterial: the LBE is equally prohibited in the environments with pre-
li adjuncts, as in (94)a)/((95)a) and with pre-
li quantifiers, as in ((96)a)/((97)a).

(94) a. *Kakoj i skoro li pridet __ student?
   which and soon Q come student
   ‘Which student will come and will it be soon that he will come?’

   b. Kakoj student i skoro li pridet ?
     which student and soon Q come
     ‘Which student will come and will it be soon that he will come?’

(95) a. *Kakomu i davno li dekan postavil dvojku __ studentu?
   which and long.time.ago Q dean gave F student
   ‘To which student did the dean give an F, and was it a while ago that the dean gave him an F?’

   b. Kakomu studentu i davno li dekan postavil dvojku?
     which student and long.time.ago Q dean gave F
     ‘To which student did the dean give an F, and was it a while ago that the dean gave him an F?’

(96) a. *Čej i každomu li rebenu podaril po igruške __ papa?
   whose and each Q child gave for toy dad
   ‘Whose dad gave a toy to each child, and was it to each child that he gave a toy?’

   b. ?Čej papa i každomu li rebenu podaril igrušku?
     which dad and to.each Q child gave toy
     ‘Whose dad gave a toy to each child, and was it to each child that he gave a toy?’
Crucially, root LBE extractions out of the non-quantified topicalized constituents in (98) are degraded. The accompanying contexts are provided to facilitate the “topic” construal of the relevant element, since on the contrastive focus interpretation the cited examples are perfectly acceptable. Just as in the cases of rHWh constructions, “standard” topicalization contexts preclude LBE.

(98) a. [Context: A stellar and a dim student are under discussion.]

Xorošij student polučil pjaterku. ‘The good student got an A.’

(i) ?*A ploxomu# dekan postavil dvojku studentu.

and bad dean gave F to.student

(ii) A ploxomu studentu# dekan postavil dvojku.

and bad student dean gave F

‘As for the bad student, the dean gave him an F.’

b. [Context: Several students are under discussion. Some are dean’s pets, and one is quite disliked by him.]

Dekan obožaet Mašu. ‘The dean adores Masha.’

(i) ?*A ètu# dekan nenavidit studentku.

and this dean hates student

(ii) A ètu studentku# dekan nenavidit.

and this student dean hates

‘As for this student, the dean hates her.’

c. [Context: Cat Behemoth is giving a tour of Master’s house to Azazello]
Now I seem to have argued myself into the corner. On the one hand, I have spilled much ink in Chapter 2, trying to convince my reader that left branch extractable material is in principle amenable to ATB-movement. The above clearly demonstrates that LBE is not possible in rHWh questions with D-linked phrases. Yet, I propose that it is precisely ATB movement that is responsible for the derivation of the latter.

The idea here is quite straightforward: in both topicalized environments and in rHWh questions there apparently exists an independent ban on LBE. Ultimately, I aspire to show that which-phrases in rHWh examples are topicalized. Therefore, they are expected to be sensitive to the same set of restrictions as non-quantified TCs.

As argued extensively in Bošković (2001) and Rudin (1993), topicalized constituents occupy the highest position in the clausal periphery (and in fact, it is standard practice to treat topics as belonging in the C-domain, see, e.g, Cinque 1990). Both Bošković and Rudin converge on the idea that TCs adjoin to CP. If so, the topicalized elements in (98) target the edge of CP as their landing spot.

Combining the idea that D-linked wh-phrases in (94)–(97) are topicalized with Bošković/Rudin-style treatment of TCs, we necessarily converge on the derivation in (90): the wh-phrase adjoins to the higher CP segment, a position from which it can c-command both traces.

_Prima facie_ it may be strange to claim that wh-phrases are subject to topicalization. However, quite a few sources, in fact, advance this precise claim for a number of different languages (Buesa García 2011, Grohmann 1998, 2000, 2005, Reglero 2003, 2004, Wu 1999, a.o.). Grohmann (2005), e.g., derives the “Beck-effect” (discussed earlier in conjunction with the wh-indefinite blocking effects in reverse hybrids with non-D-linked words) in (99) by crucially appealing to the topicalizability of wh-phrases. His main
contention is that in multiple wh-question environments in German the wh-phrases are topics that move to CP. This multiple wh-movement is constrained by Discourse Restricted Quantification, stated in (100). Grohmann shows that only the material topicalizable in principle can be sandwiched between the two topic wh-phrases. Since monotone decreasing quantified expressions like \textit{wenige Linguisten} ‘few linguists’ resist topicalization, they cannot wedge in between the wh-words in such contexts.

(99) a. *Warum haben wenige Linguisten wem geglaubt? [German]
    b. Warum haben wem wenige Linguisten geglaubt?
    why have whom few linguists believed

‘Why did few linguists believe whom?’ (Grohmann 2005)

(100) Discourse Restricted Quantification (Grohmann 2000: 269)

Questions involving two wh-expressions are well-formed if the value of both wh-expressions is determined by the context; determination of values is satisfied by providing a set of at least two possible referents in the discourse.

Wu (1999) defends the same idea with respect to Chinese, arguing that “scrambled” wh-words in this language are, in fact, topics, which allows him to derive an aggregate of semantic and syntactic effects.

Of course, the brief summaries of Grohmann’s and Wu’s work presented above reduces to “citing precedent”: i.e., people have previously argued that wh-phrases are topicalizable in principle.

However, equipped with this wisdom, we can return to rHWh questions in search of independent confirmation that the analysis proposed in (90) is plausible. So far, I have produced one piece of evidence in favor of treating \textit{which}-phrases as topicalized constituent: viz., the ban on LBE is a feature of topicalized environments. If the D-linked wh-phrases in rHWh questions are TCs, then the lack of LBE is attributable to the same factors that condition the LBE prohibition in “regular” TC contexts.\footnote{There is one curious and possibly related fact that I will simply report here, without exploring in any coherent detail. Consider the CMW contexts in (i): both word order permutations of D-linked and non-D-linked wh-phrase coordinates are permitted. However, as (ii-a) attests, two D-linked wh-phrases are somewhat degraded in such configurations.}
Furthermore the very meaning of D-linked wh-phrases is intimately tied to discourse (Pesetsky 1987). A phrase like *which boy* entails the existence of the contextually determined set of entities (boys), familiar to the speaker and the hearer. In other words, in both D-linked and topicalized contexts the range of backgrounded referents is contextually specified or otherwise salient in the discourse.

Before proceeding further, I would like to reiterate the difference between D-linked and non-D-linked rHWh questions. D-linked wh-phrases have an option of targeting the TC position, as in ((101)b), as this is the only position from which the extractee can bind both traces. Non-D-linked phrases, by contrast, cannot go that high presumably due to the information conflict: under normal circumstances, the non-D-linked wh-phrases resist topicalization, as their function is to elicit new information (see also Bošković 2002, 2008b). Therefore, in rHWh questions they move to Spec,CP, as in ((101)a) and rely on the indefinite licensing in the second conjunct.

Worse yet are the LBE examples in (ii-b) and (ii-c). Both (ii-a) and (ii-b) improve vastly if a resumptive-like pronoun is inserted in the second conjunct in the manner of (ii-d). The position in which it interrupts the constituency of the second which-phrase is perceived to be the most natural rendition of this sentence.

(i) a. Kto i kajkogorod zaxvatil?
   who and which city captured

   b. Kakoj gorod i kto zaxvatil?
      which city and who captured

(ii)a. ??Kakaja armija i kajkogorod zaxvatila?
    which army and which city captured

   b. *Kakaja armija i kajkogorod zaxvatila armija?
      whichFEM.SG army and which city captured armyFEM.SG

   c. *?Kakoj armija i kto gorod zaxvatila?
      whichMASC.SG army and who cityMASC.SG captured

   d. Kakaja armija i kajkogorod zaxvatila?
      which army and which it town it captured

   (Gribanova 2009)
With this much settled, I turn to additional syntactic evidence in favor treating which-phrases in rHWh questions as TCs.

### 3.3.1.2 Strong crossover environments and argument drop

The second point of affinity between rHWh questions and standard nominal TC contexts implicates crossover effects. Here again the latter two pattern together, and in a manner that distinguishes them from root D-linked wh-interrogatives.

The stage is set by regular which-interrogatives. First, consider (102): (a) is exactly like English. The wh-phrase is extracted out of the matrix subject position, leaving behind a trace variable. The that-clause contains a co-referential pronoun. ((102)b) is minimally different from English in that the subject in the embedded clause is not overt. This absence is due to the argument drop. The subject in the embedded clause in (102) behaves on a par with the subject in the complement clause in (103): the preferred option in both cases is to omit it. The phenomenon of innerclausal subject drop is well-documented crosslinguistically for a variety of typologically different languages. (104) demonstrates that Russian is parallel to Chinese and Brazilian Portuguese in permitting lower null subjects co-referential with their antecedents in the matrix clause (see also Franks 1995 for arguments that Russian subject drop is conditioned by pragmatic considerations). For now, I will abstract away from the factors that determine and regulate argument drop, simply assuming that this process is the source of variation in the first two examples below: i.e., the
difference between ((102)/(103)a) and ((102)/(103)b) is attributed to argument drop in the embedded clause.

For ease of exposition I am adopting the following nomenclature in the ensuing discussion: \( e \) signals a “dropped” argument, whereas \( t \) marks the base-generation position of the moved element.

(102) a. Kakoj \( t_1 \) student\( t_1 \) skazal, čto on\( t_1 \) opozdal?
    which \( t_1 \) student\( t_1 \) said that he\( t_1 \) was.late
    ‘Which student said that he was late?’

    b. Kakoj \( t_1 \) student\( t_1 \) skazal, čto \( e_1 \) opozdal?
    which \( t_1 \) student\( t_1 \) said that \( e_1 \) was.late
    ‘Which student said that [he] was late?’

(103) a. Maša skazala, čto ona\( t_1 \) prišla pozdno.
    Masha\( t_1 \) said that she\( t_1 \) came late
    ‘Masha said that she came late.’

    b. Maša skazala, čto \( e_1 \) prišla pozdno.
    Masha\( t_1 \) said that \( e_1 \) came late
    ‘Masha said that [she] came late.’

(104) a. Zhangsan\( t_1 \) xiwang, [\( e_1 \) keyi kanjian Lisi]. [Chinese]
    Zhangsan\( t_1 \) hope \( e_1 \) can see Lisi
    ‘Zhangsan\( t_1 \) hopes that [he]\( t_1 \) can see Lisi.’

    b. João disse que \( e_1 \) viu o Pedro. [Brazilian Portuguese]
    João\( t_1 \) said that \( e_1 \) saw the Pedro
    ‘João\( t_1 \) said that [he]\( t_1 \) saw Pedro.’ (Huang 1984: 538, 540)

With this background we can consider an actual crossover environment. The \( \textit{which} \)-phrase in ((105)a) originates in the object position of the embedded clause. The movement to Spec,CP (omitting the intermediate trace positions) leads to a SCO violation, as the \( \textit{wh} \)-phrase crosses over a co-referential
pronoun in Spec,TP of the matrix clause. Observe that in principle this movement can proceed unhindered in the absence of the elements that induce the BT violation, as in ((105)b,c) (in ((105)b,c) the subject of the embedded clause may or may not be overt, owing to argument drop as per discussion above).  

(105)  

a. *Kakogo studenta₁ on₁ priznalsja, čto Maša videla t₁?  
   which student₁ he₁ admitted that Maša saw t₁  
   ‘Which student did he admit that Masha saw?’

b. Kakogo studenta₁ Maša₂ priznalas’, čto ___₂ videla t₁?  
   which student₁ Masha₂ admitted that e₂ saw t₁  
   ‘Which student did Masha admit that [she] saw?’

c. Kakogo studenta₁ Maša₂ priznalas’, čto ona₂ videla t₁?  
   which student₁ Masha₂ admitted that she₂ saw t₁  
   ‘Which student did Masha admit that she saw?’

So far, the behavior of the wh-phrase with respect to crossover effects is remarkably standard: the wh-phrase may not skip over a co-referential element in the manner of ((106)b). If the which-phrase is generated higher, it is free to bind a pronoun in the lower clause; the only complication noted at this point is the possibility of argument drop in the embedded clause, as in ((106)a). In the latter configuration the gap receives an obligatory bound variable reading.

(106)  

a. √wh₁ [tWH₁... [e₁/he₁ ... ]  

b. *wh₁ [he₁... [... tWH₁]]

Now consider the parallels to (102): (107) is an example involving a topicalized constituent, (108) is an rHWh configuration with a D-linked wh-phrase. Observe that all three constructions behave in a uniform fashion: all three allow for a null variable trace in the matrix clause (marked with t in the glosses) which

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38 Though it is standardly maintained that the extraction out of čto-clauses is illicit, my informants are perfectly willing to accept the examples in ((105)b,c).
indicates the base-generation site of the A'-moved element. The embedded clause may contain a full pronoun (which may be co-referential with the extracted subject) or a gap (which must be co-referential with the subject). So far, no difference between the constructions is emerging: all the cases under scrutiny are amenable (with appropriate caveats) to the treatment in ((106)a).

(107) a. A ètot student;# t₁ priznalsja, čto on₁ opozdal?
    and this student₁ t₁ admitted that he₁ was late
    ‘As for this student, did [he] admit that he was late?’

b. A ètot student;# t₁ priznalsja, čto ___₁ opozdal?
    and this student₁ t₁ admitted that e₁ was late
    ‘As for this student, did [he] admit that [he] was late?’

(108) a. A kakoj student₁ i davno li t₁ skazal, čto on₁ opozdal?
    and which student₁ and long.ago Q t₁ said that he₁ was late
    ‘Which student said that he was late, and was it a while ago that [he] said that he was late?’

b. A kakoj student₁ i davno li t₁ skazal, čto ___₁ opozdal?
    and which student₁ and long.ago Q t₁ said that e₁ was late
    ‘Which student said that he was late, and was it a while ago that [he] said that [he] was late?’

What about the configuration in ((106)b)? Again all three configurations look the same. The SCO effect observed in ((105)a) also obtains in TC-contexts in ((109)a) and the rHWh environment in ((110)a). On the other hand, movement out of object positions in the embedded clause, as in ((109)b) and ((110)b), is not precluded as long as the extractee does not cross over an element it is coindexed with.

(109) a.*A ètogo studenta;# on₁ priznalsja, čto Maša videla t₁?
    and this student₁ he₁ admitted that Masha saw t₁
    Intended: ‘As for this student, did he admit that Masha saw {him}?’
b. A ètogo studenta₁ Maša₂ priznalas’, čto ona₂/___ videla t₁?
and this student₁ Masha₂ admitted that she₂/e₂ saw t₁

‘As for this student, did Masha admit that (she) saw {him}?’

(110) a. *Kakogo studenta₁ i davno li on₁ priznalsja, čto Maša videla t₁?
which student₁ and long.ago Q he₁ said that Masha saw t₁

Intended: ‘Which student said that Masha saw him, and was it a while ago that he said that Masha saw {him}?’

b. Kakogo studenta₁ i davno li Maša₂ priznalas’, čto ona₂/___ videla t₁?
which student₁ and long.ago Q Masha₂ admitted that she₂/e₂ saw t₁

‘Which student did Masha admit to have seen, and was it a while ago that she admitted to have seen {him}?’

The schematic summary of the considered operations is provided in (111). Observe that the distribution of TCs in ((111)a,b), the D-linked wh-phrases in rHWh configurations in ((111)c,d), and the D-linked wh-phrases in non-coordinated questions in (106) are identical with respect to SCO effect.

(111) TC environments: rHWh environments:

a. √[NP_TOP₁] [t₁NP₁... [e₁/he₁ ... ]

b. * [NP_TOP₁] [he₁... [... t₁NP₁]

c. √[which-phrase]₁ & XP li [t₁which₁... [e₁/he₁ ... ]

d. *[which-phrase]₁ & XP li [he₁... [... t₁which₁]

Earlier I promised to reveal the difference between rHWh/TC-contexts and standard D-linked wh-interrogatives. Before doing so, however, one conclusion from the paradigm above suggests itself: viz., since all the configurations are sensitive to SCO, I take it as evidence that we are dealing with movement, rather than base-generation, of the extracted constituents in both rHWh configurations and topicalized environments.
Returning now to empirical territory, consider (112) and (113). They diverge minimally from (107) and (108) in that both, apparently, allow for a co-referential pronoun to appear in the position of $t$, i.e. the subject of the matrix clause, which is argued to mark the base-generation location of the moved constituent. The embedded clause has the usual optional pronoun (that can be dropped, as the (b)-examples show).

(112)  a. A ètot student;# on₁ priznalsja, čto on₁ opozdal?
        and this student₁ he₁ admitted that he was late
        ‘As for this student, did he admit that he was late?’

       b. A ètot student;# on₁ priznalsja, čto ___₁ opozdal?
        and this student₁ he₁ admitted that e₁ was late
        ‘As for this student, did he admit that [he] was late?’

(113)  a. Kakoj student₁ i davno li on₁ skazal, čto on₁ opozdal?
        which student₁ and long.ago Q he₁ said that he₁ was late
        ‘Which student said that he was late, and was it a while ago that he said that he was late?’

       b. Kakoj student₁ i davno li on₁ skazal, čto ___₁ opozdal?
        which student₁ and long.ago Q he₁ said that e₁ was late
        ‘Which student said that he was late, and was it a while ago that he said that [he] was late?’

This pronoun, however, cannot “replace” $t$ in non-coordinated wh-questions with D-linked wh-words: compare ungrammatical (114), with an overt pronoun inserted in the subject position of the matrix clause, with acceptable (102), where the trace is silent.

(114)  a. *Kakoj student₁ on₁ skazal, čto on₁ opozdal?
        which student₁ he₁ said that he₁ was late

       b. *Kakoj student₁ on₁ skazal, čto ___₁ opozdal?
        which student₁ he₁ said that e₁ was late
Similarly, the pronominal element cannot appear in the position of the trace in non-coordinated wh-questions when the wh-word is extracted out of the embedded clause: cf. ((115)a) with ((102)b,c). In the environments with TCs and in rHWh questions the trace can be realized as a pronoun: cf. ((115)b) with ((112)b); and ((115)c) with ((110)b).

(115)  a. ?*Kakogo studenta1 Maša skazala, čto ona videla ego1?
which student1 Masha said that she saw him1

b. A ètogo studenta1# Maša2 priznalas’, čto ona ego1 videla?
and this student1 Masha2 admitted that she him1 saw

‘As for this student, did Masha admit that (she) saw him?’

c. Kakogo studenta1 i davno li Maša2 priznalas’, čto ona ego1 videla?
which student1 and long.ago Q Masha2 admitted that she him1 saw

‘Which student did Masha admit to have seen, and was it a while ago that she admitted to have seen him?’

The patterns above are summarized in (116). Note the presence/absence of the indicated pronominal elements in these contexts appears to be distinct from argument drop discussed in conjunction with (103). I take the fact that all three constructions are sensitive to SCO to be indicative of movement. Yet, in some cases, i.e., ((116)c,d,e,f), a resumptive-like element may be inserted. There are two plausible ways to analyze the pronouns appearing in TC environments and rHWh contexts in (116): (i) the element associated with a TC/wh-phrase is an argument that can be dropped; or (ii) it is a gap, in which the resumptive may be inserted. Disentangling these two alternatives would take me too far afield. Furthermore, the issue is rather orthogonal to the present purposes: whatever the right analysis is for TCs with pronouns inserted at the position of the gap, it is transferable to the rHWh cases. The crucial point here is that once again, with respect to the availability of the “resumptive strategy”, wh-phrases in rHWh configurations pattern with TCs rather than with normal D-linked phrases. I will call the pronominal elements appearing at the trace
site “resumptives” for ease of reference, though I make no particular commitment to an analysis along the lines of (ii) above.

(116) Regular D-linked questions:

a. *wh₁ [\text{tWH₁}. [e₁/he₁ ... ]]
   \text{= he₁}

b. * wh₁ [subject₂... [... \text{tWH₁} ]]
   \text{= him₁}

TC environments:

c. \check{[\text{NP}_{\text{TOP}}]} [\text{tNP₁}. [e₁/he₁ ... ]]
   \text{= he₁}

d. \check{[\text{NP}_{\text{TOP}}]} [\text{subj₂... [... \text{tNP₁} ]]
   \text{= him₁}

rHWh environments:

e. \check{[\text{which-phrase}]}₁ & \text{XP li [\text{WHCH₁}]}... [e₁/he₁ ... ]
   \text{= he₁}

f. \check{[\text{which-phrase}]}₁ & \text{XP li [subj₂...[... \text{WHCH₁} ]]
   \text{= him₁}

Thus far we can conclude the following. First, rHWh questions align with sentences involving topicalized constituents in three ways: they prohibit LBE, they permit the insertion of the “resumptive” in the positions of the trace, and they exhibit sensitivity to SCO effects. Second, given the latter fact, both configurations implicate movement. Further evidence that TCs and which-phrases move to the periphery rather than appear there by virtue of base-generation is provided in (117), which demonstrates that the peripheral constituent containing the anaphor must have been local to its lower antecedent at some point in the derivation.

(117) a. Kakuju knigu o sebe₁ i davno li professor₁ pročital?
   \text{which book about self and long.ago Q professor read}
   ‘Which book about himself did the professor read, and was it a while ago that the professor read it?’
b. A knigu o sebe,# pročital li professor,

And book about self read Q professor

‘The book about himself, did the professor read it?’

With this, I turn to the final environment that reinforces the above conclusions. The next section documents a number of restrictions that obtain in island environments.

3.3.1.3 Island contexts

TCs and which-phrases in rHWhs are identical in terms of sensitivity to island effects. I start with the behavior of rHWh questions in complex NP contexts. As (118) demonstrates, the extraction out of a relative clause gives rise to an extremely deviant sentence. The insertion of the resumptive in ((118)b) has no effect on the grammaticality.

(118) a. *Kakuju stat’ju_1 i vse li znajut avtora, kotoryj napisal t?

which article and all Q know author who wrote t

Indended: ‘Everybody know the author who wrote which article, and does everybody know the author who wrote it?’

b. *Kakuju stat’ju_1 i vse li znajut avtora, kotoryj ee_1 napisal?

which article and all Q know author who it wrote

Extraction out of the sentential adjunct in (119) or out of the subject in (120) likewise yields degraded surface strings. Just like above, the introduction of the resumptive is bereft of utility in salvaging these sentences.

(119) a. *Kakuju stat’ju_1 i davno li studenty pošli v biblioteku,

which article & long.ago Q students went to library
potomu čto im não bylo pročítat’ $t_1$?

because them$_{DAT}$ necessary was to.read $t$

Intended: ‘The students went to the library, because they needed to read which article, and was it a while ago that the students went to the library because they needed to read it?’

b. *Kakuju stat’ju$_1$ i davno li studenty pošli $v$ biblioteku, which article and long.ago Q students went to library

potomu čto im ee$_1$ não bylo pročítat’?

because to.them it necessary was to.read

(120) a. *Kakogo redaktora$_1$ i davno li to čto ětot avtor nenavidit $t_1$

which editor$_{ACC}$ and long.ago Q that that this author hates $t$

pugaet Ivan? scares Ivan

Intended: ‘That the author hates which editor scares Ivan, and has it been for a while that that the author hates him scares Ivan.’

b. *Kakogo redaktora$_1$ i davno li to čto ětot avtor nenavidit ego$_1$

which editor$_{ACC}$ and long.ago Q that that this author hates him

pugaet Ivan? scares Ivan

The paradigm in (118)–(120) is replicated below for configurations with topicalized material: ((121)a) is a relative island, ((121)b) evinces a sentential adjunct environment, and in ((121)c) the extractee is base-generated inside the subject. The resumption in all these environments induces no amelioration effects, much like it has no effect on the grammaticality status of rHWs in island contexts.

(121) a. *A ětomu rebenu$_1$ty znaeš doktora, kotoryj {emul $t$}$_1$ postavil priviku?

and to.this child you know doctor who him$t$ gave injection
Intended: ‘As for this child, do you know the doctor who gave him a shot?’

b. *A ètu stat’ju1 kto pošel v biblioteku, potomu čto and this article who went to library because

nado bylo {eel t}1 pročitat’?
necessary was itl t to.read

Intended: ‘As for this article, who went to the library because they needed to read it?’

c. *A ètogo redaktora1 to čto ètot avtor nenavidit {egol t}1 pugaet Ivana? and this editor that that this author hates himl t scares Ivan

Intended: ‘As for this editor, does the fact that the author hates him scare Ivan?’

Therefore, the extraction of objects out of strong islands produces severely degraded results, which cannot be remedied by the insertion of resumptive pronouns in either “standard” TC-environments or rHWh questions. We can attempt to move a subject to determine whether the base position of the extractee matters. But this also fails: the extraction of subjects out of the adjunct clause in (122) or out of the relative in (123) is impossible for both wh-phrases in rHWhs in the (a)-examples and topicalized constituents in the (b)-examples.

(122) a. *Kakoj professor4 i davno li studenty pošli v biblioteku which professor and long.ago Q students went to library

potomu čto {onl t}1 im poručil najti literaturu? because hel t them ordered to.find literature

Intended: ‘The students went to the library because which professor ordered them to find literature, and was it a while ago that the students went to the library because he ordered them to find literature?’
b. *Ètot professor_{1}# studenty pošli v biblioteku
this professor students went to library

potomu čto \{onl t\}_{1} im poručil najti literaturu?
because hel t them ordered to find literature

Intended: ‘As for this professor, did the students go to the library because he ordered them to find literature?’

(123) a. *Kakoj professor_{1} i davno li studenty pročitali knigi
which professor and long.ago Q students read books

kotorye \{onl t\}_{1} napisal?
which hel t wrote

Intended: ‘The students read the books that which professor wrote, and was it a while ago that the students read the books that he wrote?’

b. *Ètot professor_{1}# studenty pročitali knigi, kotorye \{onl t\}_{1} napisal?
this professor students read books which hel t wrote

Intended: ‘As for this professor, did the students read the books that he wrote?’

There is one environment that sets apart wh-words and scrambled NPs. Russian is a language sensitive to wh-island environments whenever a wh-phrase crosses over a wh-clause (Bailyn 2011), but NPs are free to move out of the embedded wh-interrogatives (see Pereltsvaig 2008, Stjepanović 1999a, and Chapter 4 of this dissertation): cf. (124) and (125). Note that the scrambled NP can either realize contrastive focus in ((125)a) or be interpreted as a TC, as in ((125)b). In the latter case the entire NP constituent must be pied-piped to the clausal periphery. The dichotomy between (124) and (125) yields the following prediction: the which-phrases in non-coordinated questions are expected to pattern with (124), while those in rHWh constructions should behave on a par with TCs, i.e. with ((125)b).
(124) a. *Komu₁ ty sprosil, kogda₂ Ivan pozvonil t₁ t₂?

\[ \text{who} \text{DAT} \text{ you asked when Ivan called} \]

Intended: ‘Who did you say Ivan called when?’

b. *Kogda₁ ty sprosil, komu₂ Ivan pozvonil t₁ t₂? \hspace{1cm} (Bailyn 2011: 101)

(125) a. Ty DIREKTORU₁ znaeš, kto zvonil t₁?

\[ \text{you principal} \text{DAT} \text{ know who called} \]

‘Do you know who called the principal?’

b. A novyj učebnik₁ ty ne znaeš, gde kupit’ t₁?

\[ \text{and new textbook you neg know where to buy} \]

‘As for the new textbook, do you happen to know where to buy it?’

The prediction is borne out, as (126) demonstrates: the TC in (a) and the which-phrase in (b) can both move out of the wh-clause.\(^{39}\) (126) contrasts with (127), which is an instance of “normal” wh-movement.

(126) a. A ètogo aspiranta₁ ty znaeš, kogda \{’egol t₁\} vygnali iz universiteta?

\[ \text{and this grad student you know when him} \text{ kicked.out from university} \]

‘As for this graduate student, do you know when they kicked him out of the university?’

b. Kakogo aspiranta₁ i davno li ty uznal, kogda \{egol’ t₁\} vygnali iz universiteta?

\[ \text{which grad student and long.ago you found.out when him} \text{ kicked.out from university} \]

\[ \text{from university} \]

\(^{39}\) My informants seem to have a slight preference for a \( t \) in ((126)a), but the overt pronoun in ((126)b). The source of this preference is not quite clear. The crucial point here, however, is that there is a rather sharp split between (126), with or without pronouns, and (127).

One additional point here is that if a pause is inserted after the wh-phrase in non-coordinated contexts like (127), the sentence improves. This suggests that in “normal” D-linked environments there are in fact two options: either the wh-phrase moves to Spec,CP (in which case no pause follows it) or it adjoins to CP in the manner of TCs (in this situation a pause accompanies it). The one issue with this speculation is the lack of “resumption” in root D-linked questions. I will not attempt to resolve the problem here, leaving it for future investigation.
‘Which graduate student did you find out when they kicked out from the university, and was it a while ago that you found out that they kicked him out?’

(127) *Kakogo aspiranta ty znage, kogda vygnali t iz universiteta?
which grad student you know when kicked.out t from university

The island effects are accommodated in a straightforward way by my analysis. In principle, the locality violations are repairable by ellipsis, as per extensive discussion in Chapter 2. So, it must be the case that the violation is incurred in the second conjunct, as shown in (128).

(128) [wh-phrase1 [TP [Island Iwh-phrase ]] [BP B [CP [TP [Island Iwhich ] ]]]]
\[\text{\_repair by ellipsis}\]

I conclude that the analysis developed so far is on the right track. Now the question is how to explain the difference between D-linked and non-D-linked wh-words with various pre-li constituents: both are impossible with NP-arguments and with verbs in the position preceding the interrogative marker and acceptable with adjuncts in preposed slots. The point of divergence between the two emerges in the contexts where the quantified expression occupies the pre-li position in the second conjunct.

3.3.2 D-linked rHWhs with various pre-li constituents

One remaining question to be addressed here concerns the pattern stated in (89) and repeated in (129). The crucial point of divergence between who-phrases and which-phrases in rHWh contexts concerns the possibility of pre-li quantifiers.

(129) Distribution of which-phrases in rHWhs:

a. *wh & verb li

b. ?*wh & argument li
c. \( ^w \text{wh} \) & quantifier \( li \) // \( ^v \text{wh} \) & quantifier \( li \) pronoun

d. \( ^v \text{wh} \) & adjunct \( li \)

Given the proposed treatment for rHWh questions with D-linked wh-words, the exclusion of ((129)a,b) from the set of acceptable configurations and the felicity of ((129)d) follow from the same restriction as those articulated before for rHWh clauses with non-D-linked wh-words. Recall that verbs are illicit in such positions because of the presuppositional conflict that arises whenever the information proceeds from more specific to more general. In other words, the wh-question presupposes an affirmative answer in the second conjunct. The problem is that the second conjunct does not entail an affirmative answer. Hence, the presuppositional clash is the culprit in cases schematized in ((129)a).

Arguments (cf. (129)b) are bad due to the focus/ellipsis requirements. The element preceding \( li \) must be focalized, but its counterpart in the ellipsis site must be presupposed and destressed. If so the pre-\( li \) material has no counterpart in the first conjunct, which ultimately leads to the observed degradedness.

Adjuncts, being optional, are merged in the second conjunct only. Since they do not appear in the ellipsis site, they do not induce the same effect as arguments do. Hence, they are free to surface before \( li \) in rHWh question with both types of wh-phrases.

The explanation for ((129)a,b,d) is identical for both D-linked and non-D-linked wh-phrases in rHWh constructions. A more interesting question concerns the distribution of the quantified expressions in (130) and (131) (repeated from (17) and (18)): the (a)-examples contain non-D-linked phrases, while in the (b)-examples D-linked wh-phrases appear in the first conjunct. The former are perceived to be much worse than the latter.

(130) a. ?*Kto i každomu li rebenku prines podarok?

\( \text{who}_{\text{NOM}} \text{ and each}_{\text{DAT}} Q \text{ child}_{\text{DAT}} \text{ brought present} \)

Intended: ‘Who brought a present to each child and was it to each child that somebody brought a present?’
It was observed earlier that the grammaticality status of rHWh questions with non-D-linked words tracks the behavior of root Y/N interrogatives with wh-indefinites: the latter are unacceptable in the presence of the quantified expression. The proposed treatment was couched in terms of the immediate scope principle. A null interrogative/polarity operator, generated on the edge of the clausal periphery, was deemed responsible for licensing wh-indefinites. However, whenever a quantifier intervenes between the licensor and its “dependent,” the licensing fails, as demonstrated in ((132)a). In rHWh questions with non-D-linked wh-words the null element in the second conjunct is a deleted wh-indefinite. It is subject to the same licensing requirements as its overt counterpart in root environments. Therefore, the degradedness of rHWh with who-phrases and with pre-li quantifiers follows from the failure to license the indefinite.

What about rHWh questions with which-phrases? I will argue for the analysis sketched in ((132)b). The wh-phrase here adjoins to the higher segment of CP on a par with topicalized constituents. The quantified expression moves to the pre-li position in the second conjunct and to Spec,CP in the first conjunct. The key difference between ((132)a) and ((132)b) is rooted in the nature of the null element: the former contains a wh-indefinite, the latter – a wh-trace. So, in (a) the null element must be licensed, but in (b) the only
requirement imposed on the trace (or a “resumptive”) is that it be bound by its antecedent, i.e. the D-linked wh-phrase. The QNP in ((132)b) does not hinder binding in the way it blocks licensing in ((132)a).

(132)  a. \([\text{CP} \ Op \ QNP \ li \ \text{wh-indefinite}]\)

\[ \text{*, } \]

b. \([\text{CP} \ which\text{-phrase}_1 \ [\text{CP} \ QNP \ C^0 \ [\text{TP} \ ]]] \ [\&P \ & \ [\text{CP} \ QNP \ li \ [\text{TP} \ t_1 \ ]]]\]

In principle which-phrases can be interpreted as wh-indefinites, as the following examples demonstrate. They are licensed in the same contexts as non-D-linked wh-words.

(133)  a. \(\text{V obedennyj pereryv begali v GUM smotret', ne vybrosili li in lunch break ran}_3^\text{PL} \text{ to GUM to.see neg threw Q kakix koftoček. which tops}\)

‘During the lunch break they ran off to GUM to see whether they were selling any tops.’


b. \(\ldots\)\text{ona zabespokoilas’ ne dopustila li kakoj oplošnosti. she started.to.worry neg commited Q which transgression}\)

‘She started to worry that she has committed some transgression.’


However, there are two reasons to reject the notion that the second conjunct in rHWh questions contains a wh-indefinite (in the configurations with D-linked wh-phrases). Consider (134): (a) is the context in which the wh-phrase is obligatorily construed as a wh-indefinite; (b) is understood as a true wh-question. In both contexts the discontinuous dependency is possible.
a. Rastut li ešče kakie u tebia v ogorode ovošči?
   grow Q else which to you in garden vegetables
   ‘Do you still have any kind of vegetables growing in your garden?’

b. Kakie ešče u tebia v ogorode ovošči rastut?
   which else to you in garden vegetables grow
   ‘What other vegetables grow in your garden?’

Suppose now that the which-indefinite were indeed generated in the second conjunct. Since LBE is licit for both wh-indefinites and true wh-interrogatives, we would expect that a structure like (135) would be possible where which is extractable in both conjuncts: in the first one it is understood as a true wh-word, while in the second it instantiates the indefinite meaning much like its non-D-linked counterpart.

\[
(135) \text{which [CP ... [TP ... ![which NP] ...]] [&P & [CP li [TP ... ![which > ... ![which NP] ...]]} \\
^\text{true wh-element} \quad ^\text{wh-indefinite}
\]

The prediction is not borne out, as demonstrated by (136) (see also Section 3.3.1.1). In rHWh questions the potentially LB extractable material must be pied-piped due to its topicalized nature.

a. *Kakomu i vse li podarili po igruške __ rebenku?
   to.which and all Q gave forDIST toy child

b. ?Kakomu rebenku i vse li podarili po igruške?
   to.which child and all Q gave forDIST toy
   ‘To which child did everybody give a toy, and was it everybody that gave him a toy?’

Second, as discussed earlier, the pronominal resumptive-like element in the second conjunct is possible in rHWh questions with D-linked wh-words. In fact, some speakers prefer these questions with the overt pronoun, as demonstrated by (137). I made no particular commitment to the analysis of such elements: they can be thought of either as a gap (optionally spelled out as a resumptive) or as an argument, which can be dropped if it is bound by a topicalized constituent.
(137) a. ?A kakomu rebenku i vse li podarili po igruške?
   which child\textsubscript{DAT} and all Q gave for\textsubscript{DIST} toy
   ‘To which child did everybody give a toy, and was it everybody that gave [him] a toy?’

b. A kakomu rebenku i vse li emu podarili po igruške?
   which child\textsubscript{DAT} and all Q him\textsubscript{DAT} gave for\textsubscript{DIST} toy
   ‘To which child did everybody give a toy, and was it everybody that gave him a toy?’

The paradigm in (137) contrasts with (138): the “resumptive” is impossible with who\textsubscript{-}phrase. This follows on the assumption that the argument position in the second conjunct in such cases is realized by the non-overt wh-indefinite.

(138) a. Komu i skoro li ty otneseš vse èto baraxlo?
   whom\textsubscript{DAT} and soon Q you take all\textsubscript{ACC} this junk
   ‘To whom will you take all this junk, and will it be soon that you will take all this junk to somebody?’

b. *Komu i skoro li ty otneseš emu vse èto baraxlo?
   whom\textsubscript{DAT} and soon Q you take him\textsubscript{DAT} all\textsubscript{ACC} this junk

Given that the two constructions behave so differently with respect to the possibility of “resumption,” it stands to reason that the null-arguments in the second conjunct are likewise distinct. While the rHWh constructions with who\textsubscript{-}phrase contain a wh-indefinite, their equivalents with the fronted which\textsubscript{-}phrases contain a trace.\textsuperscript{40}

\textsuperscript{40} Given (133), the derivation under which the D-linked wh\textsubscript{-}phrase moves to Spec,CP in the first conjunct with a wh\textsubscript{-}indefinite merged in the second conjunct (i.e. exactly the manner endorsed for non-D-linked phrases) should in principle be available. One could plausibly conjecture that such a derivation should be possible in non-quantified environments. If so, given the diagnostics I develop, we predict that in the environment like (i) with a pre-li adjunct LBE should be possible while “resumption” is expected to be illicit. This is not borne out, as (i) indicates, which, in turn suggests that such a derivation is not possible for D-linked wh\textsubscript{-}phrases (though I am hesitant to venture a reason for this).

(i) a. *Kakomu i davno li dekan postavil dvojku __ studentu?
   which and long.time.ago Q dean gave F student
Returning now to ((132)b), there are two additional questions that this analysis invites. First, I need to address why the QNPs in pre-*li* positions are seemingly immune to the conspiracy of focus and ellipsis requirements that rule out non-quantified arguments in the same configurations. After all, they do bear focus interpretation, so they should be expected to behave on a par with their non-quantified counterparts. A related issue has to do with the position of QNP in the first conjunct: what triggers its movement to the C-domain? These two questions essentially constrain the remaining discussion in this chapter.

The long-standing observation in the field concerns scope parallelism. Generally speaking “parallelism” refers to a requirement in ellipsis contexts that entails structural identity between the elided constituent and its antecedent (Sag 1976, Williams 1977). In certain quantified contexts ellipsis often has the effect of eliminating scopal ambiguity. For example, in ((139)a) the existential obligatorily takes wide scope, but ((139)b) is ambiguous. Fox (2000) argues that (139) follows from Scope Economy, which dictates that all Scope Shifting operations produce a semantic effect. Raising a quantifier over a referring expression in (a) below would result in a scopally uninformative configuration (so it must be vP-adjoined). The parallelism requirement ensures that the adjunction level of the universal is preserved in both the antecedent and the sentence containing the ellipsis site. If so, the lack of ambiguity follows, since every *teacher* does not raise over some *boy*. On the other hand, (b) is ambiguous because the quantifier can target either vP or TP due to the presence of a scopally active element. Hence, both scope readings are allowed.

\[(139)\]

\[\begin{align*}
\text{a. Some boy admires every teacher. Mary does too.} & \quad (\exists \forall; \; \forall > \exists) \\
\text{b. Some boy admires every teacher. Some girl does too.} & \quad (\exists > \forall; \; \forall > \exists) \quad (\text{Fox 2000:4})
\end{align*}\]

The crucial point for my purposes here is that there seems to be an independently necessary condition imposed on ellipsis in the presence of quantified expressions: the QNP must be at the same level structurally in both conjuncts. I argued in Chapter 2 that XP material moves to Spec,CP in Y/N-questions. Therefore,
Spec,CP2 in the second conjunct in rHWh is the landing site for the QNP. Since this is so, given the parallelism condition, the QNP in the first conjunct must occupy an equivalent position in the first conjunct (i.e. Spec,CP1, as demonstrated in (140)). The QNP copy in CP1 (bolded below) is silent; the lower one in the second conjunct gets to be pronounced.

(140) \[ [\text{CP1 } \text{which-phrase}_1 \ [\text{CP1 } \text{QNP } \text{C}^0 \ [\text{TP } \text{li}] \]] \& \& [\text{CP2 } \text{Top}_1 \ \text{QNP } \text{li } [\text{TP } t_1 ] ] \]

So, an independently necessary mechanism guarantees the extraction of QNP to the edge of CP. But now observe that this operation has an additional effect: this QNP is no longer dominated by TP, hence it ends up outside of the ellipsis site. If so, the lack of argument-type effects mentioned above follows: TP material can be safely destressed and deleted. The pre-	extit{li} material in the lower conjunct does have a non-distinct counterpart (from the standpoint of feature composition) in the higher conjunct.

Hence, the scope parallelism derives both the necessity to move to the edge of CP as well as the lack of focus/ellipsis effects that hold of non-quantified arguments in rHWh questions with D-linked wh-phrases. Note that the scope parallelism issue is orthogonal for rHWh configurations with who-phrases. Here is why. Suppose we posit the derivation in (141), which entails QNP movement in the first conjunct exactly in the manner of (140): it has no effect on the blocking problem in the second conjunct, however. The wh-indefinite is still unlicensed, since the QNP intervenes between the licensor and the licensee. So, though the extraction of the QNP in the first conjunct solves the focus/ellipsis issue, it simultaneously engenders the blocking effect in the second conjunct. This latter precludes the possibility of rHWhs with non-D-linked wh-words.

(141) \[ [\text{CP } \text{who-phrase} \ [\text{CP QNP } \text{C}^0 \ [\text{TP } \text{li}] ] ] \& \& [\text{CP } \text{Op } \text{QNP } \text{li } \text{wh-indefinite} ] \]
The conclusions are as follows:

(i) Pre-*li* verbs and non-quantified arguments are impossible in rHWh questions with both D-linked and non-D-linked wh-words for the same reasons. The former trigger a presuppositional clash, the latter are a result of ellipsis requirements;

(ii) Adjuncts are acceptable in the position preceding *li*, since their appearance there causes no problems for any of the mechanisms argued to be involved in the derivation of rHWh strings;

(iii) The split between D-linked and non-D-linked wh-phrases in contexts with preposed quantified NPs follows from the nature of the null argument in the second conjunct: the former have a trace variable that must be bound by a topicalized wh-phrase, the latter has a non-overt wh-indefinite, which must be licensed. The raised quantifier induces a blocking effect for licensing, but not for binding. Hence, *which*-phrases are fine in such contexts, but *who*-phrases are not.

### 3.4 Conclusion

This chapter investigated the behavior of reverse hybrid questions, which distinguish themselves from “regular” hybrids by the permuted order of the conjuncts. I proposed a different treatment for rHWh questions and HWh questions. Within the former class, I also endorsed a distinction between rHWh with D-linked and non-D-linked wh-words. Descriptively the following holds: in rHWh questions D-linked phrases are licit when the position before the interrogative marker *li* is occupied by an adjuncts or a quantifier, while non-D-linked phrases only tolerate adjuncts to be preposed before *li*. These facts are summarized in TABLE 4.
TABLE 4. DESCRIPTIVE SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>(i) D-linked wh-phrase</th>
<th>(ii) Non-D-linked wh-phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>… &amp; Argument *li</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>… &amp; Verb *li</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>… &amp; Adjunct ✓li</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>… &amp; Quantifier ✓li</td>
<td>✓</td>
<td>*</td>
</tr>
</tbody>
</table>

I argued that both types of rHWh questions are underlyingly biclausal. The surface result is accomplished via ellipsis in the first conjunct. What sets the two configurations apart is the nature of the null element appearing in the second conjunct and the landing site of the wh-phrase. D-linked phrases target the higher segment of CP. Non-D-linked wh-words undergo movement to Spec,CP. The second conjunct in rHWhs with which-phrases contains a trace variable, as the movement of the wh-phrase proceeds in the ATB fashion out of each conjunct. This trace can be replaced by a “resumptive”-like pronoun. The second conjunct in rHWh questions with D-linked wh-words contains a non-overt wh-indefinite that must be licensed by the polarity/interrogative operator generated at the edge of CP. This difference was argued to be linked to their behavior in the presence of quantifiers. In rHWh questions with who-phrases the QNP induces a blocking effect by interfering between a licenser and the wh-indefinite. In the configurations with which-phrases, however, no licensing is necessary. The trace is required to be bound, which can be achieved even with an intervening quantifier.

I argued for the same analysis of which- and who-rHWh question when it comes to the distribution with pre-*li* verbs, arguments, and adjuncts. Verbs are ruled out in such configurations, since their appearance causes a presuppositional clash. Arguments are illicit due to the ellipsis requirement: a contrastively focused NP before the Y/N marker cannot have a counterpart in the second conjunct. Finally, pre-*li* adjuncts are felicitous: since they are not required in the first conjunct, their presence in the second conjunct does not inhibit any of the mechanisms implicated in the derivation of rHWh questions.
In conjunction with explaining the core empirical dataset of this chapter, I touched upon a few related issues. In particular, I reported on the previously unobserved licensing conditions in the environments with wh-indefinites: it turns out that there are restrictions on wh-indefinite licensing in the presence of quantified expressions. Some issues related to the behavior of topicalized constituents were discussed. I showed that topicalized material appears at the edge of CP by virtue of movement, rather than base-generation, as these constructions are sensitive to crossover and island effects. Furthermore, LBE is prohibited with TC. This chapter also dealt at various junctures with the properties of ellipsis and its interaction with quantifier raising and focus. Finally, I presented two additional arguments in favor of QR in Russian. It was shown to be instrumental in deriving the behavior of wh-indefinites in quantified contexts. The felicity of QNPs in pre-
li positions in rHWh-questions with D-linked words likewise falls in place if QR is assumed to be operable.
Chapter 4. Quantifier Raising

4.0 Introduction

The chapter focuses on an aggregate of independent facts that are argued to provide additional evidence for Quantifier Raising (QR) in Russian. In the preceding chapters I demonstrated that certain hybrid constructions involving quantifiers constitute one context in which QR takes place. The ensuing discussion covers a different empirical terrain, implicating the behavior of the anaphoric possessive svoj ‘self’s’ in a variety of contexts. Considered here are the possible and impossible combinations and permutations of svoj with various types of quantifiers, superlatives, and focalized elements. Crucially, both sets of facts – to wit, the pattern found in HWhs and the distribution of svoj – point to the same mechanism responsible for deriving the observed surface patterns.

Whether Russian has QR is a topic widely debated. The first explicit analysis of QR with respect to Russian is articulated in Ionin (2002). There she observes that in doubly quantified constructions in (1), the surface word order reflects the available scope readings of the quantified phrases. This distinguishes Russian from English, in which the inverse scope interpretation is accessible in comparable sentences, as in (2). She attributes this state of affairs to the information structure. The preverbal QP moves to the Topic position, while the postverbal QP occupies the focus position. Under this analysis the absence of inverse scope readings in Russian hinges on the impossibility of raising above Topic and the prohibition on reconstruction to the subject base position (she does not, however, address the issues of interpretation in the environments of the contrastive preverbal focus).

(1) a. [Odin mal’čik] poceloval [každuju devočku].
   [one boyNOM] kissed [every girlACC]

(one>∀): One (specific) boy kissed every girl.

*(∀>one): For every girl x, x was kissed by some boy.
b. [Odnu devočku] poceloval [každyj mal’čik].

[one girl_{ACC}] kissed [every boy_{NOM}]

(one>∀): For one (specific) girl, every boy kissed that girl.

*(∀>one): For every boy x, x kissed some girl.

(2) Some boy kissed every girl.

(some>∀), (∀>some)

Antonyuk-Yudina (2006, 2009) challenges the judgments reported in Ionin (2002). In particular, Antonyuk-Yudina claims that the inverse scope readings in multiply quantified sentences are available in Russian, just like in English (2) (the inverse scope reading is facilitated in the presence of numerals, as briefly discussed in Bošković (2004, ft.15)). Even more generally, Russian is sensitive to the same constraints and exhibits the same properties as QR in English (such as Fox’s (2000) Scope Economy Principle). If so, the analysis of QR in English with covert movement of QPs (as in, e.g., May 1985) extends to Russian.

In a more recent experimental study investigating the availability of inverse scope readings in Russian, Stoops and Ionin (2012) conclude that even though the surface scope of SVO and OVS strings is more readily available to speakers, both interpretations are possible.41

This chapter considers QR from an unusual perspective. Under scrutiny here is the ordering of elements within the QNP itself. It turns out that the stacking order of certain strong quantifiers and the anaphoric possessive is immutable: the former must follow the possessive. On the other hand, indefinites can appear either before or after the possessive. The basic paradigm is provided in (3): vse in ((3)a) has to surface before the possessive, while the indefinite kakie-to in ((3)b) is felicitous in both positions.

(3) a. Ona prodala [vse svoi vešči]. / ?* … [svoi vse vešči].

she sold all self’s things/ self’s all things

41 In fact, the preference for surface scope is documented for English speakers as well (see Anderson 2004, Tunstall 1998 and references therein).
‘She sold all her things.’

b. Ona prodala [kakie-to svoi vešči]. / ✓ ... [svoi kakie-to vešči].

she sold some self's things/ self's some things

‘She sold some of her things.’

I argue that the conspiracy of three factors underlies the observed dichotomy. The first component of the analysis requires a contextual treatment of phases, under which the highest XP in the extended domain of a lexical head counts as a phase; the second – a particular approach to movement, whereby only the element occupying the highest edge is eligible for extraction in phases with multiple edges. Both of these theoretical tools are proposed in Bošković (2014a, b, in press) and further developed here. Third, to derive the Russian svoj-quantifier interactions, we need the mechanism of QR, but of a particular flavor. In what ensues, I argue that in complex QPs only the quantifier is subject to extraction. Note that this is contrary to standard analyses, under which the entire QP containing the quantifier undergoes LF movement.

The chapter is roughly divided into two parts: the first part deals with the behavior of quantifiers, the second considers a variety of contingent phenomena that arise in conjunction with the analysis that I propose in the first part. The objective here is to give an account of the anaphoric possessive/quantifier interactions in Russian, which constitute the bulk of evidence for QR in Russian. I argue that the patterning of svoj with Qs essentially reduces to a conspiracy among QR, phasal properties (and conditions on extraction), and binding. The logic then is to track whether the claims that I make regarding the anaphoric possessive itself hold in other contexts. This, in turn, harkens back to the issues related to binding and the phasal approach that I adopt in this discussion. So, the basic expository strategy of this chapter is summarized below, where (i) and (ii) capture the empirical core that is considered here, and the rest reflect the necessary theoretical constructs to be used and developed.
The proposals made in this part of the dissertation have bearing on the proper account of Condition A (though it needs to be stressed that it is not my objective to provide a full account of all the BT-related facts in Russian, rather it is meant as a contribution on the level of the reasonably constrained dataset that may ultimately enhance our understanding of certain binding issues), the approaches to the interpretation and syntactic behavior of quantificational elements, and some focus-related matters.

Section 4.1 delineates theoretical assumptions and preliminaries that I rely upon in the analysis. Section 4.2 deals with quantifiers. Both agreeing and genitive-of-quantification (GoQ) assigning quantifiers are considered. The section also includes a discussion of certain issues related to the interpretation of svoj with GoQ assigning quantifiers, the weak vs. strong dichotomy, and a sketch of a semantic solution of my conception of QR. Next I turn to the interaction of the anaphoric possessive with focused elements in Section 4.3. Section 4.4 is dedicated to the behavior of svoj with superlatives. I discuss some issues related to what appears to be obligatory LBE in Section 4.5. The conclusion is in Section 4.6.
4.1 Preliminaries and assumptions

I take Bošković’s recent proposals as a point of departure in the investigation of properties associated with the anaphoric possessive. I am adopting two of his theoretical contributions. First, I assume a contextual approach to phases, whereby the highest projection in the extended domain of a lexical head counts as a phase. Second, I exploit the idea that only the highest edge is extractable in configurations with multiple phasal edges (Specs/adjuncts). Additionally, I adhere to the now standard parametric dichotomy with respect to the availability of functional projections in languages (also due to much recent work of Bošković and his students). The following is a brief elaboration of each point.

Bošković (2005, 2008c, 2013a, 2014b) argues that languages are subject to parametric variation in the nominal domain. He suggests that the presence/lack of articles in a language plays a crucial role: languages without articles lack the functional DP-layer. So, English-type incarnations, with definite articles in their functional inventories, project DP above NP, but Russian-type languages lack this D-layer. From this he derives a number of syntactic and semantic generalizations, based primarily on Slavic data. He shows a remarkably consistent split between Bulgarian and Macedonian, the only two Slavic languages with articles (hence DP-languages), on the one hand, and the remaining members of the Slavic family, the article-less (or NP-) languages, on the other hand. This consistently uniform patterning of DP vs. NP-languages is manifested in a variety of constructions: for instance, of all the Slavic languages only Bulgarian and Macedonian prohibit Left-Branch Extraction (LBE), but have clitic doubling. The opposite is true of the remaining members of the Slavic family. The LBE illustration is provided in (4) below: the adjective can be extracted in BCS (and the languages of its ilk, including Russian) in the manner of ((4)a); but Macedonian patterns with English in prohibiting such movement, as ((4)b) and the ungrammatical English translation in ((4)a) demonstrate. The analyses of such typological patterning crucially hinge on the absence/presence of DP.

(4) a. Skupa₁ je vidio [t₁ kola]. [BCS]
   expensive Aux3SG seen car

198
Another assumption I adopt in the ensuing discussion is that the adjective and possessives are NP adjoined. This is, in fact, necessary if we accept the no-DP treatment for Russian. Let me elaborate briefly on the alternative. There exist a few proposals in the literature on Slavic to treat Russian/BCS-type languages on a par with English/Italian-type: these analyses entail the presence of a null D⁰ and an elaborate system of functional projections below DP, which serve to host the adjectives of various flavors, demonstratives, and possessives in the tradition of cartographic approaches (Bašić 2004, Pereltsvaig 2007, Progovac 1998, Rutkowski 2009). For example, Bašić (2004) posits (5) for the Serbian nouns phrase based on the facts in (6). For her, the elements—demonstratives, possessives, and adjectives—are generated in the Specs of the relevant functional projections. It follows then that the order of those elements is immutable: demonstratives must always precede the adjectives and possessives.

(5) [DPovaj [PossP njegov [αP brbljivi [NP sused]]] [BCS]
   this his chatty neighbor

(6) a. *Petrovi oni gosti
   Peter's these guests

b. *dosadni oni gosti
   boring these guests

However, Bošković (2009) shows that the facts in (6) are better accommodated by his no-DP analysis, which entails that all the prenominal elements (including possessives and demonstratives) are NP-adjoined. He first demonstrates that in BCS the order of possessives and adjectives is free, as in (7), contrary to the predictions made by the cartographic-style approaches. He then argues that the reason why the paradigm in
The principles of semantic composition, whereby demonstratives must compose after the introduction of adjectives for type-theoretic reasons.42

(7) a. ✓ … njegova omlijena kola
    his favorite car

   b. ✓ … omiljena njegov kola

The other arguments for the DP in Slavic boil down to the strict internal order of adjectives (Pereltsvaig 2008) and the behavior of nouns/pronouns with an intensifier (Progovac 1998). These data are likewise shown to be insufficient to support the analysis along the lines of (5) in Bošković (2005, 2009), Despić (2011), and Zlatić (1997), a.o. I will not rehash the entire debate here, but will simply side with the proponents of the parametric approach, assuming that Russian has no DP and that its prenominal modifiers are essentially adjectival (each element must agree with a noun in case, gender, and number, as in ((8)a)) and hence adjoined to NP, as shown in ((8)b). As stated, syntax imposes no restriction on the order prenominal elements in ((8)b) (though semantics may). However, there are independent factors that may preclude certain adjunction configurations, as I will subsequently show.

(8) a. prodala ětu novuju papinu mašinu
    sold thisACC.FEM.SG newACC.FEM.SG dad’ACC.FEM.SG carACC.FEM.SG

   b. [NP DEM [NP AdjP [NP POSS [NP N]]]]

42 Furthermore, a variety of NP languages do not have the restriction in (6) (see, e.g., Bošković and Hsieh (2013) for a discussion of Chinese). In fact, Russian is one such language. Consider the following examples found in the wild, which show that the demonstrative is quite happy following the nouns in (i), adjectives in (ii) and possessives in (iii). Though they do have a peculiar interpretation in this context, not as true demonstratives, but rather as elements inducing a familiar interpretation (see Partee 2006).

(i) A lošad’ ětu umnuju potom s’eli.
    and horse this clever then ate3PL
    ‘And then they ate that clever horse.’

(ii) Gosti ne zametili glupix ětix slez.
    guests neg noticed silly those tears
    ‘The guests did not notice those silly tears.’

(iii) Mašina ěta znakomaja menja besit do žuti.
    Masha’s this acquaintance me annoys to horror
    ‘This Masha’s acquaintance irritates the loving god out of me.’
The final piece of technical machinery that I assume has to do with a particular conception of phases. The traditional treatment of phases (e.g., Chomsky 2000, 2001) is envisioned in rigid terms – the status of the XP does not depend on its syntactic environment, but rather hinges on its category (so, vP and CP are always phases, but, for example, VP is not). Bošković (2014a) raises an interesting conceptual objection to this view, couched in terms of historic continuity between the discoveries of GB and the current theoretical desiderata. He observes that GB’s barriers are akin to Minimalist phases in that they are formulated to capture the opaque/transparent domains for extractions. Crucially, the former are determined by the syntactic context, but the latter are not. So, in Chomsky’s (1986) system, CP’s properties are conditioned by the environment: it is a barrier when merged in the subject position or if it is an adjunct, but not a barrier when it appears in object positions. Under Minimalism, of course, this dichotomy is lost. Bošković deems this an unfortunate oversight, proposing to define phasehood contextually (basically preserving the insights of the earlier generative days and stacking additional empirical evidence in favor of this treatment). In fact, this is not an unpopular opinion: a number of researchers propose some variant of the contextual treatment of phrases (Bobaljik and Wurmbrand 2005, Bošković 2005, den Dikken 2007, Despić 2011, Gallego and Uriagereka 2007a,b, M. Takahashi 2010, 2011). Here I will assume Bošković’s (2014a,b, in press) system.

Under this view, the highest projection in the extended domain of every lexical head functions as a phase: hence, N, Adj, V, P all project phases. Depending on the inventory of functional elements in the language and the particulars of a given syntactic context, the phases will vary. Consider how this is implemented in English and in Russian.

As a general case, DP constitutes a phase in English, as in ((9)a), and NP – in Russian, as in ((9)c). That is because in ((9)a) the highest projection within the domain of N⁰ is DP. Recall that Russian lacks this functional layer, so the highest projection within the domain of N⁰ is NP. It should be emphasized that the absence of a DP in a language does not preclude other functional projections. Hence, in the cases involving certain quantifiers, we end up with the structure in ((9)b), with a QP in the argument position (some variant of ((9)b) is assumed for a variety of Slavic quantifiers that assign genitive case to the complement NPs, see Bošković 2006, Despić 2011, Franks 1994, 1995, and references therein, and Section 4.2.2 of this thesis).
This QP, by virtue of being the highest projection within the extended domain of N, now constitutes a phase.

(9) a. \[ \text{VP} \]

\[ \text{V} \]

\[ \text{DP} \]

\[ \text{D} \]

\[ \text{NP} \]

b. \[ \text{VP} \]

\[ \text{Q} \]

\[ \text{NP} \]

c. \[ \text{VP} \]

\[ \text{N} \]

Bošković (2014a,b, in press) also contends that in cases of multiple edges (Specs/adjuncts) of a phase, only the highest one counts as the phasal edge for purposes of the Phase Impenetrability Condition (PIC). Abstractly, YP in ((10)a) is the highest edge. This configuration renders it accessible for extraction ((10)b). ((10)c) with movement of ZP over an overt higher edge is illicit.

Chomsky (1995) demonstrates that traces do not count as interveners for Relativized Minimality (RM). The same reasoning is applied to the cases under current scrutiny: traces void “edgehood”, much like they rescind the effects of RM. Therefore, in ((10)d) the extraction of YP renders ZP the highest edge suitable for subsequent operations.

(10) a. \[ \text{Phase} \]

\[ \text{XP} \]

\[ \text{XP} \]

\[ \text{YP} \]

\[ \text{ZP} \]

\[ \text{X} \]

\text{highest edge: eligible for extraction}

b. \[ \text{Phase} \]

\[ \text{YP} \]

\[ t_{\text{YP}} \]

\[ \text{XP} \]

\[ \text{XP} \]

\[ \text{ZP} \]

\[ \text{X} \]

\text{highest edge: blocks extraction}

c. \[ \text{Phase} \]

\[ \text{XP} \]

\[ \text{YP} \]

\[ t_{\text{YP}} \]

\[ \text{XP} \]

\[ \text{ZP} \]

\[ \text{X} \]

\text{becomes highest edge: eligible for extraction}
What empirical benefit does this abstract pattern offer? Bošković considers a variety of extraction patterns out of NPs with complex edges. Crucially, they all comply with the analysis in (10).

Consider one illustration of Bošković’s (2014b) BCS paradigm in (11): ((11)a) is equivalent to ((10)c): the extraction out of AP is blocked by the higher edge Jovanovog ‘Jovan’s’. In ((11)b) ponosnog na tebe ‘proud of you’ is on the edge, so movement out of it is possible. Once Jovanovog moves in ((11)c), the AP becomes the edge licit for subsequent operations as predicted by ((10)d).

(11) a. *Na tebe1 sam vidio [NP Jovanovog [NP ponosnog t1] [NP oca]]
    of you am seen Jovan’s proud father
    ‘I saw Jovan’s father (who is) proud of you.’

b. Na tebe1 sam vidio [NP ponosnog t1] [NP oca]
    of you am seen proud father

c. ?Jovanovog1 na tebe2 sam vidio [NP t1 [NP ponosnog t2] [NP oca]]
    Jovan's of you am seen proud father

Anaphor binding is conceived in similar terms. First, given the phasal approach to Condition A, an anaphor can be bound outside its minimal domain if it occupies the edge (e.g. Despić 2011). In view of the above, however, the following amendment is necessary: the anaphor must occupy the outermost edge to be bound outside its minimal phasal XP. Consider Bošković’s BCS example in (12). The sentences in which the possessive follows the adjective are unacceptable, as demonstrated in ((12)a). That is because binding is blocked in this configuration, since the possessive does not occupy the highest edge. The fronting of the adjective in ((12)b) creates a configuration which renders the anaphoric possessive accessible to its binder (recall that the trace of omiljenu ‘favorite’ does not count in the computation of the edge). Further, omiljenu must occupy the highest edge prior to movement, otherwise it would not be able to move. Finally, in ((12)c), the possessive is stacked above the adjective, hence at the highest edge. It is predictably licit in this configuration.
(12) a. *Marija je prodala omiljenu svoju knjigu. (Bošković 2014b: 55)

María Aux sold favorite self’s book

b. Omiljenu je Marija prodala svoju knjigu.

c. Marija je prodala svoju omiljenu knjigu.

The BCS pattern in (6) is replicated in Russian (13): the order Adj>svoj in ((13)b) is disallowed, since the adjective, occupying the highest edge, blocks the binding of svoj. The judgments reported in (7) hold of neutral contexts. It should be noted that ((13)b) becomes acceptable if the adjective is focused. I will return to this issue in Section 4.3.

(13) a. Teri Lindeberg predstavila svoju avtorskuju kolonku. [www]

Teri Lindeberg presented self's author’s column

‘Teri Lindeberg presented her original column.’

b. *Teri Lindeberg predstavila avtorskuju svoju kolonku.

Teri Lindeberg presented author's self’s column

The prediction hence is that svoj in Russian ought to occupy the outermost edge in every context. In the ensuing sections I discuss three environments that are superficially problematic for Bošković’s approach. Certain quantifiers must precede the possessive whereas others can. The implications of this split are considered in Section 4.2, where I argue that quantifiers appear at the edge only in contexts of obligatory QR. The already noted interaction of the anaphoric possessive with focused elements (whereby the sequence Adjective>svoj is licit only if the adjective is focalized) is the topic of Section 4.3. In essence, I defend the position that Russian has overt focus movement. Finally, the superlatives appear to be freely ordered with respect to svoj, which is explored in Section 4.4.

Despite the apparent falsification of Bošković’s prediction, the analysis that I develop here does not contradict the above claims; in fact, it provides additional arguments in favor of the contextual treatment of phases.
4.2 Interactions of *svoj* with quantifiers

In this part I consider the interaction of quantifiers with *svoj*. The next two subsections deal, in turn, with “agreeing” and “genitive-assigning” quantifiers. The difference between the two types is illustrated below. ((14)a) evinces the former variety. Here each element of the NP, including the quantifier, is assigned the same case (accusative in the example). The quantifier agrees with the noun in gender and number. ((14)b) belongs to the second type. In structural case positions (i.e., nominative or accusative) the genitive-assigning quantifiers themselves appear in the appropriate case (the form is the same for nominative and accusative), but the material following them is invariably in genitive plural, suggesting a richer internal structure.\(^{43}\)

\[(14)\] a. My kupili ____
we bought
vse novye knigi/
all\_ACC\_PL new\_ACC\_PL books\_ACC\_PL

\(^{43}\) An important caveat here is that the genitive of quantification-assigning quantifiers can appear in oblique case positions (genitive, locative, dative, and instrumental). When that happens, each element of the quantified expression is declined. Consider the example in (i). The predicate *dovolen* 'satisfied' requires instrumental. So, each constituent within the NP is assigned instrumental, as indicated. Now compare (i) with (ii) and (iii). The latter two examples demonstrate case assignment in the contexts where the quantified constituent occupies the position in which the structural case is assigned – accusative in (ii) and nominative in (iii). This pattern is precisely what we see in ((14)b).

(i) Recenzent ne dovolen dvenadcat’ju/ neskol’kimi novymi knigami.
reviewer neg satisfied twelv\_INST/ several\_INST new\_INST books\_INST
‘The reviewer is not happy with 12/several new books.’

(ii) Recenzent pročital dvenadcat’/ neskol’ko novyx knig.
reviewer read twelv\_ACC/ several\_ACC new\_GEN books\_GEN

(iii) Dvenadcat’/ neskol’ko novyx recenzentov pročitali knigi.
twelv\_NOM/ several\_NOM new\_GEN reviewers\_GEN read books

Two points need to be kept in mind throughout the subsequent discussion. First, in positions of oblique case assignment, the genitive of quantification-assigning quantifiers behave exactly like agreeing quantifiers. Second, only the configurations like (ii) will be considered. That is because *svoj* is anaphoric, hence it has to be bound by something in the higher position (subject being the usual binder). As such, it cannot appear within the subject, since such a configuration will result in a Condition A violation.
Despite these differences, the patterns found in each environment with respect to the anaphoric possessive are handled by the same analysis. The novel observation concerns the split between strong and weak quantifiers in this context, rather than the agreement configurations. The strong quantifiers obligatorily precede the possessive, whereas the weak ones can appear either before or after svoj. Ultimately, I will show that whenever the quantifier surfaces in front of svoj, it is subject to QR.

### 4.2.1 Agreeing Quantifiers

The most natural order of quantifiers and svoj is in (15), where quantifiers of every flavor precede the anaphoric possessive. Observe that this pattern seemingly contradicts the “edgehood” requirement imposed on svoj discussed above. Conversely, a permutation of this order yields an unexpected result in (9). The latter demonstrates that strong quantifiers like vse ‘all’ and každyj ‘each’ are illicit if svoj occupies the edge,
as demonstrated in ((16)a,b). However, the indefinites (i.e., *-to and -*nibud’ series) can freely precede the possessive, as shown in ((16)c,d).

(15) a. Dostoevskij postavil na polku každuju svoju knigu.
Dostoevsky put on shelf each self's book
‘Dostoevsky put each book of his on the shelf.’
b. Dostoevskij postavil na polku vse svoi knigi.
Dostoevsky put on shelf all self's books
c. Dostoevskij postavil na polku kakie-to svoi knigi.
Dostoevsky put on shelf some self's books
d. Opublikoval li Dostoevskij kakuju-nibud' svoju knigu?
published Q Dostoevsky some self's book
‘Did Dostoevsky publish some book of his?’

(16) a. ?*Dostoevskij postavil na polku svoju každuju knigu.
Dostoevsky put on shelf self's each book
b. ?*Dostoevskij postavil na polku svoi vse knigi.
Dostoevsky put on shelf self's all books
c. Dostoevskij postavil na polku svoi kakie-to knigi.
Dostoevsky put on shelf self's some books
d. Ja ne znaju, opublikoval li Dostoevskij svoju kakuju-nibud' knigu.
I don't know published Q Dostoevsky self's some book

These basic facts are summarized below in (17).
Recall that I am following Bošković (2013a) and Despić (2011) in treating agreeing QPs and the possessive svoj as NP-adjuncts. Now with this, I can finally present the core argument of this part of my dissertation. Contrary to the traditional claims that Russian “wears LF on its sleeve” in that it lacks the covert QR operation (Ionin 2002), I endorse the opposite view. Specifically, I propose that the quantifiers in (15) undergo QR.\(^{45}\) Since traces do not count in the calculation of edge, the operation of QR ensures that svoj is on the outermost edge, which renders it accessible to its binder in LF as desired, as shown in ((18)a).

Now the question is how to capture the observed split between ((16)a,b) and ((16)c,d)? In ((16)a,b) the possessive is at the edge of the phase, so it blocks the extraction of the QP, as in ((18)b). It follows that quantifiers of this type are subject to obligatory QR. Indefinites, on the other hand, can be interpreted in-situ as choice-functional elements (Yanovich 2005). The configuration in ((16)c,d) is licit, as shown in ((18)c). The possessive here is properly bound, since it occupies the highest edge.

\(^{44}\) Some of my informants find ((16)c,d) as degraded as ((16)a,b). For these speakers, the analysis I give for ((16)a,b) holds of instances involving indefinites. Note that these are the same speakers for whom the wide scope interpretation of the indefinites discussed below is impossible.

\(^{45}\) I am arguing here that only the quantified element is subject to QR. I will return to this issue in Section 4.2.4
There are several additional facts that support this analysis. The first piece of evidence involves the introduction of the adjective in configurations like (19). If my account is on the right track, we predict that the order Q>Adj>svoj>N ought to be illicit, since the adjective occupying the edge of NP blocks the binding of svoj.\(^\text{46}\) This is borne out:

\[
(19) \begin{align*}
a. & \text{ Kompanija tščatel’no dokumentiruet každuju svoju pribyl’nuju sdelku.} \\
& \text{company thoroughly documents each self’s profitable deal} \\
& \text{‘The company thoroughly documents each of its profitable deals.’} \\
& \text{[www]} \\
b. & \text{ ?*Kompanija tščatel’no dokumentiruet každuju pribyl’nuju svoju sdelku.}
\end{align*}
\]

The second argument concerns the interpretation of indefinites, whereby the configuration in ((16)c) evinces a construal distinct from ((16)a). Reinhart (1997) and Kratzer (1998) treat indefinites as choice functions. One particular property of indefinites that invites such an analysis is their ability to scope out of islands (conditional in ((20)a) and CSC-island in ((20)b), data due to Reinhart 1997). Being a movement operation, QR is subject to locality constraints, hence cannot be implicated in deriving (20). Instead, indefinites are interpreted here via an in-situ mechanism.

\[
(20) \begin{align*}
a. & \text{ Most guests will be offended if we don’t invite some philosopher.} \\
& \text{ (some>most)} \\
b. & \text{ Everyone reported that [Max and some lady] disappeared.} \\
& \text{ (some>everyone)}
\end{align*}
\]

\(^\text{46}\) The judgments reported in (19) (and more generally of the configurations involving the preposed adjective) hold for prosodically neutral environments. For an extensive discussion of the interaction of focus and the possessive see Section 4.3.
Yanovich (2005) argues that -to items in Russian should be likewise analyzed as choice functional elements. He reports that (21) is ambiguous between two readings: ((21)-i) instantiates the meaning where the indefinite gets the widest scope; in ((21)-ii) it is interpreted inside the conditional.

(21) Petja budet sčastliv, esli kakaja-to devuška pridet.

Petya will.be happy if some girl comes

(i) **OK** ∃>if: ‘There is a property $p_{<e,t>}$ such that Petja will be happy if a girl $y$ such that $p(y) = 1$ comes.’

(ii) **OK** if>∃: ‘Petja will be happy if there is a girl who comes.’

Additionally, Yeremina (2012) maintains that wide scope is generally more prominent for -to indefinites in Russian.

Now consider (22) in light of these claims. ((22)a) is judged by the majority of my informants as realizing the wide scope interpretation, which is in line with the ‘indefinites as choice functions’ account (i.e. we expect the widest scope here in compliance with the Yeremina’s observation about indefinites). But in ((22)b), the most prominent reading is the one where the indefinite takes narrow scope, indicating that it is best treated as a quantificational element (again, in consonance with my analysis).

(22) a. ?Každyj professor dumaet, čto Ivan pročitaet svoj

each professor thinks that Ivan will.read self's

kakoj-to doklad na konferencii.

some-TO paper on conference

‘Every professor thinks that Ivan₁ will deliver some paper of his₁ at the conference.’

*Preference for ∃> ∀ (there is a particular paper of Ivan’s such that every professor thinks that Ivan will deliver it at the conference)*

b. Každyj professor dumaet, čto Ivan pročitaet kakoj-to svoj doklad na konferencii.

*Preference for ∀>∃ (each professor thinks that Ivan will deliver a [possibly different] paper of his)*
As a final piece of evidence observe the ordering restrictions on adjectives and quantifiers below. The quantifiers of the vse/každyj-type in (23) work in a predictable manner in that they obligatorily precede the adjectives. The examples in ((23)a) and ((23)c) are deviant, because the adjectives, occupying the higher edge, induce a blocking effect, which precludes QR. This leaves the order Q>Adj in ((23)b) and ((23)d) as the only available option for these types of quantifiers. The indefinites in (24) are also well-behaved. They can either follow or precede the adjective. Depending on their position with respect to the edge, they either undergo QR, as in ((24)b) and ((24)d), or stay in-situ, as in ((24)a) and ((24)c).

(23) a. *Studenty pročitali novye vse knigi.
students read new all books
‘The students read all the new books.’
b. ... vse novye knigi.
c. *Studenty pročityvajut novuju každuju knigu.
students read new each book
‘The students read each new book.’
d. …každuju novuju knigu.

give me new some book
‘Give me some new book.’
b. ... kakuju-nibud’ novuju knigu.
c. My posmotreli novyj kakoj-to fil’m.
we watched new some-TO movie
‘We watched some new movie.’
d. …kakoj-to novyj fil’m.
Furthermore, the semantic judgments reported in (22) for the indefinites and *svoj* orders are replicated in (25) for the two permutations of the orders involving indefinites and adjectives. There is a preference for the wide scope interpretation of the existential consistent with its previously alleged choice-functional nature in the contexts where it cannot raise. On the other hand, my informants prefer the narrow scope reading of *kakoj-to* in ((25)b). This is conditioned by the restriction on QR: *viz.*, this operation is clausebounded. Hence, in the case of ((25)b) we are indeed dealing with a raising quantifier rather than an element interpretable in-situ.

(25) a. Každyj professor polagaet, čto studenty posmotrjat novyj
    each professor thinks that student will.watch new
    *kakoj-to* fil’m na festivale.
    some-TO film at festival
    ‘Every professor thinks that the students will watch some movie at the festival.’

*Preference for $\exists \rightarrow \forall$ (there is a particular new movie such that every professor thinks that the students will see at the festival)*

b. Každyj professor polagaet, čto studenty posmotrjat *kakoj-to* novyj fil’m na festivale.

*Preference for $\forall \rightarrow \exists$ (each professor thinks that student [possibly different] new movie at the festival)*

The upshot of the discussion is the following: certain quantifiers are subject to QR (they all seem to be strong quantifiers\(^{47}\)). Hence, they must be the highest adjuncts in the NP, which ensures that the possessive is on the edge of the phase when binding takes place. Indefinites (and other weak Qs) must undergo QR, if they are on the edge of NP. However, if they are merged lower than the possessive, they are obligatorily interpreted in-situ as choice functional items.

\(^{47}\) I will return to the issue of the strong/weak distinction in Section 4.2.3. For now, I will simply use this nomenclature for ease of reference.
The central claim here is that Russian does indeed have QR, conceived as an extraction of the quantified element out of a complex NP. If so, the approach to phases and PIC developed in Bošković on independent grounds can be maintained.

4.2.2 Genitive of Quantification assigning quantifiers

The genitive of quantification (GoQ) assigning quantifiers evince the same split as agreeing quantifiers: some (mnogo ‘many’, bol’šinstvo ‘most’) must be obligatorily merged after svoj is introduced, as in (26), while others (neskol’ko ‘several’ and cardinal numerals) have the option of either preceding or following the possessive, as in (27) and (28).

(26) a. Sberbank priostanovit bol’šinstvo svoix operacij.
   Sberbank willsuspend most selfSGEN operations
   ‘Sberbank will suspend most of its operations.’

b. *Sberbank priostanovit svoix bol’šinstvo operacij.
   Sberbank willsuspend selfSGEN most operations

c. On opublikoval mnogo svoix fotografij.
   he published many selfSGEN photos
   ‘He published many photos of his.’

d. *On opublikoval svoix mnogo fotografij.
   he published selfSGEN many photos

Observe also that the QP elements in (27) can be sequenced in three possible ways. The quantifiers like neskolk’o ‘several’ and cardinal numbers may precede the possessive, as in ((27)a) and ((28)a). In this case, svoj is obligatorily assigned genitive. However, the anaphoric possessive is also eligible before the quantifier. It may surface with genitive, as in ((27)b) and ((28)b), or with accusative, as in ((27)c) and ((28)c). This variation with respect to case is accompanied by the available interpretation: ((27)b) and
((28)b) realize the partitive interpretation, while ((27)c) and ((28)c) encode the definite (or specific) meaning.

(27) a. On postavlja polku neskолько своих книг.
   He put on shelf several selfsGEN booksGEN
   ‘He put several of his books on the shelf.’

   b. On postavlja polku своих нeskol’ko книг. [has more than several]
      He put on shelf selfsGEN several booksGEN

   c. On postavlja polku свой несколько книг. [specific]
      He put on shelf selfsACC several booksGEN

(28) a. Dostoevskij postavil na polku 12 своих книг.
   Dostoevsky put on shelf 12 selfsGEN booksGEN
   ‘Dostoevsky put 12 of his books on the shelf.’

   b. Dostoevskij postavil na polku своих 12 книг. [has more than 12]
      Dostoevsky put on shelf selfsGEN 12 booksGEN

   c. Dostoevskij postavil na polku свой 12 книг. [specific]
      Dostoevsky put on shelf selfsACC 12 booksGEN

As was noted above, the quantifiers of the first type – like, mnogo ‘many’ and bol’šinstvo ‘most’ – obligatorily occupy the edge: to wit, ((26)b) and ((26)d) demonstrate that the possessive in genitive cannot precede these quantifiers (i.e., the following pattern is illicit: *своих> mnogo/bol’šinstvo). Attempts to front the possessive in accusative in the manner of ((27)c) and ((28)c) with mnogo and bol’šinstvo likewise fail (i.e., *своей> mnogo/bol’šinstvo), as captured in (29).

(29) a. *Sberbank приостановит свой bol’šinstvo операций.
    Sberbank will.suspend selfsACC most operations
b. *On opublikoval svoi mnogo fotografij.

he published self’s many photos

The preceding discussion is summarized in Table 5. All the agreeing quantifiers can hence be divided into two types: the first type can combine with a possessive under the condition that the quantifier is merged last. All the configurations in which the possessive precedes the quantifier are illicit. The second type boasts some flexibility: it can precede or follow svoj. Additionally, the possessive itself may be assigned accusative or genitive.

**Table 5. Eligible Configurations for Genitive Assigning Quantifiers with svoj**

<table>
<thead>
<tr>
<th>Type of Q</th>
<th>Environments</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Q&gt;svojGEN</td>
<td>(ii) svojGEN&gt;Q</td>
</tr>
<tr>
<td>(iii) svojACC&gt;Q</td>
<td></td>
</tr>
<tr>
<td><strong>TYPE 1</strong></td>
<td></td>
</tr>
<tr>
<td>mnogo ‘many’</td>
<td>✓</td>
</tr>
<tr>
<td>bol’sinstvo ‘most’</td>
<td>✓</td>
</tr>
<tr>
<td><strong>TYPE 2</strong></td>
<td></td>
</tr>
<tr>
<td>neskol’ko ‘several’</td>
<td>✓</td>
</tr>
</tbody>
</table>

It should be apparent at this point that (morphological details aside) we are dealing with a recurrent pattern, which amounts to the following generalization: certain quantifiers must, while others can, appear before the anaphoric possessive. The substance of the analysis remains unchanged: the arguments advanced in Section 4.2.1 for agreeing quantifiers extend to the GoQ assigning contexts in the familiar manner sketched in (30). If the quantifier precedes the possessive, then it is subject to QR, as in ((30)a). I will argue that quantifiers of Type 1 from Table 5 must undergo QR. Hence, they are ineligible in the position indicated in ((30)b). The quantifiers of Type 2, on the other hand, need not undergo QR (as their interpretation can be gauged through an in-situ mechanism, as in ((30)c)). If so, their ability to appear in the environments (ii) and (iii) in Table 5 is not surprising.
Of course, in the case of genitive-assigning quantifiers, it is necessary to account for the morphological patterns. The constructions involving GoQ presumably boast a richer internal structure (Bošković 2006, Bošković 2013a, Despić 2011, Franks 1994, 1995, and references therein). The literature on the subject is leaning in favor of additional functional material wedging in between the quantifier and the other constituents of the NP. For the sake of explicitness, I am adopting Bošković’s (2014a,b, in press) analysis of the distribution of numerals and svoj in BCS. I then extend it to all GoQ-assigning quantifiers.

Bošković (2013a) argues that numerals implicate a QP (see also Despić 2011 and references cited above), which constitutes the highest projection within the nominal domain and hence functions as a phase. Contra standard analyses of numerals as Q-heads, he endorses the view that numerals are phrasal elements (adjuncts to QP) on the grounds that they undergo Left Branch Extraction (LBE), an instance of phrasal movement. As (31) demonstrates, mnogo, neskol’ko, bol’šinstvo, and cardinal numbers also undergo LBE. Genitive case is assigned via an intermediary – the functional head F₀, which intervenes between QP and NP.

(31) My mnogo/neskol’ko/12/ bol’šinstvo (na-/s-)kupili knig.
we many/several/12/most bought books

‘We bought many/several/12/most books.’

These assumptions produce the structure in (32). It is problematic, however: since QP is a phase, its complement is subject to Spellout, rendering only its edge (mnogo) and its head accessible for further computations. But svoj, being inside the complement, belongs in the Spellout domain, where it cannot be bound.
To avoid this problem Bošković suggests that the anaphor tucks in under the quantifier as in (33), which precludes it from being spelled out. In this position it can be bound (after QR) by the subject in Spec,vP, as demonstrated below.

This takes care of the examples in (26) from the standpoint of mechanics. Now the question is: what motivates this movement of the anaphor to the edge? I suggest that a mechanism akin to Chomsky’s (1993) Greed is responsible for this operation: items move to satisfy their own requirements (see also Bošković 2007). Intuitively, the possessive wants to be bound, so it moves to the position where it can be bound. Suppose svoj enters the derivation with a feature [+anaphoric], which requires that the possessive occupy the edge. Note this is the opposite of the edge feature on the head (e.g., edge feature on T⁰, which drives movement to Spec TP). Hence, whenever the anaphor can move, it must move (in compliance with restrictions on movement such as (anti-)locality). Observe also that in the case of (7b) with an Adj>svoj order repeated below in (34), the possessive is on the edge (so, its [+anaphoric] feature is checked). The

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48 Following Bošković (2005), I am assuming that anti-locality is complied with if the element crosses the full phrasal boundary, not just its segment.
problem is that it does not occupy the highest edge. It is easy to verify that the same is true of all the instances involving agreeing quantifiers on the analysis that the Qs themselves are NP-adjoined.

(34) ?*Teri Lindeberg predstavila avtorskuju svoju kolonku.  
Teri Lindeberg presented author's self's column  
‘T.L. introduced her original column.’

The relevant parts of these examples are repeated in (35) for the convenience of the reader. There are several puzzles presented by the data in (35) in addition to the central problem investigated in this chapter. First, it is necessary to explain the differences in case assignment on the possessive: why can svoj appear in either accusative or genitive when fronted? Second, all three configurations are distinct in terms of the available interpretation. ((35)b) obligatorily engenders a partitive construal (under which the agent handles only a subset of all the books that he owns). ((35)a) is neutral in that it carries neither the exhaustivity presupposition (whereby the possessor may or may not have exactly the specified amount of items) nor the partitivity presupposition. ((35)c) is understood as a specific (or definite) expression devoid of the uniqueness/maximality presupposition, whose sense is best conveyed by the English paraphrase provided in brackets.

(35) a. neskol’ko/12 svoix knig [Q>poss>N]  
several 12 self’s GEN books  
[neutral interpretation]  
b. svoix neskol’ko/12 knig [possGEN>Q>N]  
self’s GEN several 12 books  
[✓partitive ‘may have more than several/12 books’]  
c. svoi neskol’ko/12 knig [possACC>Q>N]  
self’s ACC several 12 books  
[✓specific ≈ ‘those several/12 books of his’]
I will start by discussing how to handle the mechanics of case assignment and binding and then return to the semantic problems posed by (35).

In (35b) (which, recall, is the relevant fragment of (18b) and (19b)), the possessive originates inside the NP, adjoined to N in the familiar fashion, as demonstrated in (36). The constituents inside the NP, including the adjectival possessive, get genitive from F₀. Since svoj is endowed with the [+anaphoric] feature, it ought to move. This movement can proceed without causing any problems: it complies with locality and anti-locality requirements (it crosses the full phrasal boundary – FP – and terminates on the phasal edge, without going any further). This results in a recognizable configuration. The extracted anaphor occupies the outermost edge blocking QR and forcing the in-situ construal of neskol’ko/12.

(36)

In (35c) (which constitutes the fragment of (18c) and (19c)), svoi surfaces in the accusative. So both the quantifier and the possessive bear identical case, assigned by the predicate. From this, one can infer that the possessive is base-generated in the QP-adjoined position (rather than moved there from an FP-internal, genitive-assigning slot), as in (37). The quantifier does not undergo QR (due to the blocking effect of the higher edge), requiring the in-situ interpretation instead.

(37)

Putting aside the derivation of (35a) for now, let us first scrutinize the issues concerning the differences in interpretation for (35).
Russian is not unique in this respect. In fact, (35) is akin to the Chinese paradigm in (38). Partee (2006) reports that ((38)b) implies that Zhangsan owns more than three books, while ((38)a) carries no such implication. The partitive interpretation hence arises whenever the possessor follows the numeral, but not when the possessor precedes the numeral. This latter order is subjected to detailed scrutiny by Partee. It turns out that though English and Chinese in ((38)a) look remarkably similar, they are not identical in terms of meaning. In particular, Partee shows that both English and Chinese equivalents of ((38)a) are definite (or specific), but that Chinese definiteness/specificity is of a particular kind. The English John’s three books carries the exhaustivity presupposition, whereby John is understood to own exactly three books. This presupposition is absent in Chinese. So we end up with a conundrum: though the Chinese NP with the order Poss>Num is definite/specific, it is devoid of the uniqueness/exhaustivity presupposition characteristic of English examples.

(38)  a. [Zhangsan de] san ben shu [specific: no exhaustivity]
Zhangsan DEPOSS three CL book
‘Zhangsan’s three books’

b. san ben [Zhangsan de] shu [partitive: “more than 3 books”]
three CL Zhangsan DEPOSS book
‘three of Zhangsan’s books’

Partee credits Huang (1982) for the following data and tests. The NPs with the order Poss>Num are definite (or specific), since they can occur in the sentential subject positions, but may not participate in existential constructions, as shown below (the facts are exactly reversed for the order Num>Poss).

(39)  a. Zhangsan de san ben shu zai zher.
Zhangsan DEPOSS three CL book at there
‘Zhangsan’s three books are here.’
To glean what ‘definiteness without exhaustivity’ actually entails, Partee examines instances like (40), which implicate the peculiar usage of demonstratives in English. She dubs them “familiar that/those”. The crucial property of the familiar demonstratives is that they are not anaphoric to any explicit discourse antecedent. Instead, they realize “some presupposition of familiarity – the speaker conveys confidence that the hearer will recognize the intended referent, although it hasn’t been mentioned in the immediate context” (Partee 2006: 7). As such, they express “emotional deixis” between the interlocutors and funnel the presupposition of shared familiarity with the referent. Observe also that the contexts involving those familiar demonstratives lack the exhaustivity presupposition, much like the Chinese possessive construction in ((38)a). The upshot of this exposition should be obvious by now: the relevant Chinese construction ought to be treated like the facts in (40), since they encode the same semantic effect – to wit, definiteness/specificity without the exhaustivity.

(40)  a. Those three books of yours are still in my office.

b. I really didn’t like that one argument of his, and I told him so.

Returning now to Russian (35): the example in ((35)c) is like Chinese ((38)a)/English (40) in that it involves the familiar interpretation/specificity reading. Consider the emotionally charged discourse in (41). In the grammatical ((41)a), the speaker and the hearer have in mind a specific set of books, familiar to both participants of the conversation. The example does not necessarily imply that the ownership of the addressee is limited to five books (though it is compatible with that meaning).\(^49\) The accusative on the

\(^{49}\) Actually, there is an interesting caveat here. Partee (1989) credits Huettner (1984) for the following observation regarding “generic all”.

(i) There were few faculty children at the 1980 picnic.

Here, few can be understood as all. That is, all the faculty children were present at the event, but there were not many to begin with. The same reading is available for English instances involving the possessive in (ii). Partee then shows
possessive indicates the high generation of svoj. Recall that the possessive in ((41)b) is argued to be base-generated lower. Observe that it is incompatible with this context, where the familiar reading is apparently required and partitive is excluded.

(41)  a. Zabiraj svoi pjat' knig i vali ostjuda k čertu.
     take self\[^{\text{ACC}}\] five books and get.out from.here to devil
     ‘Take those five books of yours and go to hell.’

     b. *Zabiraj svoix pjat' knig i vali otsjuda k čertu.
     take self\[^{\text{GEN}}\] five books and get.out from.here to devil

Running Huang’s definiteness test discussed above, we discover the following. In existential constructions like (42), the possessor may appear before the numeral, but only if it is in the genitive, cf. ((42)a) with the genitive and ((42)b) with the nominative possessors.\(^{50, 51}\) The opposite set of judgments is recorded for the possessed NPs in the subject positions in (43): the acceptable variant involves the possessor in nominative ((43)b), rather than genitive ((43)a).

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that this generic existential meaning is incompatible with the analysis of QR of many: she argues for an in-situ interpretational mechanism for such cases (Partee 1989: 10).

(ii) John sold his many books = all of his books.

Russian examples involving svoj\[^{\text{ACC}}\rightarrow\text{Num/neskol'ko}\] seem to evince the same effect: in certain contexts they can be interpreted in this “generic all” sense. I will not attempt to disentangle whether this is something parasitic on the familiar interpretation or an independent effect, conditioned by other factors; I am simply reporting it as a curious factoid here.

\(^{50}\) Note that examples like ((42)a) work only if the possessive is focused (i.e. ((42)a) is good with the continuation in parentheses). Note that the qualifying conjunct can be implicit; it serves precisely to establish the partitive context.

\(^{51}\) The nominative and accusative forms of the possessor are syncretic in the contexts I am discussing here. The possessor svoj, however, is impossible, since I am testing the NPs in the subject position or in the positions where nominative is assigned (viz. existential constructions like (42)). Because svoj is anaphoric, it cannot be bound in such configurations.
Superficially, Russian boasts a more complicated paradigm than Chinese. This complication, however, is only apparent. Recall that the genitive originates lower than the accusative/nominative possessive; its surface position is derived via movement.

It follows, therefore, that the base position of the possessive determines the available interpretation, whereby the partitive interpretation arises if the possessor is construed within the scope of the quantifier. The latter is precisely the contention made in Bošković and Şener (2014) with respect to Turkish (44). In certain contexts, Turkish examples like (44) realize the partitive reading. Bošković and Şener then set out to explain the availability of the partitive reading in the following way. They take Chinese (38) to overtly encode LF: i.e. Chinese (38) is the underlying structure of Turkish (44) (on the partitive reading). This assumption leads them to argue that (44) is derived via possessor movement, as in (45).\footnote{They present several arguments in defense of this proposal. Consider, e.g., (i). Relying on Takahashi’s (2000, 2001) claims that \textit{pro} does not move, they show that examples like (i) force a partitive interpretation, and predictably so, if there is a link between the low generation of the possessor and this reading. For additional arguments see cited work.}

\begin{itemize}
\item[(i)] \text{üç pro kitab-im]-t ev-de brak-ti-m} \\
\text{three pro book[SG,ACC] house[LOC] leave[PAST,SG]}
\end{itemize}

‘I left three of my books at home.’
to note here with respect to Turkish (44), however, is that strictly speaking, the sentence does not require the partitive interpretation. It is, in fact, closer in meaning to Russian neutral ((35)a).

(44) Can-in üç bisiklet-i

John_{GEN} three bicycle_{1SG}

‘John’s three bicycles’

(45)

Putting aside ((35)a) for the moment, several conclusions naturally present themselves. First, Russian is very similar to Chinese with respect to the available readings: the lower base position, as in ((46)a), engenders the partitive construal, while the high base generation of the possessive shown in ((46)b) induces the familiar interpretation/specificity effects. The crucial point to note here is this: examples like ((46)a) are forced into partitive construal, but they still lack the specificity of ((46)b) (despite appearing in the same surface position): evidently, to be specific the possessive must be generated outside of the scope of the quantifier.

(46) a.

Second, given its morphological richness, Russian offers more explicit tools for probing the underlying positions of the possessors. Finally, there is a larger theoretical consideration informed by (35), which involves one of Bošković’s NP/DP generalizations.

In particular, Bošković (2012) reports that NP languages (Bangla, BCS, Hindi, Japanese, Korean, Magahi, Malayalam, Russian and Turkish) all pattern with Chinese in lacking the exhaustive
interpretation. The DP languages (Arabic, Basque, Brazilian Portuguese, Dutch, Hebrew, Italian, Spanish) pattern with English in requiring the exhaustive interpretation in the contexts where the possessive precedes the quantifier. This allows him to state the following generalization:

(47) Possessors may induce an exhaustivity presupposition only in DP languages.

Russian, despite the veritable plethora of possessive constructions, complies with (47). One can reasonably conjecture that the exhaustivity/uniqueness presupposition is associated with D. Since Russian (and other languages of its ilk) lack DP, it is entirely unperplexing why they should also lack the exhaustivity presupposition.

We can now return to the neutral ((35)a) repeated below in (48).

(48) neskol’ko/12 svoix knig [Q>poss>N]
   several 12 self’s books
   [neutral interpretation]

Two curiosities are tied to examples like (48). First, with regard to Huang’s test, this construction is eligible both in existential contexts and in subject positions with locative codas, as demonstrated by (49), much like the equivalent English translations. Second, the exhaustivity presupposition is missing here.53

(49) a. U nego est’ 5 moix knig.
   at him is 5 my books
   ‘There are 5 of my books in his possession.’

b. 5 moix knig ležali na stole.
   5 my books were.lying on table
   ‘5 of my books were on the table.’

53 It is a good juncture to mention that the exhaustivity presupposition appears to be a soft presupposition which can be cancelled given the right pragmatic context (see Partee 2006).
Given this, the examples like (48) are handled exactly like ((35)b), save for the surface position of the possessive. In this case, the possessive tucks in under the quantifier, as demonstrated in (50), but in the case of the latter it adjoins to the QP, as in (36). As before, the possessive in (50) tucks in under the quantifier, being driven by [+anaphoric] feature. The quantifier undergoes QR, leaving the anaphor on the edge.

Recall now that Turkish (44) is also neutral (partitive interpretation arises in particular contexts). From the standpoint of meaning, it is like Russian (50). Strangely enough, it is unlike (50) in the surface word order. It would be instructive to provide a brief summary of the data discussed.54

TABLE 6. INTERMEDIATE SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>Russian</th>
<th>Turkish</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Familiar/Specific</td>
<td>Poss_{ACC}&gt;Num</td>
<td>Poss&gt;Num</td>
<td></td>
</tr>
<tr>
<td>(ii) Neutral</td>
<td>Num&gt;Poss_{GEN}</td>
<td>Num&gt;Poss</td>
<td></td>
</tr>
<tr>
<td>(iii) Partitive</td>
<td>Poss_{GEN}&gt;Num</td>
<td>(Num&gt;Poss)</td>
<td>Num&gt;Poss</td>
</tr>
</tbody>
</table>

I have argued above that the familiar/specific reading is achieved via the high base-generation of the possessive (presumably adjoined to QP). Russian case facts and Chinese surface configuration that reflects

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54 The empty entries in the table are not meant to imply that the other two languages lack the indicated interpretation. Exploring their properties in any more detail will take me too far afield. I will simply deal with the Russian data here, leaving the more detailed investigation of the other languages for future research.
LF (as noted by Bošković and Şener) argues in favor of this treatment. Therefore the entry (i) in TABLE 6 has the derivation in (51). Crucially the possessor is interpreted above QP only if it is base-generated there.

(51) $[svoi_{ACC} [Q…]] \rightarrow \text{specific/familiar} \quad [= \text{Chinese ((38)a)/Russian ((35)c)}]$

Turning now to the partitive and neutral readings (i.e., entries (ii) and (iii) in TABLE 6), let us assume the following: the edge of NP necessarily correlates with the partitive constual, whereas Spec, QP is associated with the neutral reading, as demonstrated in (52). I will first provide an account for Russian, based on this, and then explain how to derive the Turkish facts.

(52)

If the neutral reading is licensed in the Spec, QP position, the Russian derivation of examples like ((35)a) proceeds as shown in (53): $svoix$ moves to Spec, QP, which is where it is pronounced and interpreted.

(53) $= \text{Russian ((35)a) [Q}$\textit{svoix}_{GEN}$]: neutral
The partitive meaning is associated with the edge of NP. The derivation of ((35)b) (= entry [ii] in TABLE 6) is provided in (54). The possessive here adjoins to QP. I argue above that to be interpreted above QP, the possessive needs to be generated there, which is impossible in this case given the genitive case (shown to be assigned QP-internally earlier) on the possessive. Hence, the only possible interpretation in cases like (54) is in the position of the trace, which is on the edge of NP. This produces precisely the desired result. Note that the derivation cannot proceed as indicated by the dashed line: the possessive cannot stop in Spec, QP (the locus of neutral interpretation) and adjoin to the same QP, as such movement would result in an anti-locality violation.

Finally, consider Turkish in (55). I suggest that Turkish has enough structure to accommodate the possessive in the intermediate position in Spec, QP in contrast to Russian (54). The crucial difference between Turkish and Russian is that Turkish has a rigid word order with respect to possessives and adjectives (in contrast to Slavic): possessives always precede the adjectives, which is suggestive of a specialized functional position for possessives (call it PossP). If so, in cases like (44)/(55) PossP is merged above QP; and it is this position that is ultimately targeted by the possessive. Now the difference between Russian (54) and Turkish (55) is the availability of this higher position: the Turkish possessive incurs no anti-locality violations if it stops in Spec, QP, but Russian does. From this the interpretation effects follow
straightforwardly: Turkish possessive can be interpreted in Spec, QP, which is associated with the neutral reading.\(^{55}\)

\[(55)\]

\[\text{NP} \quad \text{Q} \quad \text{QP} \quad \text{poss} \quad \text{Num/Quan} \quad <\text{poss}> \quad \text{\^{neutral reading}}\]

\[= \text{Turkish (44) [Poss>Q]: neutral}\]

With this tentative analysis of interpretation in place, we can return to the core facts of this section—viz., binding of the anaphoric possessive in Russian. The one consistent feature has to do with the height of this element—whether it is base generated adjoined to QP, moved there or stranded by a raised quantifier,—it has to end up very high in the structure in order to be bound. Some independent evidence supporting this claim involves ellipsis. A number of researchers (e.g., Boeckx 2009, Bošković 2014a, Cheng 2013, Gengel 2009, Rouveret 2012, van Craenenbroeck 2010, and references therein) have argued that only phasal complements (and phases) can be elided. So, if svoj remains in the NP-internal position (as in the hypothetical (23)), it cannot survive ellipsis (since it is buried in the complement of the phasal head position). On the other hand, if svoj moves to a higher position, as I argue, then it should survive ellipsis. The latter is borne out, as shown in ((56)b) (cf. ((56)a)).

\[(56)\]

a. *Maša prodala neskol'ko svoix knig, a Petja obmenjal

\[\text{Masha sold several self's books and Petja exchanged}\]

\(^{55}\) For the alternative approach to the structure of Turkish NP, see Bošković and Şener (2014).
b. Maša prodala neskol'ko svoix knig, a Petja obmenjal mnogo svoix knig.

The main takeaway point from this section pertains to the similar patterning of quantifiers with respect to svoj placement. Despite the need for more technology and a richer structure in the GoQ assigning contexts, I propose a blanket analysis that stands for all types of quantifiers: whenever the quantified element precedes the possessive, it is subject to QR. The operation is obligatory for strong quantifiers (irrespective of their agreement properties), so they must always be merged last to be accessible for extraction. On the other hand, quantifiers, interpretable in-situ, can be introduced into the structure earlier than the possessive.

4.2.3 Strong vs. Weak quantifiers: the case of mnogo/mnogie and ni-items

In the previous sections, I made a distinction between two types of quantifiers – those obligatorily undergoing QR and those that can be interpreted in-situ – tentatively concluding that the strength of the quantifier underlies this dichotomy. This section investigates some of the features and properties associated with each quantifier type.

One of the earliest investigation of the contexts in which certain quantifiers are eligible to appear is due to Milsark (1977), who observed that determiners like every, the, all, neither, most are not allowed in existential contexts, but they can co-occur with property predicates. These ‘strong’ Qs contrast with weak determiners like a, sm, and cardinal numbers, whose distribution is exactly the opposite: they are compatible with there-constructions, but impossible with individual-level predicates.

Partee (2004) proposes the context in (57) as a probe for the quantifier strength: only weak quantifiers are eligible to fill the gap here.
Based on the results of the test, we obtain the following:

**TABLE 7. PARTEE'S WEAK/STRONG TEST IN RUSSIAN**

<table>
<thead>
<tr>
<th>Strong Qs</th>
<th>Weak Qs</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>každyj</em> ‘each’,</td>
<td><em>mnogo</em> ‘many (adverbial)’,</td>
</tr>
<tr>
<td><em>vse</em> ‘all’,</td>
<td><em>nemnogo</em> ‘few’,</td>
</tr>
<tr>
<td><em>mnogie</em> ‘many (adjectival)’,</td>
<td><em>neskol’ko</em> ‘several’,</td>
</tr>
<tr>
<td><em>bol’sinstvo</em> ‘majority, most’</td>
<td><em>nikakoj</em> ‘none’</td>
</tr>
</tbody>
</table>

The seemingly problematic cases involve *ni*-items and *mnogo/*mnogie. Consider first the adverbial *mnogo* ‘many’ in (58). By all accounts it is a weak quantifier, yet it cannot be preceded by the anaphoric possessive. Under my analysis this indicates that the quantifier is subject to obligatory QR. On the other hand, the adjectival *mnogie*, which is strong according to the diagnostic above, can be preceded by the possessive, as in (59), pointing to the availability of in-situ interpretation.

(58)  

a. Dostoevskij postavil na polku *mnogo svoïx* knig.  
Dostoevsky put on shelf *many* *self’s* books

b. *Dostoevskij postavil na polku svoï* *mnogo* knig.  
Dostoevsky put on shelf *self* *many* books

c. *Dostoevskij postavil na polku svoi* *mnogo* knig.  
Dostoevsky put on shelf *self’s* *many* books

(59)  

William Petty posvjatil *svoi mnogie* èkonomičeskije trudy  
William Petty dedicated *self’s* economic studies
The situation with ni-items (the elements licensed by verbal negation)\textsuperscript{56} is analogous to what was reported above for mnogo. Ni-items have to precede the anaphoric possessive, despite falling into the category of weak determiners (cf. ((60)a) and ((60)b).

\begin{equation}
\text{(60) a. Oni ne smogut nikakuj svoju ideju provesti.}
\end{equation}

\begin{equation}
\text{they will.not.able ni-which self's idea realize}
\end{equation}

\begin{equation}
\text{‘They will not be able to realize a single idea of theirs.’}
\end{equation}

\begin{equation}
\text{b. ?* ... svoju nikakuj ideju...}
\end{equation}

These data, hence, demonstrate that the strong/weak distinction is not entirely precise when it comes to the facts under scrutiny here: some purportedly strong quantifiers ought to be interpretable in-situ given my reasoning, while certain weak ones are subject to QR, as summarized below.

\textsuperscript{56} A detailed discussion of ni-items is to follow in a moment. Foreshadowing this exposition, however, I should briefly introduce these elements. Morphologically ni-items consist of a negation element (ni) attached to the wh-word. They are NPI-like in that they are only licensed in the contexts of clausemate verbal negation. So, in the examples below, only (i) is acceptable; (ii) is bad because there is no negation to license the ni-element, and (iii) shows that the licenser must be local (see Brown 1999 and references therein).

\begin{equation}
\text{(i) Ivan ničego ne prines.}
\end{equation}

\begin{equation}
\text{Ivan ni-what neg brought}
\end{equation}

\begin{equation}
\text{‘Ivan didn’t bring anything.’}
\end{equation}

\begin{equation}
\text{(ii) *Ivan ničego prines.}
\end{equation}

\begin{equation}
\text{Ivan ni-what brought}
\end{equation}

\begin{equation}
\text{Intended: ‘Ivan does not know who brought nothing.’}
\end{equation}
TABLE 8. QUANTIFIER CLASSIFICATION IN RUSSIAN

<table>
<thead>
<tr>
<th>Partee's test:</th>
<th>STRONG QS</th>
<th>WEAK QS</th>
</tr>
</thead>
<tbody>
<tr>
<td>My analysis:</td>
<td>OBLIGATORY QR</td>
<td>INTERPRETABLE IN-SITU</td>
</tr>
<tr>
<td></td>
<td>• každyj ‘each’</td>
<td>• mnogie ‘many (adjectival)’</td>
</tr>
<tr>
<td></td>
<td>• vse ‘all’</td>
<td>• bol’šinstvo ‘majority, most’</td>
</tr>
</tbody>
</table>

I will first discuss the case of mnogo/mnogie and then turn to ni-items. The objective is to present some evidence that mnogo and ni-items do, in fact, undergo QR.

Before I proceed, I briefly summarize Partee (1989), since I will rely on her account and extend her diagnostics to the above. First Partee observes that (61) evinces two interpretations indicated in ((61)a) and ((61)b). Partee argues that though truth conditionally ((61)a) and ((61)b) are equivalent, they ought to be treated differently. The proportional reading arises from QR (in such cases many patterns with strong Qs like most, every etc. in that it is an operator, participating in the tripartite structure: Operator+Restrictive clause+Nuclear scope). The cardinal reading, on the other hand, is realized by the adjectival many, which lacks intrinsic quantificational force. The latter are treated as Kamp-Heim indefinites. The summary is provided in (62).

(61) Many aspens burned.

(a) Cardinal: |A \cap B| > n

(b) Proportional: \[ \frac{|A \cap B|}{|A|} \geq k; \quad k \text{ a fraction or } \% \]

(62) a. Cardinal reading: in-situ interpretation

b. Proportional reading: obtained via QR
Claims have been made that Russian encodes the distinction in (62) morphologically. Babko-Malaya (1998) argues that the adverbial *mnogo* is cardinal, while adjectival *mnogie* is proportional, based on their behavior in *there*-insertion sentences and their compatibility with permanent property predicates. Combining this insight with Partee’s analysis of proportional and cardinal readings, we run into an obvious contradiction with respect to my analysis of (58). If *mnogo* is cardinal, under Partee’s analysis it has to be interpretable in-situ. On the other hand, since *mnogie* is proportional, it ought to be subject to QR. This is, in fact, the opposite of what I endorse for those quantifiers. In the ensuing discussion I first challenge the notion that *mnogo/mnogie* unambiguously correspond to cardinal/proportional interpretations (respectively) in all contexts. Then I briefly present an analysis (due to Krasikova (2011)) that supports my proposals on independent grounds.

Though in English the context often allows for both interpretations, Partee points out that there are environments in which the reading is unambiguous and corresponds to either the cardinal or the proportional interpretation. One such environment is in (63). Whenever *many* is preceded by an article it is obligatorily interpreted as an adjectival element carrying cardinal reading. In (63), then, the first instance of *many* is obligatorily proportional (=quantificational), the second – cardinal.57

(63) Many of the many protestors advocated violence. (Partee 1989: 9)

The introduction of the possessive induces the same effect on interpretation as the article. In ((64)a), the possessive precedes *many*, giving rise to cardinal construal. The partitive ((64)b) realizes proportional reading.

57 Note, incidentally, how nicely this fact fits my proposal: the quantificational reading is uniformly missing for the elements which are not on the edge and hence cannot undergo QR. Since the article blocks the movement of Q in such instances, *many* ought to be obligatorily construed cardinally.
(64)  a. He sold his many books.  
         Cardinal [his books>n or his books = ‘all’ generic existential] 
   b. He sold many of his books.  
         Proportional

Let us now consider the Russian facts in light of the above. First, an example like (63) is given in (65).  

Much like in (63), the first instance of *many* in ((65)a) is proportional, the second is obligatorily cardinal.  

Crucially, the proportional reading is instantiated by a weak Q – the adverbial *mnogo*. The adjectival *mnogie* is distinctly peculiar in this construction in ((65)b). The attempts to permute their order in ((65)c) also produces a deviant result.  

(65)  a. My pereprobovali mnogo mnogix bljud. = a large proportion of a large number  

        we tried many$_{ADV}$ many$_{ADJ}$ dishes  

        $^*$proportional $^*$cardinal


        we tried many$_{ADJ}$ many$_{ADJ}$ dishes


        we tried many$_{ADJ}$ many$_{ADV}$ dishes

58 Partee observes that *many* can be understood as *all*. Partee shows that this generic existential meaning is incompatible with the proportional interpretation.

59 One may plausibly object that ((65)b) may be attributed to the PF ban on the two consecutive homophonous words. My reader should already be familiar with Bošković’s example in (i-a). Here the lower wh-phrase is pronounced to avoid a PF violation (due to the prohibition on the contiguous homophonous words). However, the pronunciation of the higher copy is fine if the second wh-word receives strong emphasis, as in (i-b). In the latter case, the two contiguous copies are, in fact, distinct for the purposes of phonology.

(i)  a. Što$_1$ [što$_2$ t$_1$ uslavljava što$_2$]?  
         what what conditions what  
         ‘What conditions what?’

         b. Što$_1$ [što$_2$ t$_1$ uslavljava što$_2$]?

However, no such improvement is observed for ((65)b). This, in conjunction with the impossibility of ((65)c), suggests that we are dealing with a non-PF effect.
Second, the paradigm in (66) replicates the English facts reported in (64): ((66)a) with the adverbial 
\textit{mnogo} preceding the possessive receives a proportional interpretation. On the other hand, ((66)b) with 
adjectival \textit{mnogie} following \textit{svoj} is construed cardinally.

(66) a. On prodal mnogo svoix knig. \hspace{1cm} \text{Proportional} \\
he sold many\textsubscript{ADV} self\textsuperscript{sGEN} book\textsubscript{GEN} \\
‘He sold many of his books.’

b. On prodal svoi mnogie knigi. \hspace{1cm} \text{Cardinal} \\
he sold self\textsuperscript{sACC} many\textsubscript{ADJ} book \\
‘He sold his many books.’

With this two facts in mind, consider the alternative to Partee’s analysis. Krasikova (2011) defends 
the “pragmatic” approach to ambiguity of \textit{many}, which amounts to treating the proportional reading as a 
subcase of the cardinal reading. What sets the two construals apart is the notion of comparison class. With 
respect to Russian, she argues that \textit{mnogie} is akin to attributive gradable adjectives, whose comparison 
class is determined by the head noun. Adverbial \textit{mnogo}, on the other hand, is a focus-sensitive adverb that 
is best treated as a degree operator. Its comparison class is determined by the focus structure of the 
sentence. For explicitness consider Krasikova’s sentences in (67), which are argued to have the LF 
representations in (68). Putting aside the precise technical implementation of all the derivational steps, one 
crucial point to note here is that she derives both examples in (67) by moving \textit{mnogo} to the edge of the 
clause. So, in effect, we converge on this movement analysis for \textit{mnogo} on independent grounds – 
Krasikova tackles the problem from the semantic side, my approach is entrenched in syntactic facts.

(67) a. Mnogo detej boleet [grippom]\textsubscript{F}. 
many\textsubscript{ADV} children is.ill with.flu

b. Grippom boleet mnogo [detej]\textsubscript{F}. 
with.flu is.ill many\textsubscript{ADV} children 
(Krasikova 2011:110)
(68) a. mnogoC[¬C λd [ ∃ [a, d [ d(et) MEAS detej)]] λ x [,boleet [grippom]]]

b. mnogoC[¬C λd [ ∃ [a, d [ d(et) MEAS [detej]]] λ x [,boleet grippom]]

Hence, _mnogo_ has to move to the edge of CP. This yields precisely the predicted result with respect to the behavior of the possessive: it can only follow this quantifier. The QR of _mnogo_ ensures that _svoj_ is on the edge. On the other hand, _svoj_ cannot precede is, as it would block the extraction.

With this settled, I turn to the problem of _ni_-items presented by examples like (60) and (69). From Table 4 we can glean that _ni_-items are classified as weak determiners given Partee’s test, yet my system prescribes to treat them as quantifiers which obligatorily undergo QR.

(69) a. Jane priglašaju nikakix svoix znakomyx.

   I invite _ni_-which self’s acquaintances

   ‘I am not inviting any acquaintances of mine.’ [www]

b. *…svoix nikakix znakomyx.

The question is whether there is any independent evidence for treating _ni_-items in a way consistent with my analysis. As it turns out, there is. One such proposal is made in Abels (2005), who articulates a number of compelling arguments in favor of treating _ni_-items as universal quantifiers (or “polarity sensitive universal quantifiers” to be precise) that undergo movement to Spec, NegP. He considers the distributional affinities and differences between Genitive of Negation (GoN) licensing contexts and environments in which _ni_-items are eligible to appear. To appreciate Abels’s contribution consider his paradigm in (70), which demonstrates two things. First, in positive contexts like ((70)b) the object is assigned accusative (both genitive and _ni_-items are prohibited in this environment). If the verb is negated, however, as in ((70)a), all three options (i.e., accusative, genitive and _ni_-items) are possible. Second, GoN and _ni_-items are licensed under clausemate negation, as is evident in ((70)c), where the negation in the matrix clause is unable to license eather GoN or _ni_-items in the embedded clause.
While (70) captures the similarities between GoN and ni-items, (71) documents their distributional divergences. As discussed in Brown and Franks (1995, 1997), GoN in ((71)a), but not the ni-item in ((71)c) is licensed in negated Y/N questions. Similarly, the complement of the verb bojat’sja ‘to fear’ may contain a non-quantified argument in genitive, as in ((71)b), but not the ni-item in ((71)d). Examples like (71) have been christened “Expletive negation” (EN) in the literature.

(71) a. Ne/*ø kupil li Petr žurnala?
   neg buy Q Peter magazineGEN
   ‘Did(n’t) Peter buy any magazine?’

b. Ja bojus’, kak by Petr ne narušil èksperimenta.
   I fear how mod Peter neg ruined experiment
   ‘I fear Peter might ruin the experiment.’

c. *Ne/ *ø kupil li Petr ničego?
   neg buy Q Peter ni-what
   Intended: ‘Didn’t Peter buy anything?’

d. *Ja bojus’, kak by Petr ne narušil ničego.
   I fear how mod Peter neg ruin everything
   Intended: ‘I fear that Peter might ruin something.’ (modified from Abels 2005: 7-8)
It is standardly maintained (see, e.g., Brown 1999, Brown and Franks 1995, 1997) that EN is a peculiar species of negation devoid of negative force (i.e., semantically vacuous negation). The generalization takes the following shape: GoN is licensed by both formal negation (as in (70)a)) and EN, while ni-items are only licensed by formal negation. This view is challenged in Abels (2005). Claiming that introducing a new construct like EN is undesirable on both theoretical and empirical grounds, he instead proposes a unified treatment of EN and formal negation. The deviant examples in (71) are essentially ruled out by (72). He argues that ni-phrases track the scope of negation (i.e., no other quantifier can intervene between negation and ni-phrases). Formally this is accomplished by moving a universally quantified ni-phrase to Spec, NegP. This requirement to move negative concord items to Spec, NegP is, in fact, widely argued for in the literature for a variety of languages (see, e.g., Bošković 2008a, Browne 2005 for BCS, Haegeman 1992 for West Flemish, Kayne 1998 for Norwegian). This operation is constrained in the way QR usually is: a quantified element cannot cross a tensed clause – i.e., TP – boundary (see also Progovac 1993 for a discussion of this condition on ni-items). The facts in (70) follow in a straightforward way: ((70)a) with the ni-item is exactly like ((72)b), (70)b is ruled out since there is no clausemate negation to license the ni-phrase, and ((70)c) is bad, because the NegP is too far for the ni-phrase to move to.

(72)  a. *[neg…[TP… ni-phrase…]]
       b. [TP…ni-phrase [neg…] ]

The examples in (71) can be explained using the same theoretical apparatus. The GoN in ((71)a) has the derivation in (73). The verb undergoes head movement resulting in the cluster ne kupil ‘neg bought’ adjoined to C. GoN is licensed derivationally before head movement. Ničego ‘ni-what’ in ((71)c), generated in the object position of the verb, on the other hand, has to move to a position from which it c-commands ne ‘neg’, in a manner sketched in ((72)b). Assuming that head-movement here does not

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Note for these researchers the movement to Spec, NegP is a formal licencing requirement. Abels’s analysis is slightly different in that it implicates QR.
reconstruct, the locality (viz., *ni*-phrases cannot leave TP) precludes any further movement of *ni*-phrases, which results in the ungrammatical configuration ((72)a).

(73)

The remaining pair in (71) involves the verb ‘to fear’, which subcategorizes for subjunctive embedded clause. Subjunctive in Russian carries the positive evaluative component. The latter, as Cinque (1999) argues, is the locus of evaluative mood, the second highest projection in the clausal hierarchy outscoping TP. Abels further suggests that what is negated here is not the proposition itself, but rather the positive evaluation of *p*. So the derivation proceed as follows: negation is generated in NegP and is raised to the evaluative mood head in LF. GoN in ((71)b) is licensed derivationally, so no problems arise here. But *ničego ‘ni-what’* in ((71)d) has to end up in a position c-commanding negation. This operation violates locality, since *ničego* would have to cross over TP to be associated with *neg*. Hence, the resulting configuration for ((71)d) is again the deviant ((72)a). To summarize: the asymmetry between GoN and *ni*-items licensing reduces to the height of negation. In EN contexts it is too high to be accessible to *ni*-items for movement.

I will not attempt to rehash Abels’s rather involved arguments in favor of treating *ni*-phrases as universal quantifiers, but the general outline of the system that he champions ought to be relatively clear by now. The ramifications of his analysis have consequences for the claims made in this dissertation. First, my facts in (60) and (69) follow directly if he is correct about the quantificational nature of *ni*-items
the requirement imposed on them to move to NegP. This explains why they have to merge last within the NP: ((60)b) and ((69)b) are ruled out since the possessive blocks the movement of ni-items to NegP. On the broader theoretical level the system is compliant with the Minimalist desideratum of reducing complexity. In addition to eliminating a suspicious theoretical construct – semantically vacuous negation (EN) – and essentially making the account of two phenomena (GoN and ni-items licensing) compliant with the minimally necessary locality constraints, it also captures a set of independent binding facts, as I have just shown.

We also derive an additional empirical benefit of explaining the facts in (74)—(76). Ni-phrases are fine in Y/N-questions (in ((74)a,c) as long as they are not separated from the associated neg, as in ((74)b,d). Recall that sentences like ((74)b,d) are ruled out due to locality: ni-phrases cannot cross TP. It follows that the HWh questions in (75) are bad for the same reason ((74)b) is deviant. Though in principle LBE of ni-phrases is possible, as demonstrated by (76), the locality constraints preclude the extraction of ni-items to edge of CP, hence effectively prohibiting ((74)b) and (75).

(74) a. Petr li ničego ne prines na večerinku (ili Ivan)?

Peter Q ni-what neg brought to party or Ivan

‘Was it Peter that brought nothing to the party (or Ivan) ?’

b. *Ničego li Petr ne prines na večerinku?

ni-what Q Peter neg brought to party

61 Note, incidentally, that it is possible to have ni-items in Y/N questions formed via the interrogative strategy: both the object in (i) and the subject in (ii) can appear in such configurations.

(i) Petja ničego ne prines na večerinku?

Peter ni-what neg brought to party

‘Peter brought nothing to the party?’

(ii) Nikto ne prixdil?

ni-who neg came

‘Nobody came?’
c. Na večerinku li nikto ne prišel?

to party Q ni-who neg came

‘Was it to the party that nobody came?’

d. *Nikto li ne prišel na večerinku?

ni-what Q neg come to party

Intended: ‘Was it nobody that came to the party?’

(75) *Nikakix li i kto ne prines podarkov detjam?

ni-which Q and who neg brought presents to.children

Intended: ‘Did somebody bring no presents to the party, and who didn’t bring any presents to the party?’

(76) Ja nikakix etomu dokazatel’stv ne videl.

I ni-which to.this proof neg saw

‘I haven’t seen any proof of this.’

Note that in contrast to ni-items, confined to TP, quantifiers like mnogo are contended to move to the edge of CP, which is exactly why their participation in HWh constructions like (77) is entirely expected.

(77) Mnogo li i kto prines podarkov detjam?

many Q and who brought presents to.children

‘Did somebody bring many presents to the children, and who brought many presents to the children?’

This discussion leads us to the following conclusion. The initially stated dichotomy (viz., “only strong Qs must QR in the relevant configurations”) is not entirely precise. The instances in which the quantifier obligatorily precedes the possessive depend not on the strength of the quantifier per se, but rather on whether the quantifier in question is subject to obligatory QR (or a more general requirement to move to
Spec, NegP). This section was essentially a case study, scrutinizing two quantifiers alleged to be ‘weak’. On the basis of independent evidence it was shown that those quantifiers ought to raise in LF, exactly as my binding data predict. Furthermore, such quantifiers may be distinct in terms of what they target as a landing site. Those quantifiers that can be extracted to the edge of CP are eligible to appear before the question marker *li* in root polar question and HWh questions, while those that may not move out of TP are prohibited in all pre-*li* positions.

### 4.2.4 Extraction of the quantified part

This section deals with the semantic consequences of QR as conceived in this work. In the preceding sections I argue that the extractee is a quantified element itself (rather than the whole quantified NP). Such a treatment is in conflict with the standard account of QR (see, e.g., May 1985). Consider the scope of the problems. First, the mechanism of QR, envisioned as an operation affecting strictly the quantificational specifier (or the *wh*-specifier), leads to a type mismatch. Second, there arise some issues with capturing the right interpretation in questions (reported in Reinhart 1998). In what follows, I first discuss some theoretical and empirical advantages of treating QR in a non-standard way (this part of the exposition relies heavily on the insights in Chomsky 1993, 1995 Ch.4). Then I sketch a semantic solution consistent with the syntactic treatment I endorse here, based on the proposals in Reinhart (1998) and Ruys (1997, 2001, 2002), which addresses the problems alluded to above.

Chomsky’s (1993) data in (78) constitute the initial empirical basis for analyzing QR (and LF wh-movement) as the extraction of the quantificational specifier without pied-piping of the restriction. The two approaches to QR make distinct predictions with regard to (78): the standard account (which entails pied-piping of the entire quantified constituent) predicts that the examples below ought to be acceptable, since *John* is outside of the c-commanding domain of the pronoun in LF. On the other hand, if *every* and
how many are the sole extractees, as the non-standard analysis prescribes, then the restriction containing John remains in-situ, causing Condition C effects.\(^62\)

\[
\begin{align*}
(78) & \quad \text{a. } \ast \text{He, liked [every picture that John, took].} \\
& \quad \text{b. } \ast \text{Who said he, liked [how many pictures that John, took]?}
\end{align*}
\]

The spirit of the Move-Spec analysis of Chomsky (1993) is, in essence, carried over to Chomsky’s (1995) framework. The latter, in addition to handling the facts, offers a theoretical justification, which hinges on economy considerations. In particular, he argues that movement is motivated insofar as it results in the configurations interpretable at interfaces. In the cases of covert raising, the minimally necessary requirement for convergence at the CI interface amounts to the operations that manipulate the formal features of lexical items. The pied-piping of a category (or of a larger constituent containing the category) is a consequence of the PF requirements. In Chomsky’s words: “Economy conditions exclude “extra” moves and anything more than the minimal pied-piping requirement for convergence. In covert movement, features raise alone. Procrastinate expresses the preference for the covert option” (Chomsky 1995: 266).\(^63\)

Assuming this reasoning to be sound, the conceptual advantage of extracting only the quantified element without its restriction should be apparent. However, the proposed treatment has superficially unfortunate consequences for semantics. These \textit{prima facie} problems are discussed next.

One entirely obvious concern arising in conjunction with the non-standard view of QR involves the type mismatch. For explicitness, let us examine the textbook derivation in (79) (see, e.g., Heim and Kratzer 1998). \textit{Every panda} is of type \langle \text{et},t \rangle (\textit{every} combines with type \text{et}, hence it is itself of type \langle \text{et}, \langle \text{et},t \rangle \rangle). It cannot combine with a transitive verb having the denotation of type \langle e, \text{et} \rangle due to the type mismatch. The crucial step then is to move \textit{every panda} to the edge of IP, as in (80). The trace

\[^{62}\text{This, of course, holds on the assumption that there is LF wh-movement and that QR involves IP-adjunction.}\]

\[^{63}\text{An important aside is warranted at this point. It was argued earlier that the traces do not count in the computation of the edge. But if covert movement, indeed involves movement of formal features only, one would be compelled to redefine the notion “intervener”. I am assuming that the relevant adjustments can be made, though I will not attempt to do so here (note that the same issue arises RM effect on this analysis of LF movement).}\]
variable is assigned type $<e>$. Now functional application can proceed, composing the verb and the trace of type $<e>$. This operation results in the denotation of type $<et>$ for VP, which can then combine with the subject, ultimately yielding type $<t>$ for the lower IP segment. After the application of the Predicate Abstraction rule, we derive the desired result, which produces the meaning of the type $<et>$. Ultimately, we derive the interpretation corresponding to the following: $\llbracket (79) \rrbracket = 1$ iff for every $x$ such that $x$ is a panda, Mary hugged $x$. What is important to keep in mind here is that the driving force behind QR from the type-theoretic standpoint is the type mismatch between the quantified expression and the verb.

(79) Mary hugged every panda.

(80)

\[
\begin{array}{c}
\text{IP: } t \\
\text{every panda: } et,t \\
\text{hugged: } e,et \\
\text{Mary: } e \\
\text{VP: } et \\
\text{IP: } e \\
\text{IP: } et \\
\text{IP: } t \\
\end{array}
\]

Given the above, the problem for the non-standard QR is this: if the extraction of the quantifier leaves behind a trace of type $<e>$ (i.e., the type normally assigned to the variable), then the combination with the NP produces the result of type $<t>$, which cannot compose with the verb, as sketched in (81).

(81)

\[
\begin{array}{c}
\text{VP} \\
\text{V: } e,et \\
\text{t}_{\text{every}}: e \\
\text{t}_{\text{every}}: e \\
\text{NP: } et \\
\end{array}
\]

Another issue concerning the interpretation is noted in Reinhart (1998), where she tackles certain semantic issues which arise under the non-standard treatment of QR. Under scrutiny are examples like (82). I will follow the expository sequence of Reinhart in the following brief review. First, she adopts the
semantics of questions developed in Karttunen (1977) (all the data are from Reinhart 1998), who maintains that \textit{wh}-phases are akin to existential NPs. Questions constitute a set of propositions such as “John will be offended if we invite Quine”, “Bill will be offended if we invite Searle”, and so on, denoting true answers. The set also includes the case where P will not hold, hence, it also denotes an empty set in the case where no philosopher was invited, and so nobody’s sensitivities were hurt. Now, suppose that in (82)a the restrictor \textit{philosopher} stays in-situ. If so, we have the representation in (82)b, which means ‘for which \(x\) and \(y\) is it the case that \(x\) will be offended if \(y\) is a philosopher, and we invite \(y\).’ This semantics produces an unwanted result, rendering a sentence like ‘Lucy will be offended if we invite Donald Duck’ vacuously true: since Donald Duck is not a philosopher, the antecedent of the conditional is false, which makes the conditional true. This problem does not arise if the entire QP undergoes QR.

(82)  
\begin{enumerate}
\item a. Who will be offended if we invite which philosopher?
\item b. \(\{P \mid \exists \langle x,y\rangle [P = ^\wedge( (y \text{ is a philosopher} \land \text{we invite } y) \rightarrow (x \text{ will be offended}) \land ^\lor P)]\}\}
\end{enumerate}

Reinhart solves the conundrum presented in (82) by using choice functions, as demonstrated in (83). In the latter the operator unselectively binds a variable ranging over choice functions (rather than individuals). The choice function then applies to the stranded restriction. This choice function assigns a member of the set to each set in its domain. Hence, (83) has the following rough paraphrase: “for which \(x\) and which choice function \(f\), is it the case that \(x\) will be offended if we invite an individual that \(f\) selects from the set of philosophers.” The Donald Duck problem ceases to exist under this treatment, since no \(f\) can select a cartoon character from the set of philosophers (i.e., the set of philosophers contains no annoying Disney animals or, in fact, any other non-philosophers).

(83) \(\{P \mid \exists \langle x,f\rangle [P = ^\wedge( \text{we invite } f(\text{philosopher})) \rightarrow (x \text{ will be offended}) \land ^\lor P]\}\)
Ruys (1997) extends this treatment to instances involving non-interrogative quantifiers.\textsuperscript{64} First consider the formal implementation of his proposal in (84).\textsuperscript{65} To derive ((84)a), he also invokes the choice function with a denotation in ((84)b). He argues that \textit{every} binds the variable of CF type. CF is defined as a function, which, when applied to sets, returns a particular value from that set. So, this gives us the LF in ((84)c), which reads “for every CF f, the individual that f selects from the set of boys sings”.

\begin{align*}
&\text{(84) a. Every boy sings.} \\
&\text{b. } [\text{CF}] = _{df} \{ f \mid \forall X (X\neq \emptyset \rightarrow f(X) \in X) \} \\
&\text{c. } \forall f [\text{sing}(f(\text{boy}))]
\end{align*}

Note that this analysis also trivially solves the problem of the type mismatch mentioned above. Because CF f returns an individual selected from a set of individuals, f(boy) is naturally assigned type \(<e>\), exactly as desired. It is hence free to compose with the verb.

There is one outstanding issue that pertains to type-theoretic considerations which Ruys neglects to discuss: viz., what type is assigned to the quantifier and its trace? If his analysis is to be taken seriously (as it should be), then there is no option but to assign type \(<\text{et,}e>\) to the trace. By Functional Application, it composes with the NP of type \(<\text{et}>\), yielding the entity F(panda) in ((85)a) of type \(<e>\). Further computations proceed as demonstrated below. The denotation assigned to \textit{every} is given in ((85)b), which essentially amounts to the following: apply to the sentence that is missing a choice function. \(\Psi\) is a variable that ranges over a particular semantic type, namely, a sentence missing a choice function, or, in other words, a function from CF to truth values \(\langle<\text{et,}e>,t>\). My sketch of the solution to the type-theoretic

\textsuperscript{64} The sequence of cited material appears to be out of order. Ruys (1997) relies on the unpublished 1992 version of Reinhart’s manuscript and her 1993 conference proceedings paper. I am citing Reinhart’s (1998) published version.

\textsuperscript{65} The denotation of CF in ((72)b) is actually a preliminary version that he considers in his 1997 paper. He ultimately develops a more elaborate semantics for CF for universal quantification, which does capture the instances where the set of boys is empty. He also discusses some residual issues pertaining to his analysis: in particular, the treatment of CF that he defends breaks down for the existential quantifiers. He entertains several solutions, the relative (dis)advantages of which I will not attempt to tease apart. The preliminary version in ((72)b) is sufficient for my purposes, since my goal here is to demonstrate how such analysis can work in principle (rather than to hash out all the details and resolve all the complications that such proposals entail).
problem in (85) is to be construed as a demonstration that an approach along these lines is in principle feasible. It is not my goal to weigh the potential semantic ramifications and extensions of this proposal in this work. However, it would be remiss of me not to mention that the treatment of QNP traces as entities assigned higher types is not without precedent in the literature. In Lechner (1996), who grapples with the scope ambiguities in German, for example, the QPs with weak determiners are argued to leave traces of higher types (all other NPs on this analysis strand individual variables). Likewise, the idea that traces may be analyzed as higher types is pursued in Cresti (1995) in the context of investigating the properties of A’-movement. In short, what I am proposing below is not particularly heretical, as there exist some antecedent models congruent with the general thrust of my analysis.

Returning now to Ruys’s work, he cites the following data in defense of his analysis. Instances like ((86)a) involving Antecedent Contained Deletion (ACD) are traditionally taken as evidence for QR (May 1985). Under recoverability VP2 ought to copy VP1. But since VP1 contains an empty category, a representation like ((86)a) leads to infinite regress. Raising the quantified NP eliminates the issue: once QNP is ex-situ, VP1 contains just the verb and the trace of the moved constituent. This material can be copied into VP2 without any difficulties, as in ((86)b). Though ((86)b) solves the infinite regress problem, it simultaneously engenders an unexpected complication: observe that this configuration is predicted to cause no difficulties from the standpoint of Binding Theory, as John is clearly outside of the c-

\[
\text{b. } [\text{every}] = \lambda \Psi. \forall CF. \Psi(CF)
\]
commanding domain of the pronoun. Yet, Condition C effects apparently persist. Ruys argues that, in fact, ((86)c) is the correct LF rendition of ((86)a): QNP ends up in the case-checking position in Spec, AgrOP (as in Hornstein 1995), hence lower than the pronoun, and every is adjoined to IP. So, the A-movement gets the element out of the loop; QR then follows. This approach captures both the interpretation and the binding facts in a straightforward way.\footnote{For a more involved discussion on the applicability of Move-F in such cases (and more generally on the predictions Move-F makes with respect to A and A’-movements) see Ruys (1997).}

(86) a. He\(_1\) [\(VP_1\) likes [every book John\(_{1/2}'\)s mother does [\(VP_2\) e]]].

b. *[every book] John\(_1\)'s mother does [\( VP_2\) e]_2 he\(_1\) [\( VP_1\) likes \(t_2\)].

  c. *every\(_2\) he\(_1\) [Agr\(OP\) [\( t_2\) book John\(_1\)'s mother does [\( VP_2\) e]]_3 [\( VP_1\) likes \(t_3\)].]

Another batch of data mobilized in defense of the non-standard treatment of QR implicates crossover effects in (87) (see especially, Ruys 2001, 2002). All the ungrammatical instances below are ruled out in the already familiar fashion by treating QR as an extraction of the quantification element, which leaves behind a CF trace. The sentences in (87) are interpreted as demonstrated in (88).

(87) a. which\(_1\) [\( t_1\) boy\(_2\)] likes his\(_2\) mother? (=Which boy\(_2\) likes his\(_2\) mother?)

b. *which\(_1\) does he\(_2\) like [\( t_1\) boy\(_2\)]? (=Which boy\(_2\) does he\(_2\) like?)

  c. *he\(_1\) likes every boy\(_1\).

The quantifiers in all these examples scope over the entire sentences. However, they cannot bind the pronouns as variables on the grounds that pronouns can only be interpreted as variables ranging over individuals (and not as choice function variables). This means that the pronoun can only be bound by f(boy), which exactly predicts the ungrammaticality of ((87)b)/((88)b) and ((87)c)/((88)c), since the relevant term does not c-command the pronoun, and rules in the acceptable ((87)a)/((88)a) with the right c-commanding shape.
\[(88)\]  
\[a. \{P \exists f [P = ^{a}( f(\text{boy})_1 \text{likes } \text{his}_1 \text{ mother } \land ^{v}P)]\} \]

\[b. \{P \exists f [P = ^{a}( \text{he}_1 \text{ likes } f(\text{boy})_1) \land ^{v}P]\} \]

\[c. \forall f [\text{he}_1 \text{ likes } f(\text{boy})_1] \]

The denouement of the preceding exposition is quite predictable. The Reinhart/Ruys semantic treatment seems to be directly transferable to the relevant Russian cases discussed in the earlier sections. For explicitness (and putting aside the semantics of anaphora), let us apply this analysis to (89). This is the case of the obligatory QR. Here, the quantifier moves to the edge of the clause, producing the LF in (90a), stranding a choice function variable. The result is (90b), which has the following rough paraphrase: “for every CF f, Peter likes the individual that f selects from the set of Peter’s friend.”

\[(89)\]  
Petja ljubit vsex svoix druzej.  
Peter likes all self’s friends  
‘Peter likes all his friends.’

\[(90)\]  
a. Vsex \_ [Petja \_ ljubit [t1 svoix2 druzej]]  
b. \forall f [Peter_1 \text{ likes } f(\text{his}_1 \text{ friends})]  

Though there remain a number of outstanding issues related to both syntax and semantics (noted sporadically in the footnotes and the main text), I take the Reinhart/Ruys approach to QR to be a reasonable hypothesis, which can be further tested and developed based on the Slavic data (along the lines presented in this dissertation). As a species of intermediate summary it is perhaps a good juncture to repeat the logic of argumentation I pursue in this chapter, presented in the flowchart format below. The upshot ultimately amounts to the following: the Russian pattern involving the sequence Q>svoj ought to be added in the repository of arguments in favor of the non-standard view of QR, with the latter independently justified on empirical (both syntactic and semantic) and theoretical grounds.
4.3 Interactions of svoj with focus

At this juncture, I detour into the interaction with focus, returning to the issue mentioned in the beginning of the chapter. Consider (13) again, repeated below in (91): ((91)b) is degraded in neutral contexts. However, it improves significantly if the adjective is focused. In fact, whenever a focus element (-to, -že, daže ‘even’, tol’ko ‘only’) is explicitly present, the judgments become opposite to those in (91).

(91) a. Teri Lindeberg predstavila svoju avtorskuju kolonku. [www]
    Teri Lindeberg presented self’s author’s column
    ‘Teri Lindeberg presented her original column.’

b. *Teri Lindeberg predstavila avtorskuju svoju kolonku.
    Teri Lindeberg presented author’s self’s column
For a lot of speakers this focus interpretation muddies the waters, whereby the first impulse is to judge 
((91)b) as grammatical. Likewise, a google search would reveal that examples involving the sequence 
Adj\textgreater svoj are not at all rare, and cannot be simply dismissed as outlier cases. (92) illustrates the point. Here 
the context itself suggests that the adjective is focalized.

(92) Pridetsja každomu podumat’ v odinočku, opredelit’ REAL’NOE svoе 
have.to each think in solitude determine real self’s 
položenie kak samostojatel’noj edinicy v sociumе. 
position as independent unit in society [www] 
‘Each will have to think alone, determine the REAL position of his as an independent entity in a 
society.’

Given this, it would be useful to find some empirical support in favor of the intuition that ((91)b) is 
grammatical only if the adjective is focalized. To accomplish this, an informal questionnaire was 
conducted among 10 naïve native speakers of Russian; six informants in this group are residing in Russia, 
and four – in the US. They were presented with two scenarios (and one follow-up context) below. Consider 
the results.

The first scenario in ((93)a) facilitates a context in which the verb is the only constituent that can bear 
focus (with everything else being backgrounded in the discourse). The speakers were given two answer 
alternatives in ((93)b) and ((93)c) and asked to select the most natural response to the question in ((93)a). 
The group unanimously chose ((93)c), albeit with varying degrees of commitment to the infelicity of 
((93)b) (ranging from “completely unacceptable” to “mildly irritating”). I am using small caps throughout 
this discussion to indicate contrastive focus.

(93) a. Vse pionery kak pionery: sobrali každyj u sebja doma makulaturu – staryе gazety – i prinesli v 
školu dlja utilizacii. – A Maša? Čto ona sdelala?
‘All the pioneers acted like normal pioneers: they each collected the recyclable paper – old newspapers – in their own houses and brought it to school for recycling. – And what about Masha? What did she do?’

b. #Ona ZABYLA starye svoi gazety.

‘She forgot her old newspapers.’

c. ✓Ona ZABYLA svoi starye gazety.

The second scenario is the opposite of the above. Here, the context calls for the focus interpretation of the adjective. Alas, the situation is not quite as neat as above: four of my informants have a slight preference for ((94)b), one for ((94)c), and the rest judging both answers in (b) and (c) as equally acceptable. This suggests that for some speakers in-situ focus on the adjective is possible.

(94)  a. Slušaj, a ty ne znaeš, kuda Veronika podevala vse svoi knigi. Nu, te, što ležali zdes’? Ty vrode govorila, što ona ix vse otnesla v biblioteku?

‘Say, do you know what Veronika did to all her books? You know the ones that were here? Didn’t you say she took them all to the library?’

b. Da net že, ona STARYE svoi knigi tuda otnesla.

‘No, she brought her OLD ones there.’

c. Da net že, ona svoi STARYE knigi tuda otnesla.

What is impossible, however, for those same speakers is the paradigm in (95). The possessive itself can be focused, but as ((95)b) demonstrates, it cannot be focused in-situ when it does not occupy the highest edge. So, even when speakers accept the svaž>[ADJ]FOC configurations, something hinders the acceptability of the Adj>[SVOJ]FOC pattern. That something is the binding issue: in ((95)b) the (prosodically neutral) adjective blocks the binding of the anaphoric possessive. Observe that no relevant binding
complications arise in the cases of ((94)c) or ((95)c). The outstanding issue then is to explain how ((94)b) is possible.

(95) a. Ja slyšala, čto Ivan razbil kakuju-to krasnuju mašinu včera. Neuželi korporativnuju?
   ‘I’ve heard that Ivan totaled some red car yesterday. Was it the corporate car?’

   b. #Net, (on včera razbil) krasnuju svoju mašinu.
   no he yesterday totaled red SELF’S car

   c. ✔Net, (on včera razbil) svoju krasnuju mašinu.

The immediate conclusion following from the discussion above is that the descriptive generalization is, in fact, correct: the adjective may precede the possessive anaphor if it is focused, which becomes apparent in the contexts that facilitate or impede the focal interpretation.

The situation becomes even more transparent (and the judgments more robust) in cases with overt focus elements like -to, -že, daže ‘even’, and tol’ko ‘only’. In (96) svoj cannot precede an adjective that is accompanied by an element that indicates some discourse prominence.

(96) a. On umudrilsja opublikovat’ [daže/ tol’ko EROTIČESKIE]FOC svoj novelly
   he managed to.publish even only EROTIC self’S novellas
   ‘He managed to publish even/only his EROTIC novellas.’

   b. *... svoj [daže/tol’ko EROTIČESKIE]FOC novelly

   c. (Ved’) ona poterjala [NOVYE-TO]FOC svoj krossovki.
   (Foc) she lost NEW-FOC self’S tennis.shoes
   ‘(Imagine,) she lost her NEW tennis shows.’

   d. *...svoj [NOVYE -TO]FOC krossovki

   e. [STARYE ŽE]FOC svoj proizvedenija on ne peredelyvaet.
   old- Foc self’S oeuvres he not redo
   ‘As for the old oeuvres of his, he does not redo them.’
f. *...svoi [STARYE ŽE]_{FOC} proizvedeniya

In a way, the interaction of the possessive with focus is akin to what was observed earlier for quantifiers. The juxtaposition of (97) and (98) encodes the range of similarities between Q/svoj and [Adj]_{FOC}/svoj patterns. Recall that in the case of the former, svoj must follow the quantifier that is subject to obligatory QR, as in ((98)i), but it can either follow or precede the indefinite quantifier, which is shown in ((98)ii). The same dichotomy underlies the instances under current scrutiny, summarized in (98). In environments like ((98)i), where focus is marked overtly, the adjective must be on the edge. Such a configuration is indicative of movement: the focalized element has to be ex-situ. On the other hand, if prosody is the singular indicator of focus, as in ((98)ii), both word order permutations are attested.

(97) i. Obligatorily QRing Qs:
   a. Q > svoj
   b. *svoj > Q
   
   (98) i. Overt focus element present:
   a. ✓[Adj]_{FOC} > svoj
   b. *svoj>[Adj]_{FOC}

   ii. Indefinites:
   c. ✓Q_{INDEF} > svoj
   d. ✓svoj>Q_{INDEF}

   ii. Prosodic focus only:
   c. ✓[Adj]_{FOC} > svoj
   d. ✓svoj>[Adj]_{FOC}

This remarkably similar patterning suggests that the behavior of contrastively focused items should be captured in terms similar to those applied earlier to the quantified elements. However, ultimately, I conclude that the XPs with overt focus markers move overtly for focus (followed by the possible subsequent QR), whereas the behavior of prosodically focused adjectives arises as a result of the conspiracy of syntactic and PF requirements. In other words, my claim is that both the prosodically focused adjectives and the adjectives accompanied by overt focus markers undergo overt movement for contrastive focus.

Before proceeding, however, it would be edifying to give a brief overview of various approaches to focus, since “focus” appears to be a multifarious phenomenon, which garnered much attention in the
literature. To start with, there have been recognized at least two varieties of focus – identificational focus (also known as contrastive focus) and information focus (or presentational focus) – each evincing a distinct set of properties. É. Kiss (1998: 245) defines the former as follows:

Function of identificational [ID] focus: An [ID] focus represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; it is identified as the exhaustive subset of this set for which the predicate phrase actually holds.

The constituent marked for ID focus is associated with the abstract operator, which is linked to exhaustivity identification. ID focus is a structural phenomenon in that it triggers syntactic reordering by displacing the focused constituent to the Spec of some functional projection. The reflexes of this movement can be observed in English and Hungarian. In English ID focus is expressed by cleft-constructions; in Hungarian – by the DPs scrambled into the immediate pre-V position. This is demonstrated by ((99)a), which means ‘From the set of individuals in the relevant domain, I introduced Mary (and nobody else) to Peter’ (this holds both of the Hungarian sentence and its English paraphrase).

By contrast, ((99)b) is merely an instantiation of informational focus (bolding encodes the pitch accent on Marinak ‘to Mary’), i.e. it expresses new, non-presupposed information, which is neutral with respect to whether she was the sole individual introduced to Peter. É. Kiss argues that such examples are purely within the purview of PF rules; no movement happens in syntax. So, every sentence would be assigned the most prominent stress by some PF rules (I will return to the nature of this PF mechanism below).

(99) a. Tegnap este MARINAK mutattam be Pétert.
   last night MARYDAT introduced-1SG perf PeterACC
   ‘It was MARY that I introduced to Peter last night.’

b. Tegnap este mutattam be Pétert Marinak.
   last night introduced-1SG perf PeterACC MaryDAT
   ‘I introduced to Peter to Mary last night.’

(É.Kiss 1998: 247)
She further argues that crosslinguistically contrastive/ID focus may differ with respect to feature specification: it can encode the positive value of both or either [contrastive] and [exhaustive] features. Contrastive is understood by É. Kiss as a closed set of entities whose members are known to the discourse participants: the identification of the relevant subset is accompanied by the identification of a complementary contrasting subset.\(^67\)

The crucial points are summarized below:

**TABLE 9 CONTRASTIVE VS. INFORMATIONAL FOCUS**

<table>
<thead>
<tr>
<th></th>
<th>Contrastive/ID focus</th>
<th>Informational focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syntax:</td>
<td>Movement (to Spec of some functional projection)</td>
<td>No movement</td>
</tr>
<tr>
<td>Interpretation:</td>
<td>[±/− exhaustive] and/or [±/− contrastive]</td>
<td>Non-presupposed information</td>
</tr>
<tr>
<td>Obligatory in the</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>sentence:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In essence, I adopt this dichotomy for Russian, arguing that contrastive/ID focus is a product of syntactic operations, while informational focus is determined on the PF side. Before I present the full account, however, I still need a little bit of technology, which is what I turn to next.

In his early work, Chomsky (1971) maintains that the focus/presupposition partition is determined strictly by the phonological component, whereby an aggregate of phonological stress assignment rules determines the surface intonation of the sentence.\(^68\) This view in resurrected in Reinhart (1996), who, relying on Cinque’s (1993) hypothesis of phrasal stress assignment, develops a PF analysis of focus in Dutch object scrambling constructions. The gist of Cinque’s proposal amounts to the following: the stress assignment rule proceeds in a cyclic fashion from the most to the least deeply embedded constituent by

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\(^67\) Recall that the exhaustive identification involves the indentation of the relevant subset in conjunction with the **exclusion** of the complementary subset.

\(^68\) This opinion is amended, however, in Chomsky (1976), where he argues that focus is an operation akin (or identical) to QR. The focused element hence undergoes QR.
copying the stress asterisk. As a result, the most deeply embedded constituent is automatically assigned stress. Consider the application of this proposal in Reinhart for English (100) with the derivation in (101). The most embedded cycle is the object node, which received the stress. The stress asterisk is then copied in the subsequent cycles with the result in ((101)e).

(100) I read a BOOK.

(101) a. Line 1 (word cycle): [I [read [the book]]] [***]
b. Line 2 NP cycle: [ [ [***]]]
c. Line 3 VP cycle: [ [***]]
d. Line 4 IP cycle: [ [***]]
e. Result: V O *

Now, crucially, Dutch with in-situ objects assigns stress in exactly the same way – to the object. However, when the object is scrambled, it is the verb that receives contrastive focus.\(^{69}\) Compare (102) and (103): the Dutch example in ((102)a) with a scrambled object is equivalent to English ((103)a). On the other hand, the unscrambled variant in ((102)b) corresponds to the neutral English ((103)b).

(102) a. Dat de politie een kraker gisteren opgepakt heeft [scrambled]
that the police a squatter yesterday arrested has
b. … gisteren een kraker opgepakt heeft [uscrambled]
yesterday a squatter arrested has

(103) a. The police ARRESTED a squatter yesterday. [heavy stress on V]
b. The police arrested a squatter yesterday. [neutral stress]

---

\(^{69}\) The following is the diagnostic for object scrambling in Dutch:
(i) The order Adv>Obj>V corresponds to the ‘underlying’ (unscrambled) representation.
(ii) The order Obj>Adv>V is analyzed as an instance of scrambling.
It is obvious how to capture Dutch (102) given the preceding exposition. In ((102)a) the verb is the most deeply embedded constituent, so it is assigned main stress, as shown in ((104)a), but in ((102)b) the most deeply embedded node is the object DP, so now it becomes the node receiving the main stress, as in ((104)b).

\[(104) \quad a. \ [[\text{DP}]_{\text{OBJ}} [\text{Adv} [ t_{\text{OBJ}} \text{V }]]] \quad b. \ [\text{Adv} [ \quad [\text{DP}]_{\text{OBJ}} \text{V }]]\]

A similar point is demonstrated by Cinque’s Italian/English juxtaposition below. Essentially, the English in-situ focus is encoded by the word order variations in Italian. If ((105)c) shows the position of the moved subject and ((105)d) the in-situ location of Johnson, the paradigm follows in a straightforward way: in the former the verb is the most deeply embedded constituent, in the latter it is the subject. The prosodic contour of ((105)e) is reported to be distinctly deviant.

\[(105) \quad a. \text{Johnson DIED.} \quad c. \text{Johnson e’ MORTO.} \]
\[b. \text{JOHNSON died.} \quad d. \text{E’ morto JOHNSON.} \]
\[e. \# \text{JOHNSON e’ morto.} \]

Reinhart addresses several questions in conjunction with the above: (i) What makes English ((103)a) possible given that arrested cannot receive main stress, as per the algorithm in (101)? (ii) Since non-automatic in-situ stress is obviously possible in English-type languages, why is it precluded in Italian/Dutch type languages (i.e. why should ((105)e) be bad)?

She contends that automatic stress assignment rules can be overridden under certain conditions. This has the effect of producing “marked” derivations, which she defines as derivations violating economy. If a language has some recourse to the derivations where no economy violations ensue, the stress (and hence focus) is determined automatically. So, Dutch and Italian can move constituents more freely than English. No ‘overriding’ is necessary in PF, since these movements produce distinct configurations, in which stress can be assigned automatically to distinct constituents (i.e., the verb or the object in Dutch depending on the position of the object; the subject or unaccusative verb in Italian depending on whether the subject
remains in-situ). English, being bereft of flexibility of movement, has but one recourse: shift the default stress in order to satisfy the interpretative needs. The arguments that crosslinguistic data provide the best probe for determining marked derivations have been also articulated in Zubizarreta (1998) and Cinque (1993).

With these preliminaries in place, I can now proceed with my proposals. First, I retain the distinction between ID focus and informational focus, arguing that the former is established via syntactic movement, while the latter is a function of PF (essentially along the lines of Cinque/Reinhart). Second, certain configurations preclude movement for ID focus. Such instances result in “marked” derivations in that the stress is exceptionally assigned in-situ, similar to what was just endorsed for English.

The first piece of conventional wisdom with regard to Russian (and, in fact, other members of the Slavic family) is that ID focus is typically licensed in the preverbal position. That is, while the object can receive heavy stress in the post-verbal position, speakers definitely sense a contrast between preverbal and postverbal ID focus, consistently choosing the former as the more natural variant (see King 1995, Stepanov 1998). It would seem then that the derivations involving the in-situ postverbal focus are marked in Reinhart’s sense. Stjepanović (1999b) observes that the same is true in BCS. In fact, the analysis she develops in her dissertation is quite similar to mine here. First, she too makes a distinction between ID focus and informational focus. The latter is regulated entirely by the PF component. The former is associated with syntactic operations. Running É. Kiss’s tests for exhaustivity/contrast, she demonstrates that BCS, in fact, patterns with Hungarian with respect to the semantic effects in scrambled constructions, viz. NPs in preverbal positions in Slavic are interpreted as expressing exhaustive identification. She further demonstrates that wh-phrases and non-quantified contrastively focused NPs evince nearly identical distribution. Since the wh-phrases are taken to encode contrastive focus (see, e.g. Horvath 1986), it stands to reason that the mechanisms underlying the derivation of both wh-questions and declaratives with ID focus, are, in effect, the same. She concludes that the wh-phrases and contrastively focused items share their surface syntactic positions (a similar conclusion is reached in Stepanov (1998) for Russian). Following Zubizarreta (1998), Sjepanović rejects the idea that ID/contrastive focus is assigned by the
Nuclear Stress Rule (along the lines of Cinque/Reinhart). Instead, she suggests the following procedure: stress is associated with a relevant projection, which attracts contrastively focused XP and wh-phrases; the latter have to move to this projection in order to be licensed; the stress then falls on those higher copies of the moved elements, and they end up being pronounced.

Now the question is: what drives this movement of wh-words and contrastively focused elements? There are several options here. We can assume, following Bošković (1997), that there is a feature [focus] that is somehow responsible for the displacement of relevant items. Alternatively, we can argue that the focus movement is a quantificational operation, as in É. Kiss (1998).

In fact, there exist proposals that essentially claim that there is no such thing as “contrastive” focus movement. Consider Horvath’s (2006) analysis of Hungarian. She makes no distinction between contrastive and informational focus, arguing that both, in effect, are one and the same phenomenon, whose properties are determined by the application of PF rules. She suggests that what looks like movement for contrastive focus in Hungarian, in effect, has little to do with focus, but rather it is a consequence of an independent quantificational operation, associated with exhaustive identification (IE). Some evidence is provided by the behavior of the two elements that are standardly taken to instantiate focus – czak ‘only’ and még...is ‘even’. The phrase containing czak ‘only’, a quintessential expression of exhaustivity (i.e. ‘only’ entails the exhaustivity of the identified subset), in (106) has to appear in a preverbal position. On the other hand the NP modified by ‘even’ in (107) cannot be preposed. If the movement in (106) is triggered by EI (rather than focus features), (107) follows: ‘even’ is incompatible with exhaustivity presupposition (indeed, it adds a member to the relevant set). The same treatment applies to the preverbal NPs without overt focus modifiers. Recall that such NPs also require EI interpretation, when they appear in pre-V positions in Hungarian.

    Mary nom only the reception FROM late was away
    ‘Mary was late only for THE RECEPTION.’
I will return to the issues of overt focus elements shortly. For now, I will point out a few problems with Horvath’s analysis. Though she makes no particular commitment to the PF mechanisms of stress assignment, it is easy to see that the Hungarian ID focus cannot be handled by Cinque/Reinhart’s rules. The prediction is that in the cases where this DP moves, the default stress ought to fall on the verb. That is because the displaced DP is not the most deeply embedded element. Either one would need to redefine the notion of the “most deeply embedded” constituent to allow lower copies to be counted in the computation of stress (which would be problematic for Italian unaccusative sentences), or one would need to revise the system altogether to allow for the exceptional stress assignment on the moved constituent (in addition to the default Nuclear Stress Assignment rule). The theoretical benefit of the latter option is suspect, since it would necessitate positing three distinct mechanisms – QR in syntax, an exceptional stress assignment rule to handle the moved constituents, and a Nuclear Stress assignment mechanism. Second, if it is true that this quantificational operation is divorced from focus, then it is unclear why the displaced constituents consistently realize sentential focus.

Putting aside Hungarian for now, I will assume the Stjepanović/Bošković treatment of contrastive/ID focus, whereby the movement of those items is triggered by the relevant formal feature on the participating elements (with a caveat that there appear to be concomitant semantic effects that result from this movement, like EI on the moved NP). To reiterate: I am not assuming that focus movement in Russian is triggered by QR; rather I am arguing that it is a formal feature [focus] that drives movement for contrastive
focus in syntax. It is also necessary to mention that there appear to be two landing sites for contrastively focused items in Slavic – roughly pre-VP and pre-TP.

Returning now to the Russian data reported in the beginning of this section: the facts are summarized in (108) in the schematic format for ease of exposition. If the element is contrastively focused it has to appear on the edge as in ((108)a-b). This is consistent with the proposal that contrastive focus requires displacement. So, in (a) and (b) examples below, the focused element (adjective or the possessive) undergoes movement, adjoining to VP.

(108)  
a. ✓[ADJ]$_{FOC}$ svoj
b. ✓[SVOJ]$_{FOC}$ Adj
c. ?*Adj svoj
d. *Adj [SVOJ]$_{FOC}$
e. svoj [ADJ]$_{FOC}$ OK for a subset of speakers

The paradigm in (108) actually invites the question of what movement for contrastive focus entails. Since in all the grammatical cases above the object need not precede the verb (i.e. the verb is licit before any sequence in ((108)a,b)), we have some evidence for string vacuous movement (this is also the analysis endorsed in Bošković 2014b on the basis of similar BCS data). In the interest of explicitness consider the fragment of the clausal architecture proposed in Bošković (2014a) for English in (109). He argues for two distinct positions reserved for focus (one in the V-domain – above vP and the other in the clausal domain). The structural particulars are somewhat orthogonal to his main point, however. His core argument has to do with variablity of phases, which boils down to the following: the highest projection within an extended domain of the lexical head constitutes a phase. We have already seen how this approach fares in the nominal domain. The same treatment is extended to the verbal domain. In the structure below, FocP functions as a phase, because it is the highest projection within the extended domain of V$^0$ (in the absence
of FocP, vP assumes that role). The ellipsis facts constitute the central empirical underpinning of this analysis. An example in (110) (credited to Merchant 2008) is a brief illustration of both – the necessity of the lower focus position and the empirical benefit of treating phases contextually. Both examples in (110) involve voice mismatches between two clauses, yet one is good, the other deviant. As examples of pseudogapping, these are standardly taken to involve VP-ellipsis, so the observed split is odd, indeed. According to Bošković, only phases and phasal complements can undergo ellipsis. In ((110)a) vP is the phase; hence, its complement VP can be elided. But in ((110)b) lilies is focused, presumably in virtue of appearing in the lower FocP. Since FocP is the highest projection in this context, VP is neither a phase nor a complement to the phasal head and, therefore, is ineligible for ellipsis.

\[
(109) \quad [\text{FocP} \left[ v_P \left[ t_{v_P}^{0} \left[ v_P \left[ t_{v}^{0} \left[ \text{NP} \right] \right] \right] \right] \right]]
\]

(110)  
a. The problem was to have been looked into, but obviously nobody did [look into].  
\[=\] The problem was to have been looked into, but obviously nobody did \([v_P-\text{active} \left[ v_P \left[ \text{look into} \right] \right]]\]

b. *Roses were brought by some, others did lilies [bring].  
\[=\] *Roses were brought by some, others did \([\text{FocP} \left[ \text{lilies} \left[ v_P-\text{active} \left[ v_P \left[ \text{bring} \right] \right] \right] \right]]\]

My chief claim here is that contrastive focus movement should be understood as movement of the element out of its minimal phasal domain. To wit: in the case of movement out of NP, the element targets vP (or higher). For the elements in the vP, the landing site is provided in the projection of the clausal domain. I should emphasize that the details of the structure/category labels are not crucial here; what matters is the principle: as long as this movement complies with anti-locality/PIC restrictions and crosses a domain boundary, I am agnostic on the precise structural details. (121) reflects this idea: solid arrows indicate legitimate movement targets for elements starting off in the NP, while the dashed one shows where the vP extractees can go.

\[70\text{ For arguments that AspectP belong in the V phasal domain, rather than the clausal domain see cited work and references therein.}\]
Of course, the movement to the edge of vP will not be heard (hence, string vacuous), because the verb undergoes head movement, presumably clustering in Aspect⁶. However, if the object targets the higher focus position, then it also linearly precedes the verb: that is because the verb is confined to the V-domain, but the higher focus position belongs in the clausal phasal domain. Hence, focus movement results in two configurations: either V>XP_{FOC} or XP_{FOC} >V.⁷¹

With this tangent out of the way, let us return to (108), repeated in (112). The explicit derivations for ((112)a-b) are provided in ((113)a-b). The elements on the edge are free to extract. Binding is unhindered. In both cases the anaphoric possessive is in a configuration that renders it accessible to its binder. ((112)c) is ruled out in the familiar way: here the adjective blocks the binding, because in its unfocused incarnation it has to stay in-situ.

(112)  
  a. ✓[ADJ]_{FOC} svoj  
  b. ✓[SVOJ]_{FOC} Adj  
  c. ?*Adj svoj  
  d. *Adj [SVOJ]_{FOC}  
  e. svoj [ADJ]_{FOC} OK for a subset of speakers

(113)  
  a. [AdjP]_{FOC} svoj becomes edge⁸  
  b. [svoj]_{FOC} AdjP

⁷¹ There is one more complication here that needs to be addressed. XP_{FOC} >V configurations come in two varieties. The focused element may either precede or follow the subject (i.e., both Subj> XP_{FOC} >V and XP_{FOC}>Subj >V patterns are fine). Either we are dealing with two positions reserved for focus in the clausal domain, or this is due to the variability of the subject’s surface position.
The more interesting cases are presented by ((112)d-e). Let us begin with the last example, which is predicted to be deviant, yet a subset of speakers accepts it. My proposal for cases like ((112)e) echoes the spirit of Reinhart’s insights with regard to economy. As sketched in ((114)a), the adjective cannot undergo focus movement in syntax, because the possessive here induces a blocking effect. At the point of Spellout, some variety of a stress shifting operation akin to English ((103)a) takes place that permits the transfer of an interpretable string to PF. The stress normally assigned in the Spec of vP shifts in the manner of ((114)b). This operation has a distinct Last Resort flavor. Since there is no other way to salvage this derivation, the exceptional stress reassignment must take place. Evidently, this operation is not available to all speakers (recall that some of my informants indicated a preference for ((94)b) with the form ((112)a) over ((94)c) which equivalent to ((112)e)). I suggest that the same mechanism is operable in cases where the NP is contrastively focused in-situ. As was mentioned earlier, such instances are perceived to be worse than those implicating preverbal focus, precisely because an alternative derivation exists, where no need for an exceptional stress reassignment procedure. So, the upshot is as follows: the movement of the focused constituent essentially guarantees that the stress is assigned automatically (in the Spec of the relevant projection). If the movement fails, then a Last Resort stress reassignment procedure takes place.

\[ (114) \quad \begin{array}{c}
\text{a.} \\
\vP \\
\text{b.} \\
\vP_{\text{FOC}} \quad [svoj]_{\text{FOC}} \\
\text{AdjP}_{\text{FOC}} \\
\end{array} \]

Finally, the configuration in ((112)d) is now straightforward. The culprit here is, of course, binding: the prosodically neutral adjective blocks the possessive from being bound. The fact that the exceptional stress shifting operation applies is irrelevant, as the derivation crashes in LF due to a violation of Condition A.

With this settled, let us turn to the examples involving overt focus elements in (96), repeated below in (115). All these modifiers have to be merged with the highest XP in the phase. I interpret the fact that the order [Adj]_{FOC}>svoj is obligatory to be indicative of movement. As a brief descriptive tangent, however, permit me to make this small observation: while daže ‘even’ and tol’ko ‘only’ are standardly treated as
focalizing elements, -to and že may be more appropriately classified as signaling contrastive topics. The meaning of sentences with -to and že is best conveyed by the corresponding English translations. Disentangling the finer semantic divergences of these two groups will take me too far afield. The crucial observation here is that they both pattern in the same way with respect to the configurations under scrutiny (for arguments that -to and -že items instantiate “operator-like interpretation of focus” see McCoy (2003)). Hence, the minimal hypothesis is that they should be amenable to the same treatment, which is what I assume henceforth.

(115) a. On umudrilsja opublikovat’ [daže/ tolfko ĖROTĪČESKIE]FOC svoi novelly

he managed to publish even only EROTIC self’s novellas

‘He managed to publish even/only his EROTIC novellas.’

b. *...svoi [daže/tol’ko ĖROTĪČESKIE]FOC novelty

c. (Ved’) ona poterjala [NOVYE-TO]FOC svoi krossovki.

(Foc) she lost NEW-FOC self’s tennis.shoes

‘(Imagine,) as for her NEW tennis shoes, she lost them.’

d. *...svoi [NOVYE-TO]FOC krossovki

e. [STARYE ŽE]FOC svoi proizvedenija on ne peredelyvaet.

OLD- Foc self’s oeuvres he not redo

‘As for the OLD oeuvres of his, he does not redo them.’

f. *...svoi [STARYE ŽE]FOC proizvedenija

There exist quite a few proposals (Drubig 1994, Wagner 2005, Krifka 2006) that invoke movement analysis for English ‘even’ and ‘only’ items. Krifka (2006) compares what he calls Structured Meaning (SM) and Alternative Semantics (AS) approaches to only. The former maintain that the association with focus is achieved via QR of the focalized constituent (as in, e.g., Chomsky 1976). The latter advocate for an in-situ interpretative procedure (Rooth 1985, 1992). First, consider what “association with focus” means. The one peripatetic example cited in every paper dealing with only in (116) demonstrates the
phenomenon: (a) and (b) are not truth conditionally identical. If John introduced Bill and Arnold to Sue (with no further introductions), then ((116)a) would be true, but ((116)b) would be false.

(116)  a. John only introduced Bill to [SUE]_{FOC}.

   b. John only introduced [BILL]_{FOC} to Sue.

The SM theories derive the differences in (116) by extracting Sue or Bill in LF: only then takes a relevant focused phrase and a lambda abstract containing a bound variable in the trace position as its arguments. On Rooth’s (AS) approach, both sentences in (116) essentially reflect the LF. The association with focus is achieved via an in-situ mechanism, which requires a scope-bearing operator and a set of alternatives to the ordinary semantic values. Krifka explores a “middle ground” approach, which is essentially an amalgam of SM and AS analyses. The one long standing problem for the SM-type analyses concerns the possibility of association with focus inside islands, as in ((117)a), where the focused element is inside the Complex NP (see also Anderson (1972) and Drubig (1994) for a discussion of focus association and islands). The problem is avoided if it is assumed that the entire island raises, as in ((117)b). The final piece here is to associate the particular element within this NP with focus. This is achieved via the in-situ SA mechanism.

(117)  a. only introduced [the man [that JILL_{FOC} admires]] to Sue

   b. only [[the man that JILL_{FOC} admires], [introduced t₁ to Sue]]

Wagner (2005) argues for a similar treatment on the basis of facts like (118). He shows that NPIs are licensed in the scope of only. However, they are licit exclusively in the unfocused part. He argues that ((118)a,c) are derived by moving the focused associate to the complement position of only in LF, as in ((118)b,d).

(118)  a. John only gave kale to any of his friends.

   b. [only kale] [λx. John gave x to any of his friends]
c. John only gave any kale to his friends.

d. [only his friends] [λx. John gave any kale to x]

Russian, however, is quite unlike English in terms of focus association in that structures like (116) are altogether impossible. Quite generally both *tol’ko* and *daže* need to be adjacent to the elements they modify. Consider (119) and (120). The English-type focus association, where *only* appears in preverbal position but is associated with the object, is degraded, as (119) demonstrates. The paradigm in (120) shows what happens with optionally transitive verbs. In principle, *only* can modify a verb, as in ((120)c), as long as it is without an object (the felicitous continuation for this example is “and does nothing else”). If the object appears, *only* has to be adjacent to it (cf. ((120)a) and ((120)a), which are exactly on a par with the first two sentences in (119) with the obligatorily transitive verb). The final example in ((120)d) is acceptable only when the verb is focalized. The interpretation here is that Ivan does nothing else with the cigarettes other than smoke them, which is compatible the continuation indicated in parentheses (it is pragmatically odd, since the range of conventional usages of cigarettes is normally limited to smoking, but possible nevertheless, provided one is willing to contrive the right context).

(119)  
  a. *Ivan  *toll’ko  s’el  [SELEDKU]_{FOC.} 
         Ivan only   ate   herring
  b. Ivan  s’el  toll’ko  [SELEDKU]_{FOC.} 
  c. *Ivan  daže  s’el  [SELEDKU]_{FOC.} 
         Ivan even   ate   herring
  d. Ivan  s’el  daže  [SELEDKU]_{FOC.} 

(120)  
  a. *On  toll’ko  kurit  [SIGARETY]_{FOC.} 
        he only  smokes cigarettes 
  b. On kurit  toll’ko  [SIGARETY]_{FOC.}
c. (Ivan ниčego ne delает), on toл’ko [KURIT]_{FOC}.
Ivan nothing neg does he only smokes

d. On toл’ko [KURIT]_{FOC} sigarety. (As opposed to using them as torture devices, e.g.)

This adjacency requirement renders all the standard diagnostics probing for the interaction of islands with only entirely irrelevant, as (121) shows. ((121)a) and ((121)b) are deviant for the same reason the bad examples in (119) are illicit. The only possible options are in ((121)c) and ((121)d).

(121) a. *Ja toл’ko znaju mužika, kotoryj vyraščivaet [ABRIKOSY]_{FOC}
I only know man who grows apricots
‘I only know the man who grows APRICOTS.’
b. *Ja znaju toл’ko mužika, kotoryj vyraščivaet [ABRIKOSY]_{FOC}
I know only man who grows apricots
c. Ja znaju mužika, kotoryj vyraščivaet toл’ko [ABRIKOSY]_{FOC}
I know man who grows only apricots
d. Ja znaju mužika, kotoryj toл’ko [VYRAŠČIVAET]_{FOC} abrikosy.
I know man who only grows apricots
(as opposed to, e.g., selling them)

So, the claim that I will advance here is as follows: in Russian two structural positions are reserved for focus, as argued above – roughly in the extended domain of the V-head and the clausal domain. I suggest that only is generated adjoined to either of the focus-licensing XPs – in the higher or the lower position (for arguments that only is VP-adjoined in English see Jackendoff 1972, Rooth 1985). The structure in (122) is meant as a visual guide: assuming the complex V-head ends up somewhere in the clausal domain (e.g., AspectP), only can either linearly precede it or follow it (just like the cases of NP movement for contrastive focus discussed above). A focused associate XP moves overtly to form a constituent with only (note that this is an instance of phrasal movement). In cases where this movement is
impossible (i.e. if the focalized element is the head), the stress-shifting operation ((114)b) applies. This proposal gives us all the facts in (119), (120), (121), as well as (115). Consider how.

(122)  
\[
\text{[clausal domain ONLY } \text{V-head complex [V-domain ONLY } [N-domain ] ]}
\]

The simple sentences in (119) and (120) made their appearance here to demonstrate that focus association in Russian requires adjacency. But they are also a convenient vehicle for explaining the mechanics of the proposed system.\(^72\) The paradigms in (119) and (120) reduce to the pattern in (123), which is what I will refer to in the following exposition for the convenience of the reader.

(123)  
\[
\begin{align*}
\text{a. } & \checkmark \text{Subj } \text{V only [NP]}_{\text{FOC}} = (119)b,d), ((120)b) \\
\text{b. } & *\text{Subj only V [NP]}_{\text{FOC}} = (119)a,c), ((120)a) \\
\text{c. } & \checkmark \text{Subj only [V]}_{\text{FOC}} \text{ NP} = ((120)c) \\
\text{d. } & \checkmark \text{Subj only [V]}_{\text{FOC}} = ((120)d)
\end{align*}
\]

In (123)a only is generated in the lower position of the V-domain. The NP adjoins to only in the manner of (125)a (reminiscent of the rightward adjunction mechanism proposed for Bulgarian multiple wh-movement in Rudin 2013). Now, suppose only is responsible for assigning stress to its focused NP associate (a sensible conjecture given that this item is crosslinguistically linked to focus). Crucially, this has to be done locally: the XP associate should be adjoined to only to receive stress. If so, then the stress in ((123)a) is assigned by the rule in ((125)b).

(124)  
\[
\begin{array}{c}
\text{only+NP}
\end{array}
\]

\[
\begin{array}{c}
\text{VP}
\end{array}
\]

\[
\begin{array}{c}
\text{V}
\end{array}
\]

\[
\begin{array}{c}
t_N\end{array}
\]

\[
\begin{array}{c}
t_0^0 + V^0
\end{array}
\]

\[
\begin{array}{c}
v^P
\end{array}
\]

\[
\begin{array}{c}
= ((123)a)
\end{array}
\]

\(^72\) I am confining this discussion to the behavior of only, putting aside the behavior of even.
What about deviant ((123)b)? I interpret the order only>V as evidence that only is base generated in the high position, as shown in ((125)b). NP here fails to move to only, so it cannot get stress and hence cannot be interpreted as the associate of only.

The only possible interpretation in such situations is in ((123)c), where the verb becomes associated with focus. Since there is no immediate associate NP for only to assign stress, the stress shifting rule in ((125)b) applies, moving stress to the next available head. It is akin to what was proposed for the in-situ focalization of adjectives in ((114)b). The point of affinity between the two operations lies in their distinct Last Resort flavor: the mechanism is activated if nothing else can be done to salvage the derivation. The same mechanism applies to the instances involving intransitive verbs in ((123)d).

The first piece of evidence that this is on the right track is provided by (126). The ungrammatical ((119)a) and ((120)a) become entirely natural if the NP moves overtly to adjoin to only.

(125) a. $\begin{array}{c} TP \\ \hline \text{only} \\ \hline \text{vP} \\ \hline \text{Aspect}^{0} + v^{0} + V^{0} \\ \hline t v^{0} + v^{0} \\ \hline tv^{0} \\ \hline \text{NP} \end{array} = ((123)b,c,d)$

b. [only [ ] V-complex…]

(*) $\rightarrow$$^*$

(126) a. Ivan tol’ko [SELEDKU]$_{FOC}$ s”el.
    Ivan only herring ate

b. On tol’ko [SIGARETY]$_{FOC}$ kurit.
    he only cigarettes smokes
The paradigm in (121), repeated with additions in (127), is also straightforward on my account: ((127)a) is only acceptable if the matrix verb is contrastively focused, as in ((127)a) (equivalent to “I only KNOW a guy who...”, as shown in ((127)b)). Similarly, in ((127)c) the sentence improves significantly if the focus is on “the man” (“I know only the MAN who sells apricots (not the woman who sells apricots)”, as shown in ((127)d)). ((121)e,f) are derived just like the simple sentences just considered in (123) by invoking the mechanisms in (124) and (125).

(127)

a. *Ja tol’ko znaju mužika, kotoryj vyraščivaet [ABRIKOSY]_{FOC.}
   I only know man who grows apricots
   ‘I only know the man who grows APRICOTS.’

b. ✓ Ja tol’ko [ZNAJU]_{FOC} mužika, kotoryj vyraščivaet abrikosy.
   I only KNOW a man who... (as opposed to the woman who sells them).

c. *Ja znaju tol’ko mužika, kotoryj vyraščivaet [ABRIKOSY]_{FOC.}
   I know only man who grows apricots

d. ✓ Ja znaju tol’ko [MUŽIKA]_{FOC}, kotoryj vyraščivaet abrikosy.
   I only know A MAN who... (as opposed to the woman who sells them).

e. Ja znaju mužika, kotoryj vyraščivaet tol’ko [ABRIKOSY]_{FOC}
   I only know a man who grows only APRICOTS (and nothing else).

f. Ja znaju mužika, kotoryj tol’ko [VYRAŠČIVAET]_{FOC} abrikosy.
   I only know a man who only GROWS apricots (as opposed to selling them).

As expected, the extraction of the NP-associate does nothing to salvage ((121)a,b), as demonstrated in (128). So, in effect, ((121)a,c) are ruled out because the focused NP fails to raise to its associate.

So, (128) is bad because the attempts to raise the associate NP lead to island violations. This contrasts with (129), which shows that long-distance association with focus is prohibited, as in ((129)a), but since the configuration in principle allows for extractions, the NP is free to move to only, resulting in the grammatical ((129)b).

    I only apricots know man who grows

    ‘I only know the man who grows APRICOTS.’


    I only what thatSUBJ Anton bought apricots

    ‘I only want for Anton to buy APRICOTS.’

b. Ja toľko [ABRIKOSY]FOC xoču, čtoby Anton kupil tABRIKOSY.

With this basic system established, let us now return to the more complex examples involving the anaphoric possessive in (115). ((115)a,b), repeated in (130), have the derivation in (131). Recall that in the cases of apparent NP-constituent modification, only is generated in the lower focus licensing position (the verb here precedes only and its associate). AdjP undergoes (string vacuous) movement to form a constituent with only. In (131) svoj ends up on the edge. ((130)b) is ruled out presumably due to the illicit base position of only: it cannot be merged with an element inside the NP.


    he managed to.publish only EROTIC self’s novellas

    ‘He managed to publish even/only his EROTIC novellas.’

b. *... svoj [tol’ko ÈROTIČESKIE]FOC novelty

(131)
As a final point pertaining to the behavior of svoj with overt focus markers, consider (132): in (a) svoj is under focus (with the felicitous continuation indicated in parentheses); in the more marked (b), it is the head noun that receives the most prominent stress. The latter is compatible with the interpretation suggested by the parenthetical continuation.

(132) a. Sklad firmy obsluživaet tol’ko svoi predprijatija. [www]
warehouse of.company serves only self’s plants
‘The company’s warehouse only works with its own plants.’ (not somebody else’s)

b. Sklad firmy obsluživaet tol’ko svoi PREDPRIJATIJA.
‘The company’s warehouse only works with its own PLANTS.’ (rather than, e.g., stores)

The derivation for ((132)a) proceeds in the manner of ((133)a): svoj moves overtly to only. But suppose in ((132)b) the head noun is merged with a focus feature. If so, the entire NP must move to adjoin to only, as in ((133)b) (recall that contrastive focus movement is an instance of phrasal movement, so N cannot be extracted by itself). Only assigns stress to its focalized associate: either svoj in the case of ((133)a) or the noun in case of ((133)b).

(133) a. 

b. 

It is important to note here that only the focused XP undergoes focus movement (i.e.e the minimal element with a feature [focus]. So, in the case of ((132)a), the extractee is the phrase immediately dominating svoj, while in the case of ((115)a) it is the AdjP immediately dominating ýrotičeské ‘erotic’. Crucially, both of these cases entail the LBE operation. By contrast, in ((132)b) there is no choice but to
move the NP, since its head is the element endowed with the [focus] feature: it has to be local to only to become the eligible stress hosting head.

If so, we have the following prediction: the configuration only>adj>svoj>Noun]_{FOC} ought to be deviant. If the noun gets its prosodic prominence (and hence contrastive focus interpretation) by virtue of the NP adjunction to only, then the binding of the possessive should be blocked by the adjective in this configuration. That is so because the displaced element is the entire node \([\text{NP AdjP} [\text{NP svoj [NP N]]}]\) with the adjective occupying the highest edge. On the other hand, if svoj precedes the adjective in such configurations, we expect a grammatical result. My informants indicate a clear contrast between the first two word order permutations in (134): in the environments of a focus on \textit{knigi} ‘books’ they consistently choose the variant in (b) over (a), in accord with my predictions. Of course, ((134)a) becomes perfect if the adjective is focused, as shown in ((134)c). In the latter case, only 

\textit{novye} ‘new’ is extracted, thus creating a configuration, in which svoj can get bound.

(134) a. ?*My prinesly tol’ko novye svoi KNIGI.
    we brought only new self’s books

b. … tol’ko svoi novye KNIGI.

c. … tol’ko NOVYE svoi knigi.

Another prediction concerns the possibility of splitting of only and its associate: since they form a syntactic constituent, we expect that only cannot be separated from the focused XP. This is borne out by (135), where the discontinuous association with NP or AdjP is shown to be illicit (both sentences are acceptable if the subject, i.e. an element adjacent to only, is focalized).

(135) a.*Tol’ko on KNIGI prines?
    only he books brought

b. *Tol’ko vy SVEŽUJU rybu kupili?
    only you fresh fish bought
I will not consider the rest of the elements marking contrastive focus in (115) at the same level of detail, simply confining my discussion to a brief elaboration of what the analysis for -tože markers (appearing first in ((115)c-f) and repeated in (136)) might look like. Ultimately, I endorse the extension of the analysis articulated earlier for only to -tože elements. In both cases, the focus marker generated in the higher projection triggers the movement of its associate. The one point of departure between only and -tože involves the adjacency: the latter impose a more rigid adjacency requirement. Consider how.

(136) a. (Ved’) ona poterjala [Novye-To]_{Foc} svoi krossovki.
   (Foc) she lost NEW-FOC self's tennis.shoes
   ‘(Imagine,) as for her NEW tennis shoes, she lost them.’

b. *...svoi [Novye-To]_{Foc} krossovki

c. [Starye ŽE]_{Foc} svoi proizvedenija on ne peredelyvaet.
   old- Foc self's oeuvres he not redo
   ‘As for the OLD oeuvres of his, he does not redo them.’

d. *...svoi [Starye ŽE]_{Foc} proizvedenija

In contrast to only, the markers -tože cannot license focus inside the NP, which is what is unsuccessfully attempted in ((137)a): i.e., the sentence is deviant because -to is adjacent to the adjective in the environment where the noun is contrastively focused. The focused element, whether it is an XP, an adjective ((136)a,c), or X₀, a noun in ((137)b), must be adjacent to the particle. From the standpoint of their phonetic properties, these particles are enclitic-like in that they require a prosodic host to their left.

(137) a. *(Ved’) ona poterjala [Novye-To]_{Foc} svoi KROSSOVKI.
   (Foc) she lost new-FOC self's tennis.shoes
   Intended: ‘(Imagine,) as for her new tennis SHOES, she lost them.’

b. ✓ ... [krossovki-To]_{Foc} svoi novye...
I have been implicitly assuming no specialized focus position (or more precisely, made no commitments to this idea), however, all the proposals above are consistent with the assumption that there is a focus-licensing projection (FocP) generated above vP, as in (138) (identical to the Bošković’s structure in (109)). Suppose this is so. *Only* on this view would be generated in Spec, FocP. As argued above, it requires the rightward adjunction of its XP associate. On the other hand, *-tože* head this FocP; and they require a contrastively marked host to their left. The conceivable solution then entails the movement of either the XP to Spec, FocP, as in ((138)a), or head adjunction, as in ((138)b). The former gives us the paradigm implicating the adjectives in (136), the latter – examples like ((137)b) which involve the nouns.\(^{73}\)

\[(138)\]
\[\begin{array}{c}
\text{a. FocP} \\
\text{AdjP} \\
\text{Foc}^0 \\
\text{-tože} \\
\text{vP} \\
\text{t}^0_{v+V} \\
\text{NP} \\
\text{t}_\text{AdjP}
\end{array} \quad \begin{array}{c}
\text{b. FocP} \\
\text{Foc}^0 \\
\text{N}^0 + \text{tože} \\
\text{vP} \\
\text{t}^0_{v+V} \\
\text{NP} \\
\text{t}_N^0
\end{array}\]

Regardless of which particular implementation of the focus movement is ultimately chosen, the basic schema of the analysis remains consistent: an element occupying the edge must move for focus. This step ensures the accessibility of *svoj* to its antecedent.

The final dataset I ponder in this section implicates the behavior of *only* and *even* in Y/N questions. Anticipate two revelations here. First, *only*-phrases (but not *even*-phrases) can move out of TP. Second, the mechanism of PF reordering, argued for in Chapter 2, is responsible for the surface representations.

Just a few paragraphs prior I made a claim that *only* is inseparable from its associate. The notable exception to this is in ((139)a,b). In Y/N questions [*only+XP*] can be split by the interrogative marker.

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\(^{73}\) Note that on this analysis, we may not need the Stress-Shifting operation (discussed earlier in conjunction with *only*) at all: recall that this operation was posited to account for the examples where *only* precedes the verb, as in (125). Recall also that *only* requires phrasal association. On the FocP analysis this is straightforward: the VP moves to Spec, FocP.
Note that the entire NP need not be pied-piped, as attested by ((139)b), in which the noun does not venture into the clausal domain.

Recall from Chapter 2 that the prosodic properties of the interrogative marker are twofold: li must be supported by a host to its left, and the host itself is not to exceed one prosodic word. In Chapter 2 I defended the position that li-placement is regulated by a PF-reordering mechanism, which places li to the left, triggering the apparent splitting of the constituent where necessary. More specifically, on my account the quantified NP ends up in Spec, CP in syntax. The first prosodic word of this quantified NP (i.e., the quantifier) is pronounced to satisfy the aforementioned PF requirement of li.

In the absence of another fronted element (a verb or a non-quantified NP), we, in effect, hear the results of the QR: the highest copy is pronounced to avoid the violation in PF. The same analysis applies in (139). As shown in ((139)c,d), [only+XP] undergoes QR to the edge of CP. Since no other elements are available to the left of li in these configurations, [only+XP] is what has to be pronounced. Though [only+XP] functions as a syntactic constituent, it is still parsable into prosodic words (as each word is endowed with stress). The PF reordering mechanism then places li after the first prosodic element in the manner of ((139)c,d).

(139) a. Tol’ko li GRANIČEV vinovat v ėstafetnoj neudače? [www]
     only Q Graničev is.to.blame in relay failure
     ‘Is Granichev the only one to blame for the failure in the relay race?’

    b. Tol’ko li ĖKOLOGIČESKIMI oni rukovodstvujutsja motivami?
     only Q ecological they guide.themselves motives?
     ‘Are they driven only by ecological motives?’

    c. Syntax: [tol’ko GRANIČEV] li [TP …]           PF: #töl’ko# GRANIČEV li [TP …]

74 To be explicit here, my claim with regard to the constituents involving only and even is thus: their associates undergo movement for contrastive focus in syntax (driven by a formal [focus] feature). The resulting constituent (e.g., only+XP) subsequently undergoes QR.
It has been argued time and again that only-phrases target a very high position in the clausal periphery (see, e.g., Wagner (2005) for English, Horvath (2006) for Hungarian). In Russian the prosodic exigencies allow us to see the result of this operation under certain circumstances. The crosslinguistic evidence and in conjunction with patterning of only with “high” QRing Qs in polar interrogatives constitute a strong argument for the derivations in (139). Note that the Prosodic Inversion (PI) analysis (on which li is placed to the right of the constituent in PF) predicts that only-phrases do not raise as high as CP, as demonstrated in (140). I will first show that PI analysis is undesirable from a crosslinguistic perspective.

(140) a. Syntax: \[li [XP ...] \] PF: \[li [XP \omega \omega] \] PI analysis

To see the point, let us briefly return to Horvath’s (2006) pattern of only/even distribution discussed on page 262. (107) shows the following contrast: the even-phase cannot precede the V+prt (i.e., *[even XP] – V - prt), however it can appear after the verbal complex of the form prt+V (i.e., \(\checkmark\)prt - V - [even XP]). She also reports that (141) (= \(\checkmark\)[even XP] - prt - V) is a legitimate configuration. The pattern is exactly reversed for czak ‘only’ in (106). It is assumed in the literature on Hungarian that V does not raise if it is of the form Prt+V. My contention is that even-phases, unlike only-phrases, do not QR that high – something precludes them from crossing TP (hence, they cannot be followed by a V+Prt cluster in Hungarian, which is presumed to be very high in the structure) (see also Beghelli and Stowell 1997 for an analysis of QR as a byproduct of a feature checking operation, whereby different types of quantifiers target different landing positions in the clause).

(141) Mari még [AZ ESKŰVŐJÉRŐL] is elkésett.
MaryNOM yet the weddingHER.FROM also away.late.was
Hungarian aside, Russian offers a diagnostic of its own evinced in (142). In contrast to only, even cannot be preposed in polar interrogatives. This is predicted by my analysis on the assumption that even is confined to TP. In this, even behaves like ni-items, which also may not cross a TP boundary (see Section 4.2.3). If this is correct, the derivation proceeds as in (143): even stays inside the TP. In PF, \( li \) ends up without host (there is nothing on its left), so the derivation crashes, exactly as my PF reordering mechanism predicts. Crucially, on the PI analysis, (142) is expected to be good, since \( li \) in (143) can be moved to the right of the first prosodic word.

(142) *Daże \( li \) Bazfíd on ne čitaet?

even Q Buzzfeed he neg reads

Intended: ‘He doesn’t read even Buzzfeed?’

(143) Syntax: [\( \emptyset \)] \( li \) [TP daze BUZZFEED…] PF: [\( \emptyset \)] \( li \) [TP daze BUZZFEED…]

^* PF violation: no host!

Admittedly, this section has been encumbered with a plethora of gnarly details and various tangents, but the main point is actually rather simple. Russian has two positions for focus – the movement to the lower one may be string vacuous; the displacement to the higher one results in the different word order (Obj>V). In the environments where the adjective precedes the possessive, it is obligatorily interpreted as a contrastively focused element, which must move to the relevant functional projection to check its [focus] feature and acquire stress. If this movement cannot take place (i.e. when the adjective extraction is blocked by the possessive, for example), then the stress is assigned as Last Resort by a stress-shifting operation. The same analysis extends to the interactions of overt focus markers, adjectives, and svoj. It is argued that the focus markers are, in fact, generated in the functional projections where focus is normally licensed. Their associates must be adjoined to them overtly (as attested by the adjacency requirement and the impossibility of splitting of the constituents with the form [only/even+XP]). These independently necessary movements ensure that svoj ends up in a configuration, in which it can be bound. As a bonus, I provided another piece of evidence in favor of my conception of the PF reordering mechanism in polar...
interrogatives, demonstrating that the mechanism of Prosodic Inversion makes the wrong predictions with respect to *even/only*.

The final (and very tentative) suggestion pertaining to the data discussed in this section is thus: it seems to be the case that in the languages that have overt focus movement, the association with focus elements (like *only*) has to be overt as well. This distinguishes Russian-type languages from English-type languages. In the former, but not the latter, *only*-type elements must be local.

4.4 Binding: Agree or movement?

This section considers some consequences of the analysis developed here for the Binding theory, and Condition A, in particular. I will consider two approaches: the movement approach (Hornstein 2001, Marelji 2011) and the phasal agreement approach (e.g., Despić 2011 and this dissertation). I will point out a few problematic cases for the former, tentatively concluding that the latter handles the facts in a more straightforward way.

But first allow me a disclaimer: my analysis is not meant to settle all the BT-related matters in Russian (this is a topic too vast and deserves a space of its own), rather it is conceived as a brief exploratory exercise that may help to demonstrate how the two competing approaches – viz., binding-as-movement vs. binding-as-agree – may fare.

Hornstein (2001) argues that anaphors are the residue of overt movement of the antecedent. The bound pronouns are inserted only as a last resort operation in situations when movement is prohibited. Marelji (2011), building on Hornstein’s analysis, proposes that the availability of the anaphoric possessive is reducible to the availability of LBE. In the languages that allow for LBE, the antecedent is extricable and its trace is spelled out as *svoj*. I will offer some evidence against this treatment, but first I will briefly review her argumentation.

The main focus of her paper is on the difference between English (144) and BCS (145) (Russian patterns exactly like BCS in the relevant respects, so I will simply cite Marelji’s BCS examples). While
English *his* is ambiguous between bound variable and referential meanings, BCS is not. *Njegov* ‘his’ is obligatorily referential, while the anaphoric *svoj* ‘self’s’ can only be construed as a bound pronoun.

(144) Everyone loves his_{1/2} mother.

(145) a. Svako_{1} voli njegovu_{1/2} majku.
   everyone loves his mother

   b. Svako_{1} voli svoju_{1/2} majku.
   everyone loves self’s mother

Hornstein’s explanation for (144) reduces to the prohibition on LBE in English. For him, the pronouns are costly: “the pronoun can get a bound interpretation if and only if it goes surrogate for a (syntactic) variable that could not licitly be formed by movement” (Hornstein 2001: 176). Suppose, (144) has the derivation in (146): *everyone* is copied from the DP to be merged in subject position. This internal merge is illicit, since it violates the LBE condition. Hence, the only possible recourse for convergence is to insert a pronoun. The main insight here concerns economy: in this particular case movement derivations are argued to be more economical than (and consequently preferred to) the non-movement computations.

(146) Everyone loves [everyone’s mother].

Marelj reasons that because BCS (as well as other Slavic members of this type, including Russian), being the language that violates the LBE condition with alacrity, deploys the movement strategy whenever possible. So, on her account *svoj* is a spellout of the trace (hence the obligatory bound pronoun interpretation in ((145)b), for which the derivation in (146) is licit in contrast to English). Only in environments where LBE is independently prohibited can the pronoun insertion apply. One such context is in (147). ((147)c) demonstrates what happens when the extraction takes the element over a clause boundary. If *svoj* in ((147)a) is the residue of movement of *svako*, the parallelism between (a) and (c)
follows directly: neither svoj in (a) nor stari in (c) can cross the finite da-clause. Therefore, the only remaining option is to insert the pronoun as in ((147)b).

(147) a. *Svako_I misli [da su svoji_I roditelji pametni].
    everybody thinks that are self’s parents smart
b. Svako_I misli [da su njegovi_I roditelji pametni].
    everybody thinks that are his parents smart
c. *Stari_I svako misli [da su t_I ljudi pametni].
    old everybody thinks that are people smart

If Marell’s reasoning is correct, we expect to discover complete parallelism between the cases of overt LBE and the distribution of svoj: if the former is (im)possible, then so is the latter. Here I present three pieces of evidence that contradict this claim.

One problematic paradigm is reported in Despić (2011). In (148) I replicate his BCS paradigm for Russian. The anaphoric possessive can be bound inside the PP, as in ((148)a). However, the overt extraction out of this PP in ((148)b) is prohibited. The problem is evident: if binding were treated on a par with movement, what then explains the contrast between ((148)a) and ((148)b)?

(148) a. Politik_I ušel v otstavku iz-za svojej_I suprugi.
    politician went to resignation because self’s spouse
    ‘The politician_I resigned because of his_I spouse.’
b. *Č’ej_I politik ušel v otstavku iz-za t_I suprugi?
    whose politician went to resignation because spouse

The contrast between (149) and (151) evinces the second problem. All the examples contain a quantified expression. As ((149)a,b) demonstrate, extraction out of QPs with obligatorily raising Qs is degraded. The traces indicate the underlying positions of the moved adjectives: in ((149)a,b) the adjectives have to be merged earlier than the quantifiers, as confirmed by their in-situ distribution in ((150)a,b). The
indefinites in ((149)c,d) do not hinder the extraction, since the adjectives may be merged after these types of quantifiers have been introduced, as attested by the availability of both word order permutations in ((150)c,d). The surface position of the adjective in ((149)a,b) has no effect on grammaticality: both sentences are bad regardless of where the extracted adjective ends up on the surface.

(149)  
    new she read each article
  b. *Novye ona pročitala [vse t stat’i]. / *Ona novye pročitala vse stat’i.
    new she read all articles
  c. Ty ne znaeš, pročitala li novuju ona [t kakuju-nibud’ stat’ju]?  
     (Do you know) read Q new she some-nibud’ article
  d. Novuju ona pročitala [t kakuju-to stat’ju]. / Ona novujuj pročitala kakuju-to stat’ju.
    new she read some-to articles

(150)  
  a. ✓…[každuju novuju stat’ju] / *…[novuju každuju stat’ju].
  b. ✓…[vse novye stat’i] / *…[novye vse stat’i].
  c. ✓…[kakuju-nibud’ novuju stat’ju] / ✓ …[novuju kakuju-nibud’ stat’ju].
  d. ✓…[kakuju-to novuju stat’ju] / ✓ …[novuju kakuju-to stat’ju].

Despite the apparent prohibition on movement out of certain quantified NPs, binding into them is perfectly acceptable, which is not expected under the Marelj-style analysis:

(151)  
  a. Ona vnimatel’no pročityvaet [každuju svoju stat’ju].
     she carefully reads each self’s article
  b. Ona vnimatel’no pročitala [vse svoi stat’i].
     she carefully read all self’s articles
Finally, consider this naturally occurring example of the apparent wh-island violation in (152) reported by Pereltsvaig (2008). Some may object that the extractee here is the name, which somehow facilitates its unconventional extraction out of the wh-question. However, even unadventurous adjectives (like old, new, elegant etc.) can move out in the same manner with the same perfectly natural, albeit colloquially flavored, result.  

(152) Zvezdnyj1 ne skažete [gde [t1 restoran]]?

“Starry” neg say2PL where restaurant

‘Please tell me where Zvezdnyj restaurant is?’

The sharply ungrammatical (153), where the anaphoric possessive appears in the very position occupied by the adjective trace in (152), militates against reducing svoj-licensing to movement.

(153) *Vy ne skažete [gde [svoj restoran]]?

youPL neg say2PL where self’s restaurant

Intended: ‘Would you tell me where your restaurant is?’

---

75 It is standardly assumed that Russian is sensitive to the wh-island constraint:

(i) *Komu1 ty sprosil, kogda2 Ivan pozvonil t1 t2?

whoDAT you asked when Ivan called

Intended: ‘Who did you say Ivan called when?’

(ii) *Kogda1 ty sprosil, komu2 Ivan pozvonil t1 t2?

(Bailyn 2011: 101)

However the extraction of the non-quantified NP generated inside the wh-island seems to be fine in colloquial Russian:

(iii) Ty DIREKTORU1 znaeš, kto zvonil t1?

you principalDAT know who called

‘Do you know who called the principal?’

(iv) A ty NOVYJ1 ne znaeš, gde kupit’ t1 učebnik?

and you new neg know where to buy textbook

‘Do you happen to know where to buy the new textbook?’

For a similar patterns in BCS see Bošković (2004) and Stjepanović (1999a).
The upshot of the above is the following: binding is possible in some contexts where movement is
prohibited, and, conversely, in some constructions svoj cannot be bound even though overt extraction can
proceed just fine. So, what is the alternative? The alternative is to say that svoj is a φ-deficient lexical item
present in the numeration which has to value its underspecified features against those of its antecedent in
the course of the derivation. To do so, it ought to be accessible to its binder. Recall that svoj is argued to
be specified for [+anaph], which is the driving force behind movement to the edge whenever possible. So,
the core idea then is that svoj gets its φ-feature specification from its binder by ensuring that it ends up in
the right configuration.

Let us now see how this system handles all the problematic cases above. Here is Despić’s example
(148) again, repeated as (154).

(154) a. Politik₁ ušel v otstavku iz-za svojej₁ suprugi.

   politician went to resignation because self’s spouse

   ‘The politician₁ resigned because of his₁ spouse.’

   b. *Č’ej₁ politik ušel v otstavku iz-za t₁ suprugi?

   whose politician went to resignation because spouse

   ((154)b) becomes grammatical if the extracted complex includes both the preposition and the wh-
word, as in (155).

(155) Iz-za č’ej politik suprugi ušel v otstavku?

   because whose politician spouse went to resignation

The PP in (155) need not be discontinuous, but can be. However, the discontinuity can only be of the
form P+Adj…N, but never *Adj…P+N, as shown in (156). Cases like ((156)b) and (155) are dubbed
extraordinary Left-Branch Extraction (which I will abbreviate to exLBE here).
To handle exLBE, I am adopting Bošković’s (2013b) proposal and then applying it to cases like ((154)a). Bošković’s analysis is rather involved, so I start by giving a bare bones derivation first and then provide the rationale and the requisite explications for his treatment.

The PP in (157) is basically the structure that feeds the movement in exLBE cases. This PP constitutes a phase (recall that on the contextual approach to phasehood that I am assuming, the highest projection in the lexical domain of a head constitutes a phase. Hence, PP is the highest projection in the domain of P0). All the material that is subject to extraction ought to be clustered on the edge, which is exactly what happens here. The procedure is thus: the adjective moves to Spec PP, followed by adjunction of the preposition to this extracted adjective. Consequently the resulting Prep+Adj complex can only move as a unit. The mechanism works, save for one non-trivial issue: the movement of the adjective and of the preposition are both too short under Bošković’s definition of anti-locality (which maintains that an element has to cross one full phrase boundary not just its segment; this requirement rules out, e.g, the instances where the complements move to the Spec of the same phrase). To resolve the problem, he uses a modified version of the already familiar *-notation: whenever the * appears, it signals a violation. Note that in (157) it is P0 that is assigned the *.

(157)  
\[ \text{PP} \rightarrow \text{P}^* \rightarrow \text{NP} \rightarrow t_{\text{PREP}} \rightarrow t_{\text{ADJ}} \rightarrow N \]

76 For syntactic arguments that exLBE is an instance of LBE see Bošković (2005). Prosodic evidence for the analysis in (157) is provided in Talić (2014).
Traditionally, the * is assigned to an island if an element crosses it. Consider again the example in (158), already invoked in Chapter 2. ((158)a) contains a conditional clause island. When the wh-phrase is extracted out of it, the star is placed on the island. If the * remains in the final representation, the sentence is degraded. To salvage a derivation some rescue operation must apply. In the case of ((158)b) the rescue operation in question is PF ellipsis. It deletes the island and the * along with it.

(158)  

a. *Ben will be mad if Abby talks to one of the teachers, but she couldn’t remember which (of the teachers) Ben will be mad if she talks to.

b. Ben will be mad if Abby talks to one of the teachers, but she couldn’t remember which \((\text{of the teachers)} \text{Ben will be mad if she talks to}\).  

(Merchant 2001: 88)

Bošković’s innovation is to place the * on the head of the island. This allows him to explain the instances, in which islandhood is voided when the head moves, leaving the copy that is deleted in PF. Here is how this system handles Uriagereka’s (1996) Galician example in (159). The articles in Galician come in two incarnations: the examples below involve a definite masculine article, which has two forms – one variant, \(\text{los}\), obligatorily cliticizes to the verb, the other, \(\text{os}\), is a free standing item. ((159)a) shows that the definite DP headed by \(\text{os}\) is an island for wh-extraction. It ceases to be one, however, if the article is incorporated into a verb in the manner of ((159)b). Bošković shows that it is sufficient to move just the head and delete its lower copy to rescue the derivation: in ((159)a) \(D^0\) stays in-situ. The * is placed on it when the wh-phrase is extracted, resulting in the ungrammatical surface sequence. In (159)b) the article moves to incorporate into the verb. Here, the lower DP-internal copy, which bears the *-marking, is deleted, thus salvaging the derivation.

(159)  

a. *De \text{quén}\text{\_} \text{liches} [\text{os} \text{mellores poemas de amigo} t_j]? 

\text{of whom read}_{2SG} \text{the best poems of friend}
This analysis is extended to the PIC/antilocality violations with a slight amendment that the * is placed on the head of the phase. Therefore, in (157), the preposition, i.e. the head of the phase, bears the *.

The mechanism of Copy-and-Delete determines which copy gets to survive and be pronounced. If the *-bearing head is deleted from the final representation, we end up with a grammatical sentence. But if it is not, then a violation remains. This is sketched in (160) for the relevant PPs in (155) and (154)b.

(160) a. [PP ... [*P iz-za] [NP č’ej]] 
b. [PP ... [P iz-za] [NP č’ej]]

So, the cases of exLBE of the ungrammatical form *Adj… P+N in ((154)b) and ((156)c) are ruled out because the lower P^0 copy, marked with a *, is not removed from the final representation.

I am applying this technology wholesale to the case of binding in (154)a. Coupled with my claims about the nature of the possessive, it produces just the right result. Svoj moves to Spec PP, being driven by the [anaphoric] feature. This is followed by the incorporation of the preposition, as sketched in (161). The movement ensures that the possessive occupies the edge, but it also violates antilocality. The result is the *-marking on the P-head. The deletion of the lower P^0 ensures the deletion of the * along with it.

(161) [PP iz-za+svoej [*P iz-za] [NP svoej…]]

The ungrammaticality of (162) then follows from the failure to delete the *-marking, P did not move in the first place, hence no improvement.

(162) *Politik ušel v otstavku svoej iz-za suprugi.

politician went to resignation self's because spouse
The main point here is that *svoj* is inextricable by itself (i.e., without the preposition). Under the binding-as-movement approach, one would have to add an additional caveat to handle ((154)a): the antecedent ought to be extractable out of the complex with an incorporated preposition, which we know is not possible in view of ((154)b) and ((156)c).

The second batch of facts problematic for the Marelj-style analysis is repeated in (163) and (164) from ((149)a,b) and (151). The adjective extraction is blocked in (163) by the quantifier, but *svoj* in (164) gets bound by virtue of acquiring edge status after vse/*každyj* undergoes QR. This means that binding cannot be treated on a par with overt movement.

(163) a. ?*Novuju ona (novuju) pročitala [každuju t stat’ju].
new she (new) read each article
b. ?*Novye ona (novye) pročitala [vse t stat’i].
new she (new) read all articles

(164) a. Ona vnimat’no pročityvaet [každuju svoju stat’ju].
she carefully reads each self’s article
b. Ona vnimat’no pročitala [vse svoi stat’i].
she carefully read all self’s articles

The generalization is thus: while QR, a covert operation, can rescue the binding issue (which also constitutes a covert syntax issue), it cannot help with the overt extraction violations. The intuitive idea is clear: the quantifier is turned into a trace too late to salvage (163), as sketched in (165) and (166).

(165) ?*Novye ona pročitala [NP vse t stat’i].

Blocks overt extraction
The above is couched in somewhat quaint terms: as stated, the analysis presupposes the existence of acyclic covert operations, which take place at the level of LF. The facts clearly indicate that the timing of QR in (165)/(166) matters: the quantifier blocks overt movement, but does not hinder covert computations. In other words, the contrast between (163) and (164) is that covert movement saves covert dependencies (whereas it is bereft of utility in saving overt dependencies): the Q is turned into a trace too late to salvage the derivation in (163). Now one may sensibly ask whether it is possible to capture this timing issue, assuming a more theory-friendly version of a single-cycle syntax, whereby covert movement is recast as taking place in the same cycle but involving the pronunciation of lower copies (Bobaljik 1995, Groat and O’Neil 1996, Pesetsky 1998).

The obvious question here is why the adjective in (163) cannot be extracted. A possible solution in (167) does not in principle preclude the adjunction of the adjective to the vP after QR takes place. Consider the details. On my account, the QP undergoes QR to the edge of vP. This configuration ensures that the adjective is on the edge, so it should be in principle accessible for further operation.

Here I will simply entertain a few plausible options without attempting to settle on one concrete analysis.
One possibility is that we are dealing with a species of an intervention effect. Consider how the
derivation is supposed to proceed under single cycle syntax. First, the element undergoes QR (the lower
copy is pronounced later), then the adjective moves across the QR-ed element. In effect, A’-movement
crosses an A’-displaced element, which is an instance of an RM violation.

Let us ponder this a bit more closely: suppose QR targets vP. Assume also that the level of adjunction
is preserved with moved elements tucking in Richards-style (see Bošković 2013a for a similar treatment
of object shift). This means that the order on the vP edge is still Q>Adj, as demonstrated in (168).

There are two options for the possible subsequent analysis. If the verb is subject to movement, as I
argue in the previous section, the movement out of NP is string vacuous. It proceeds in the tucking-in
manner indicated in (168). If this is so, the surface result on the edge of the vP replicates the internal
sequence within the NP, as shown in (169). To make this analysis work though we need an admittance of
one caveat, namely: it is the higher copies of both elements that are pronounced in this configuration
(rather than the lower NP-internal copies). This is necessary to capture the obligatory surface order: Q>Adj
rather than Adj>Q (the latter is the standard treatment of QR, under which the lowest copy is pronounced).
So, this is one option.

The other alternative does not entail any modifications regarding the pronunciation of the higher copy
of the quantifier. In essence, the proposal reduces to saying that AdjP cannot stay in the vP-edge position.
The intuition here is to link the properties of \( v^0 \) with the C\(^0 \) headed by \( \text{that} \) in the following way. In the cases of successive cyclic movement, the wh-phrase passes through Spec, CP headed by the complementizer \( \text{that} \). Crucially, it may not stay there – it has to proceed further. So, in cases like (163) \( v^0 \) evinces the same properties as \( \text{that} \). It can host successive cyclic movement, but the element may not stay there. Being an A’-moved element the adjective has to vacate this position, which is impossible given the QP’s blocking effect. What we are forced to conclude here is that while Spec, vP can accommodate A-elements and provide an intermediate landing site for A’-elements, it may not serve as an ultimate destination for A’-items. An exception has to be made for QR, of course, on the assumption that the QPs do not undergo any further movement.

Suppose this latter point does not apply. In Chapter 2, I argue that the relevant subset of Russian quantifiers targets CP, rather than the lower projection. Recall also that the higher focus position is lower than CP (presumably somewhere between TP and AspectP). For explicitness I will assume it is TP, but nothing hinges on this assumption. So, we have something like (170). When T is merged it ought to trigger the movement of AdjP for focus. This does not happen, however, because QP has not yet moved. But by the time QP moves to CP, it is too late for the adjective to undergo movement.

(170) \[
\begin{array}{c}
C_{\text{TP}} \\
\vdots \\
[\text{QP} \\
\vdots \\
v^0_v^0 \\
\vdots \\
[Q_P I_{\text{AdjP}} N]][N].
\end{array}
\]

To reiterate: this exposition is confined to hypothetical solutions. There are quite a few loose ends and open questions awaiting coherent explanation. But at least descriptively the problem is well-defined: what needs to be captured is the timing of the computational steps. While QR results in the configuration that makes binding possible; it does not salvage overt extractions. And that is the crux of the problem for binding-as-movement type approaches.

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77 I am leaving the issue of implementation open here, since there are various approaches for this in the literature (see, e.g. Chomsky (2000) who suggests that the intermediate heads – \( \text{that} \) and \( v^0 \) – can only be given the EPP property when needed to license successive cyclic movement).
My final objection to the Marelj-type account is admittedly weaker and reduces to the incompatibility of the analysis that I am defending for the distribution of quantifiers and svoj and the binding-as-movement approach. Consider (171). Suppose that svoj is indeed an overt realization of a trace. Given my assumptions, nothing should preclude the QR of každuju ‘each’ (if traces do not count as edges), since the movement of the antecedent ought to create a configuration, in which the quantifier occupies the highest edge, as shown in (172). If this is the case, the unacceptability of (171) remains mysterious. Of course, on the binding-as-agree analysis nothing goes wrong: (171) is bad, since QR is blocked by the possessive.

(171) *Dostoevskij postavil na polku svoju každuju knigu.
   
   D put on shelf self’s each book

(172) *Dostoevskij postavil na polku [t₁ každuju knigu].
   
   Spellout: svoju ^highest edge

I therefore conclude that binding is not established via movement. Rather, it is established via an agree-type operation. Svoj is a lexical item rather than the spellout of the trace of the antecedent. As such, it hinders QR of obligatorily QR-ing quantifiers and focus movement with overt focus elements if it is merged last in the NP.

4.5 Interaction of svoj with superlatives

The facts surrounding the distribution of superlatives with svoj in (173) instantiate yet another case that appears to run counter to the predictions made in the beginning of the chapter: viz., svoj ought to occupy the highest edge in order to be bound, which descriptively means that it has to precede all other elements in the NP. As it turns out, svoj is freely ordered with superlatives: it can either precede the superlative complex, as in ((173)a) or follow it, as in ((173)b). In principle, ((173)b) is expected to be bad due to the blocking effect of the superlative complex.
Instances like ((173)a) should look familiar: the example is quite straightforward and fits the analysis developed earlier. On the assumption that ((173)a) has the representation in (174), the possessive, appearing at the edge, is bound.

((174)

((173)b), on the other hand, is prima facie problematic: the binding of the possessive here is predicted to be impossible, since svoj does not occupy the highest edge.

In essence, the analysis that I pursue for the superlatives echoes what was endorsed earlier for focus movement. In the configurations where the superlative complex precedes the possessive, the superlative is argued to undergo focus movement.

Before presenting the advertised syntactic treatment for the core pattern found in (173), I first discuss some consequences that the possessive/superlative interaction has for the interpretation. Let the reader be warned, however, that I will not attempt to grapple with semantic issues in this section. This exposition is confined to simply noting descriptive curiosities (while putting them aside for future investigation).

The semantic literature boasts robust research on the nature of superlatives. Below is the paradigmatic example, which became the focus of much attention:
John climbed the highest mountain.

(i) **Absolute reading**: John climbed the mountain that is higher than any other mountain (i.e., he climbed Everest).

(ii) **Comparative reading**: John climbed the mountain higher than anybody else. (i.e., John has conquered Hoosier Hill, provided nobody else in some contextually salient set managed such an ascent).

There are two general approaches that account for the available readings in (175): the in-situ approaches (Sharvit and Stateva 2002, Stateva 2002), and the “movement” approaches (Heim 1999, 2000, Szabolsci 1986). In essence, the “movement” analyses derive the two readings in (175) by using two distinct mechanisms: the comparative reading in ((175)-ii) is captured via movement of the comparative morpheme out of DP, while the absolute reading in ((175)-i) is argued to arise via an in-situ mechanism.

Let us briefly consider how the introduction of the possessive affects the meanings in (175):

(176)  
\begin{align*}
\text{a. Ivan včera pokoril svoju samuju vysokuju veršinu.} & \quad \text{Ivan yesterday conquered self’s most tall peak} \\
& \text{‘Ivan ascended his highest peak.’} \\
\text{b. Ivan včera pokoril samuju vysokuju svoju veršinu.} & \quad \text{Ivan yesterday conquered most tall self’s peak}
\end{align*}

As far as I can tell the meaning of both examples in (176) amounts to the following. Suppose there are three mountains in the universe, as indicated in (177). In both examples in (176) the comparison set is limited to the mountain peaks that Ivan managed to ascend. So, both examples are true if he got to the top of McKinley yesterday, provided he never managed to climb Everest.

It is also possible to put a heavy emphasis on *svoj* in both ((176)a) and ((176)b). The construal in this case corresponds to the usual contrastive focus interpretation. The sentence is true if Ivan ascended Hoosier Hill, but his friend John conquered the peak of McKinley.
Another observation concerns the interaction of superlatives, possessives and NPIs. It is not groundbreaking news that superlatives license NPIs (see, e.g., von Fintel 1999, Gajewski 2014). However, if the possessive is present, the NPI can be licensed only if the possessive scopes over the superlative complex. This is true of both English (178) and Russian in (179) and (180).

    b. *John finished the longest one of his books ever yesterday.

(179) a. Včera Ivan dočital svoju samuju dlinnuju iz kodga-libo yesterday Ivan finished self’s most long of ever pročitannyx (im knig) knigu.
    read by.him books book
    ‘Yesterday Ivan finished his longest book ever.’
    b. *Včera Ivan dočital samuju dlinnuju iz kogda-libo pročitannyx (im knig) svoju knigu.

(180) a. Ja uže soveršila svoju samuju krupnuju v žizni pokupku I already realized self’s most big in life purchase
    ‘I already made my biggest purchase in life.’
    b. *Ja uže soveršila samuju krupnuju v žizni svoju pokupku.

Finally consider English (181): ((181)a), where the possessive scopes over the superlative, is neutral with respect to whether John is the owner of the book (it basically realizes the referential function, picking
the set of individuals that have the property named by NP), while ((181)b) only encodes ownership/possession.

    (i) = of all the books he has ever read, the one he finished yesterday was the longest
    (ii) = of all the books in his possession, the one he finished yesterday was the longest

b. John finished the longest one of his books yesterday.
    (i) ≠ of all the books he has ever read, the one he finished yesterday was the longest
    (ii) = of all the books in his possession, the one he finished yesterday was the longest

Russian lacks this distinction: neither word order permutation in (182) entails that Ivan is necessarily the owner of the book. A familiar dichotomy underlies the distinction in (182) and (173), which essentially reduces to contrastive focus: in ((182)b), the superlative complex is prosodically prominent.

(182)  a. Ivan dočital svoju samuju dlinnuju knigu.  
    Ivan finished self’s most long book

b. Ivan dočital samuju dlinnuju svoju knigu.
         = of all the books he has ever read, the one he finished yesterday was the longest
         = of all the books in his possession, the one he finished yesterday was the longest

Returning now to the core dataset presented in the beginning of the chapter, it seems to be generally the case that superlatives sound most natural when focalized (see Bošković and Gajewski 2011 for arguments that absolute reading in Slavic requires heavy emphasis on the superlatives). Given this, the analysis that I advance for sentence like ((182)b) reduces to (183). The edge on the structure in (183) represents the focus-licensing position (presumably in the V-domain). When the superlative is merged last in the NP, it is subject to focus movement, as in ((183)a). The anaphoric possessive has an option of either staying in-situ or moving to form a constituent with a superlative in ((183)b). In the former case the
superlative bears the main stress, while in the latter case it is the possessive that is prosodically most prominent. Note that in both configurations svoj occupies the edge.

(183) a.  
\[
\begin{array}{c}
\text{superlative} \\
\text{NP} \\
\text{NP}
\end{array}
\]

b.  
\[
\begin{array}{c}
\text{superlative+svoj} \\
\text{NP} \\
\text{NP}
\end{array}
\]

This then captures the basic idea. Turning now to the mechanics of the proposal, I suggest that instances in ((183)b) involve multiple focus movement. It has been pointed out in the literature with respect to BCS that multiple focus movement is possible, albeit quite rare (Bošković 2014b, in press). Consider one such example in (184), where the demonstrative and the adjective are extracted.

(184)  
\[
\text{Onu}_1 \text{ staru}_2 \text{ prodaje } [t_1 t_2 \text{ kuću}].
\]

this old sells\textsubscript{2,SG} house

‘He is selling THIS OLD house.’

(Bošković 2014b: 59)

As (185) demonstrates, these extracted elements may not be separated by anything (a subject in ((185)a) and a clause boundary in ((185)c)). The permutation of the NP-internal order is likewise prohibited, as shown in ((185)b) and ((185)d). Bošković argues that both elements move as different phrases to the same head, ending up in the configuration (186).

(185) a. \textbf{*Onu}_1 \textbf{Ivan} \textbf{ staru}_2 \textbf{ prodaje } [t_1 t_2 \text{ kuću}].

this Ivan old sells house

b. \textbf{*Staru}_1 \textbf{Ivan} \textbf{ onu}_2 \textbf{ prodaje } [t_1 t_2 \text{ kuću}].

old Ivan this sells house
A combination of various constraints – Operator freezing effects and the familiar edge requirements – derive the ungrammatical paradigm in (185).

So, my claim is that Russian superlave+svoj combinations are also a result of multiple focus movement, but I am departing from Bošković’s conception thereof sketched in (186). Instead, I am essentially adopting Rudin’s (2013) rightward adjunction analysis that she proposes for Bulgarian multiple wh-fronting. If so, the superlative in ((183)b) moves first (in compliance with the PIC edge requirement); this operation is followed by the rightward adjunction of the possessive.

To test whether focus is, in fact, the raison d’être of sentences like ((182)b), let us consider a few contexts. The first thing to notice is that the possessive can be in principle focused even when superficially it appears to stay in-situ, as in ((187)a). This focus is associated with a particular intonational contour, suggestive of constituency: ((187)b) the pitch is rising throughout the entire cluster enclosed in “#” culminating on the stressed syllable of svoj, whereas the pause between the superlative and the possessive in ((187)c) leads to a somewhat degraded status.
a. Ivan prodal samuju staruju SVOJU mašinu.

Ivan sold most old self’s car

‘Ivan sold HIS oldest car.’

b. ✓… #samuju staruju SVOJU# mašinu.

c. ??… #samuju staruju# SVOJU# mašinu.

Second, the following is also acceptable (bolding indicates secondary stress, small caps – primary sentential stress). Apparently, it is possible to have two contrastively focused elements – a superlative and a possessive, as shown in (188). However, (189) indicates that both focused elements must be present: in (a) svoj is omitted and the superlative bears the main stress in the second conjunct; in (b) the possessive is the sole bearer of focus. I take this set of facts to be indicative of the structure in ((183)b).

(188) Ivan prodal samuju staruju SVOJU mašinu,a Anton prodal samuju novuju SVOJU.

Ivan sold most old self’s car and Anton sold most new self’s

‘Ivan sold HIS OLDEST car, Anton – HIS NEWEST.’

(189) a. ?*Ivan prodal samuju staruju SVOJU mašinu, a Anton prodal SAMUJU NOVUJU.

b. ?*Ivan prodal samuju staruju SVOJU mašinu, a Anton prodal SVOJU.

The pattern changes if the superlative realizes main focus. (190) has the structure in ((183)a): the sole extractee here is the superlative complex. The acceptability of ((190)a) follows directly (svoj, being an unfocused element inside the NP, can be safely elided). ((190)b) is deviant, since the focused element in the second conjunct does not belong in the subset of contextually given elements.

(190) a. Ivan prodal SAMUJU STARUJU svoju mašinu, a Anton prodal SAMUJU NOVUJU.

b. ?*Ivan prodal SAMUJU STARUJU svoju mašinu, a Anton prodal SVOJU.

The patterns from (188), (189), and (190) are summarized below in (191). The only good example involves two focused elements in the antecedent clause followed by the parallel focus structure in the
second conjunct. ((191)b,c,d) are bad, because the NP-internal element fails to move out of the NP for focus. Since there is nothing corresponding to it in the first conjunct, the sentences are ruled out. This is, in fact, the same effect observed in Chapter 3 in illicit rHWh contexts, which involve non-D-linked wh-phrases and arguments/verbs in the pre-

li positions, repeated in (192). Recall that sentences like this are prohibited, since the focused knigi cannot have a counterpart in the elided part. So too the focused elements in (191) lack the correspondent items in the ellipsis site.

(191)  a. ✓[... [superlative]_{FOC} + [possessive]_{FOC} ...], & [... [superlative]_{FOC} + [possessive]_{FOC} ... [\texttt{NP}]]
  b. * [... [superlative]_{FOC} + [possessive]_{FOC} ...], & [... [superlative]_{FOC} ... [\texttt{NP}]]
  c. * [... [superlative]_{FOC} + [possessive]_{FOC} ...], & [... [superlative]_{FOC} ... [\texttt{NP}]]
  d. * [... [superlative]_{FOC} ... [\texttt{NP}]], & [... [superlative]_{FOC} ... [\texttt{NP}]]

(192)  a. *Kto i knigi li prodal Olegu?
       who and books Q sold to Oleg

       Intended: ‘Who sold the books to Oleg, and was it books that this person sold?’

       b. *Kto [prodal knigi Olegu] & knigi li [t_1 pro_{INDEF} prodal Olegu]?

       ^material presupposed and dessred before deletion
       ^focalized: nothing corresponds to it in the first conjunct

Finally, consider the pattern of overt extractions in (193): (a) is out because the superlative complex is a lexical unit, so it cannot be separated in syntax. The two best examples are in (b) and (c). These are exactly predicted by (183), whereby either a superlative unit alone or a superlative+svoj complex can move.

(193)  a. *Ivan samuju opublikoval skandal’nju s svoju knigu.

        Ivan most published scandalous self’s book

        Intended: ‘Ivan published his most scandalous book.’

       b. ?Ivan samuju skandal’nju opublikoval svoju knigu.
c. Ivan samuju skandal’nuju svoju opublikoval knigu.

d. ?* Ivan svoju knigu opublikoval samuju skandal’nuju.

The remaining question is why should ((193)d) be bad? I propose the following. Suppose, we start off with the familiar operation – the superlative moves out for focus as in ((194)a). The possessive ends up on the edge bound by the subject in Spec, vP. Next, we have two options: either the NP adjoins to the superlative, much like the possessive does in ((183)b). If so, the entire cluster functions as an inseparable unit and therefore has to be pied-piped to the higher projection in the manner of ((194)b). Alternatively, the NP tucks in under the possessive complex (as in Bošković 2014b). In this configuration it is not eligible for further extraction, due to the blocking effect of the superlative. Either way, we predict that the NP cannot be extracted stranding the superlative. The contrast between ((193)d) and (195) with the entire superlative+NP complex in the preverbal position follows directly.

(194) a.  
\[
\begin{array}{c}
\text{superlative} \\
\downarrow \\
\text{NP} \\
\downarrow \\
\text{svoj} \\
\end{array}
\]

b.  
\[
\begin{array}{c}
\text{superlative+NP} \\
\downarrow \\
\text{vP} \\
\downarrow \\
\text{t_{NP}} \\
\end{array}
\]

(195) Ivan samuju skandal’nuju svoju knigu opublikoval.

Ivan most scandalous self’s book published

With this I conclude that the behavior of superlatives can be effectively assimilated to that of focused constituents. The superlative undergoes focus movement wherever possible (i.e., when it merges after the possessive). Svoj in such instances has the option of either staying in the base-generated position inside the NP or moving to adjoin to the superlative complex. In the latter case, it receives the main sentential stress. The configuration in which svoj precedes the superlative is, of course, unproblematic from the standpoint of binding: the possessive is on the edge and hence accessible to its antecedent.
4.6 A word on “obligatory” LBE: tying up some loose ends

One outstanding issue remains in conjunction with the analysis that I develop in this dissertation. In Chapter 2 I claimed with respect to hybrid coordination constructions that there are two possible options when it comes to quantifier movement: some quantifiers (like, e.g., *mnogo ‘many’) appear to have an option of pied-piping the NP, as in ((196)b),\textsuperscript{78} or stranding it, as in ((196)a). No quantifiers can undergo LBE out of subject positions (therefore they have to pied-pipe the NP to the pre-\textit{li} position, as demonstrated in ((196)c)).

(196) \(\text{a. Mnogo \textit{li} i \textit{kto} \textit{prines} [\_ vina] na večerinku?}\\ 
\text{much Q and who brought wine to party}\\ 
\text{‘Was it lots of wine that somebody brought to the party, and who brought lots of wine to the party?’}\\
\)

(196) \(\text{b. Mnogo \textit{li} vina i \textit{kto} \textit{prines} [\_] na večerinku?}\\ 
\text{much Q wine and who brought to party}\\
\)

(196) \(\text{c. *Mnogo \textit{li} i \textit{kakie} imenno \textit{èkzempljary poxvalili} na vystavke \_ ljudej?}\\ 
\text{many Q and which specifically samples praised on exhibition people}\\ 
\text{Intended: ‘Was it many people that praised some samples at the exhibition, and which samples did they praise?’}\\
\)

In Chapter 4 so far, I have defended an analysis under which the QNP of the form \textit{Q}\textsuperscript{>svoj} does not pied-pipe the NP under QR, based on constructions in (197): in the presence of the anaphoric possessive

\textsuperscript{78} Recall that I argue for the analysis under which \textit{mnogo vina} in ((196)b) moves to the peripheral position of the clause in syntax. The surface order is obtained via the mechanism of PF-reordering, whereby \textit{li} is placed after the first prosodic word.
the quantifier undergoes left-branch extraction, stranding the remnant NP. Recall that this configuration ensures that the possessive occupies the highest edge and hence can be bound in ((197)a). The problem with ((197)b) is that the quantifier cannot undergo movement due to the blocking effect of the possessor discussed earlier in this chapter.

(197)  a. Dostoevskij postavil na polku vse svoi knigi.
    Dostoevsky put on shelf all self's books

    b. ?*Dostoevskij postavil na polku svoi vse knigi.
    Dostoevsky put on shelf self's all books

Therefore, we face a discrepancy: in some configurations, the quantifier has an option of pied-piping its NP-associate along to the edge of the clause or leaving it in-situ, but in others only the latter scenario is possible. The question is how to reconcile this apparent inconsistency in the behavior of quantified constituents.

The proposal in a nutshell reduces to two components. Let us first assume that all QNPs are in principle free to pied-pipe. In HWh configurations, the quantifier can either move alone or tug the entire NP with it. On the other hand, pied-piping the whole QNP in examples like ((197)a) containing svoj would result in the configuration schematized in (198), which is an instance of a Condition A violation, since the anaphor ends up higher than its binder. In fact, even without this movement the anaphor is the configuration within which it cannot be bound given that it is not accessible to its antecedent due to the blocking effect of the quantifier.

(198)   [Q [NP svoj...]]_1 binder t_1

79 There are other potential factors involved here. It was noted earlier that some quantifiers do prefer to pied-pipe. Furthermore, pied-piping out of subject positions is apparently required (see Chapter 2 for details and data). I am putting these issues aside, as they do not conflict with the proposal I am making at this juncture.
The second piece, which is relevant to ((197)b), entails a particular condition on pied-piping itself. The generalization in (200) is borrowed from Heck (2008: 88) and extended here to all the pied-piping cases, as schematized in (199).

\[(199) \quad [\beta \alpha [\beta \ldots \ t_1]_1 \ldots \ t_1\]

(200) If a wh-phrase \(\alpha\) pied-pipes a constituent \(\beta\), then \(\alpha\) has to be at the edge of \(\beta\).

Heck is concerned with accounting for the data in languages that exhibit clausal pied-piping: Basque in (202), Imbabura Quechua in (203), and Latin in (204) (see also Ortiz de Urbina 1989, Arregi 2003 for Basque, Hermon 1985 for Imbabura Quechua). All these languages have what he calls “secondary wh-movement”, defined as a sequence of computational steps whereby the wh-word moves within its own clause before the clause containing it is fronted, as in (201). All the facts in (202)–(204) hence comply with his edge generalization in (200): the wh-word must end up on the periphery of its own clause in order to pied-pipe the clause.

\[(201) \quad \ldots \begin{array}{c}
\text{[CP}} \\
\text{wh}]
\end{array}
\]

(202) a. [Nor\(_2\)joango d-ela \(t_2\)_3 esan du Jonek \(t_3\)]

who go AUX-C said AUX John

‘Who has John said will go?’

b. [Nor\(_2\) etorriko d-ela bihar \(t_2\)_3 esan diozu Mireni \(t_3\)]

who come AUX-C tomorrow said AUX Mary (Basque)

(203) [\text{CP} Imata\(_2\) wawa \(t_2\) mikuchum]_3 -taj Maria munan?

what\text{ACC} child\text{NOM} eat\text{SUBJ} -Q Maria want

‘What does Maria want that the child eats?’ (Imbabura Quechua)
Magna vis est conscientiae, [quam qui t2 neglegunt]3 se ipsi t3
big power is conscience which whoPL neglectPL RELF self3.PL
indicant
indicate3.PL

‘Great is the power of one’s conscience, which, who neglects it, shows his character.’

The same reasoning applies to the Russian cases under consideration here, namely ((197)a) and ((197)b). In order to pied-pipe the NP, the quantifier has to comply with the edge requirement. In principle then nothing precludes pied-piping of the NP in (205)a: here the quantifier is on the edge, so it can bring the lower constituent along. However, such a movement would lead of a BT-violation: if the entire QNP moves, the anaphor contained inside it ends up too high, leading to the problem noted in (198). Therefore, the only available derivation to render the configurations in (205)a felicitous is to left-branch extract the quantifier. In (205)b, which is the abstract structure of (197)b, pied-piping is impossible, since the structure does not conform to the edge requirement, as the edge is occupied by a possessive. As discussed extensively in the beginning of this chapter, the extraction of the quantifier alone in such situations is impossible due to the blocking effect of the possessive (since the Q is not at the edge). Hence, for configurations like (205)b, pied-piping and quantifier LBE are both illicit. There is no other option than to interpret the quantified element in-situ, an alternative which is available for some, but not all quantifiers.

(205) a. [Q [svoj …]]
    b. [svoj [Q…]]

On the other hand, the hybrid cases in ((196)a-b) are devoid of issues that complicate the distribution of possessives in quantified constructions: as long as the quantifier occupies the edge, it is free to pied-pipe the constituent to the periphery. Putting aside the issue of why pied-piping is obligatory from subject positions and with certain quantifiers (as this seems orthogonal to the analysis I entertain here: the latter facts can be handled on independent grounds insofar as my proposal is correct), we get a straightforward
account for the apparent obligatory LBE in the contexts with possessives. In the absence of BT-related factors, the only condition on pied-piping is the compliance with the edge requirement: the relevant element (i.e., the quantifier) must occupy the edge in order to pied-pipe the constituent. Such a scenario is ruled out for a number of constructions discussed in this chapter, because of the cluster of independent factors.

4.7 Conclusion

The chapter dealt broadly with issues relating QR, binding, and the contextual approach to phases. It offered more support in defense of the position that phases are determined in the course of the derivation, whereby the highest projection in the extended domain of the lexical head functions as a phase. Additionally, it was shown that the pattern of quantifier/focus/superlative interaction with the anaphoric possessive can be consistently accounted for on the particular approach to PIC, whereby the highest edge in the phase is the only element that is eligible for extractions/binding. The primary concern, however, was to provide more independent evidence for QR in Russian. In addition to explaining the data explored in the previous chapters, this operation is also needed to capture the facts under scrutiny in this chapter: viz., interactions of the quantifiers and the anaphoric possessive. I argued that QR ensures that the possessive anaphor ends up on the highest edge, hence in a configuration that renders it accessible to binding. QR itself is shown to be of a particular flavor, consistent with Chomsky’s (1993, 1995) analysis: what raises is the quantifier itself in the LBE fashion without pied-piping of the rest of the elements in the NP. Certain quantifiers are subject to obligatory QR. Descriptively, these Qs always precede the possessive. On my analysis, they have to be merged last in order to be extractable for QR. On the other hand, the quantifiers that can be interpreted in-situ (e.g., indefinites) may follow the possessive anaphor and hence be merged earlier than svoj. In this case, they receive a particular interpretation, consistent with the indefinites as choice functions analysis. If the indefinites precede the possessives, however, they are construed as quantificational elements. A number of related issues were discussed: it was demonstrated
that since elements like the adverbial *mnogo ‘manyADV’* and *ni*-words pattern with generalized quantifiers in their distribution with *svoj*, behavior in HWh question, and polar interrogatives, they are best treated as quantificational items that undergo obligatory QR. Some issues pertaining to the interpretation of *svoj* in genitive-of-quantification assigning environments were discussed.

In the rest of the chapter, I pondered additional data that appear to conflict with the earlier predictions made with regard to the position of *svoj*. Much like in the cases of obligatorily QR-ing Qs, *svoj* must follow contrastively focused adjective phrases. It is also freely ordered with respect to the superlatives. Following a number of works on Slavic languages, I assumed two focus positions and argued for a movement operation triggered by [focus] feature. Focus movement itself is conceived as an operation that moves an element from its phasal domain to a higher phasal domain. The displacement to the lower focus position has the effect of string vacuous movement. This focus movement guarantees the edge status of the anaphoric possessive (since the contrastively focused element ought to be ex-situ). The same mechanism was argued to be responsible for derivations involving overt focus markers and superlatives. I offered a PF solution to several residual problems pertaining to the unusual stress assignment.

Finally, two competing approaches to binding were considered: binding-as-agree and binding-as movement. I argued for the former, pointing out some problems that afflict the latter treatments, but can be handled by my analysis. Some consequences for Condition A were also considered.

The overarching strategy for this chapter was to demonstrate that the anaphoric possessive needs to occupy the highest edge to be accessible to its antecedent. If so, a number of contingent phenomena follow, the main ones being QR and focus movement.
Conclusion

The arguments for Quantifier Raising (QR) in a rigid scope language constitute the main theoretical contribution of this dissertation. Two independent sets of facts were presented in favor of this claim. The first batch implicates the behavior of quantified expressions in hybrid and reverse hybrid questions. The second hinges on the interactions of the anaphoric possessive with quantifiers inside the NP.

An aggregate of contingent phenomena were considered. The analysis developed in Chapter 2 bears on the particular implementation of ATB-movement, which was argued to be constrained by a particular set of restrictions that are imposed on the structure by the linearization procedure. Certain issues related to the conception of argument structure surfaced in conjunction with my investigation of HWh questions. In particular, I showed that the simple distinction “argument-adjunct” may be too crude: the notion “obligatory element” depends not only on theta-theoretic considerations, but sometimes it is contingent on the event structure of predicates. And so, a constituent optional in some environments may well be required in others.

A substantial part of Chapter 2 was dedicated to the syntax-PF interactions. The formation of Y/N-questions in Russian served as an empirical foundation for the exploration of this issue. I contended that li-interrogatives in Russian entail syntactic movement to Spec,CP or adjunction to C\(^0\). The mechanism of PF-reordering, which places the interrogative marker after the first prosodic word to the left of the constituent, was shown to be responsible for the surface representations. This approach proved to be successful in capturing additional patterns involving overt focus markers explored in Chapter 4.

Chapter 3 dealt with reverse hybrids. The properties of D-linked and non-D-linked wh-phrases, the issues of topicalization, the distribution of wh-indefinites, and QR were explored there. I demonstrated that Russian patterns with a variety of typologically different languages in exhibiting certain blocking effects in quantified environments. The D-linked wh-phrases were argued to behave on a par with topicalized constituents with respect to LBE, crossover and island effects. Some issues pertaining to the interaction of focus and ellipsis were discussed.
Perhaps, the most theoretically informative part of the dissertation is in Chapter 4. There I presented additional arguments in support of Bošković’s approach to phases, contending that the highest projection within an extended domain of a given lexical head constitutes a phrase. The distribution of svoj with quantifiers, focalized adjectives and superlatives is subject to the same analysis, which hinges on the particular conception of PIC, whereby the highest adjunct/Spec is the only “edge” suitable for various subsequent operations.

The proposed mechanism of QR is somewhat unconventional: what raises under my analysis is not the quantified DP, but rather the quantificational part alone. This is in line with Chomsky’s (1993, 1995) proposals as well as some approaches to the semantics of quantifier raising.

Based on the behavior of the anaphoric possessive with focalized adjectives and superlatives I argued for the syntactic focus movement, which can be string vacuous. The basic insight is that in Russian two focus positions belong in two separate phasal domains: the verbal domain and the clausal domain. I have reported on an aggregate of new facts pertaining to focalizing elements like only and even, arguing that in languages that have focus movement, focus association must be overt.

Finally, my analysis has some bearing on the conception of Condition A of Binding Theory. My data appear to be better accommodated by the analysis, which entails an agree-type operation rather than movement.
Bibliography


Antonyuk-Yudina, Svitlana. 2006. The Scope of Quantifier Phrases in Russian: A QR analysis”. In *Proceedings of the 8th SUNY/CUNY/NYU Miniconference in Linguistics. Linguistics in Big Apple (LIBA), online series*.


Despić, Miloje. in press. Phases, Reflexives and Definiteness. In *Syntax*.


Gajewski, Jon. 2014. Superlatives, NPIs and *most*. Ms, University of Connecticut, Storrs.


Kazenin, Konstantin. 2002. On Coordination of Wh-phrases in Russian. Ms., Tubingen University and Moscow State University.


Merchant, Jason. 2008. Spurious Coordination in Vlach Multiple Wh-fronting. Paper presented at *Mid-America Linguistics Conference*, University of Kansas, Lawrence. Available at 


   Amherst: University of Massachusetts, Graduate Linguistic Student Association.


   University of Maryland, College Park.


