The Indicative/Subjunctive Distinction and Scrambling in Russian

Andrei Antonenko
Stony Brook University
andant@gmail.com

1. Introduction

In this paper I discuss the distinction between indicative and subjunctive clauses in Russian. I show that the property of obviation, discussed in detail in Avrutin and Babyonyshev, 1997 allows for an analysis of the Russian indicative/subjunctive distinction within the framework of Pesetsky and Torrego, 2004, which I adopt in this paper.

Furthermore, I discuss the phenomenon of scrambling in Russian, and the conditions on scrambling with respect to its patterning in different syntactic environments. I argue that Russian long-distance scrambling is restricted in its distribution to a very particular syntactic construction, and is not freely available in many contexts, as opposed to what is claimed in Müller and Sternefeld, 1993.

The organization of the paper is as follows: In section 2 I examine the difference between indicative and subjunctive clauses in Russian, and demonstrate, following Avrutin and Babyonyshev, 1997, that it is observed only in the latter environments, but not in the former. In section 3 I introduce preliminary data illustrating Russian scrambling, and show the syntactic environments in which scrambling can occur. Section 4 outlines the framework which is used in subsequent analyses. In section 5 I discuss an analysis of the indicative and subjunctive distinction in Russian adopting the framework developed in Pesetsky and Torrego, 2001; Pesetsky and Torrego, 2004. In section 6, I show that the difference between subjunctive and indicative clauses and complementizers readily explains the restrictions on and asymmetries of Russian scrambling. Section 7 briefly discusses the obviation phenomenon beyond Slavic, and outlines the challenges the proposed analysis might face. Section 8 concludes the paper.

2. The Indicative-Subjunctive Distinction and the Obviation Phenomenon

In this section I will illustrate the differences between subjunctive and indicative clauses in Russian. The difference in these clause types relates to the well known phenomenon of obviation discussed in detail in Avrutin and Babyonyshev, 1997. This phenomenon is illustrated in the examples in (1) (Ibid.):

(1) Obviation:

(a) Volodja$_i$ xočet čtoby on$_{*i/j}$ potseloval Nadju
V. wants that-subj he kissed N.
'Volodja wants to kiss Nadja.'

(b) Volodja$_i$ skazal čto on$_{i/j}$ potseloval Nadju
V. said that he kissed N.

'Volodja$_i$ said that he$_{i/j}$ kissed Nadja.'

In example (1-a), where the embedded clause is subjunctive, the pronominal subject of the embedded clause cannot be coindexed with the matrix subject. However, when the embedded clause is indicative as in example (1-b), coreference between the matrix and embedded subjects is possible. As can be seen from the examples (2), the indicative-subjunctive distinction only holds of coreference between the matrix subject and the embedded subject. In contrast, coindexing of the matrix subject with the embedded object is possible in both types of clauses:

(2) (a) Volodja$_i$ xočet čtoby Nadja ego$_{i/j}$ potselovala
V. wants that-subj N. him kissed
'Volodja$_i$ wants Nadja to kiss him$_{i/j}$'

(b) Volodja$_i$ skazal čto Nadja ego$_{i/j}$ potselovala
V. said that N. him kissed
'Volodja$_i$ said that Nadja kissed him$_{i/j}$.'

I assume that binding relations are evaluated by phases (cf. Chomsky, 2001). Specifically, elements that are "buried" inside a completed phase (not on the phase edge) are inaccessible to binding from elements outside the phase. Accessible elements (those that can be bound) are those that are either on the phase edge (e.g. specifier position), or are the head of the phase. It is proposed that elements in only these positions are accessible from outside the phase.

When the binder is the subject of the matrix clause, it cannot bind inside the lower clause. This results from the fact that at the point at which the binder is introduced in the derivation, the lower CP-phase is already completed. Establishing binding relations between the matrix subject and the element within the embedded CP would require looking inside the completed phase, and thus is ruled out.

This assumption can easily be adopted for the cases of indicative embedded clause like those in (1-b) and (2-b). In (1-b) the pronominal subject *on* 'he' is within the lower CP-phase, and does not occupy its edge. Therefore it cannot be bound by the matrix subject. Similarly, in (2-b) the pronominal object *ego* 'him' is within the lower CP-phase, and also cannot be bound by the matrix subject. Therefore, there is no violation of Principle B in either of these examples.

However, the case of subjunctive embedded clauses (1-a) shows that the explanation is not so straightforward. In (1-a), the pronominal element *on* 'he' is within the embedded CP, and not on it's edge, and therefore straightforward application of Principle B would not rule out this example as ungrammatical. However, one can see that coindexation between the matrix and embedded subjects is impossible. Further, one has to explain the contrast between (1-a) and (2-a): why the former example is ungrammatical under coreference reading, and in the latter there are no violations even in case of coreference.

By considering the example (1-a), one might suggest that the subjunctive CP in Russian does not behave as a phase (or the CP projection is absent), since the matrix subject does remain accessible to binding from outside the phase. This assumption would readily account for the case of subject obviation (1-a). However, the absence of object obviation effects in (2-a) would present us with a problem. In (2-a) if one assumes that the subjunctive CP is not a phase, then binding relations between the matrix subject and the embedded object *ego* 'him' are possible, which (incorrectly) predicts

ungrammaticality arising from a Principle B violation.

However, that is not the only problem with the assumption that the subjunctive CP is not a phase. Further examples provided below (taken from Avrutin and Babyonyshev, 1997) cannot be accounted for under the assumptions above.

(3) Volodja ugovoril Nadju$_i$ čtoby ona$_i$ poexala v Evropu
V. convinced N. that-subj she go to Europe
'Volodja convinced Nadja to go to Europe.'

Consider the example in (3). The embedded clause in this example is subjunctive, and therefore under the assumptions above it is not a phase. In principle, that would allow binding relations to be established between the object of the matrix clause *Nadju* and the embedded subject *ona* 'she', since the matrix object c-commands the embedded subject. This should trigger a Principle B violation in the example in (3), which is clearly not the case, since this sentence is judged as grammatical.

Another set of examples complicating the phase approach to the obviation phenomenon is provided in (4):

(4) (a) Volodja$_i$ xočet čtoby ego$_i$ žena poexala v Evropu
V. wants that-subj his wife go to Europe
'Volodja$_i$ wants his$_i$ wife to go to Europe.'

(b) *Volodja$_i$ xočet čtoby svoja$_i$ žena poexala v Evropu
V. wants that-subj self's wife go to Europe
'Volodja$_i$ wants self$_i$'s wife to go to Europe.'

If we again assume that the CP is not a phase, the example in (4-a) should incur a violation of Principle B, because the matrix subject *Volodja* binds the possessive pronoun *ego* 'his' within the subject of the embedded clause. On the contrary, the example in (4-b) should be grammatical, since the anaphoric possessive *svoja* 'self's' is bound by the matrix subject, and there should be no violation of Principle A. However, these predictions are clearly wrong: (4-a) is grammatical, while the sentence in (4-b) is ungrammatical.

A final problem for this approach arises with respect to dative subjects. Consider the example (5)

(5) Volodja$_i$ xočet čtoby emu$_i$ bylo xorošo
V. wants that-subj he-dat was good
'Volodja wants to feel good'

Bailyn, 2004 has proposed that the dative pronominal subject *emu* 'he-dat' is located in the Spec,TP position. If this is correct, and a subjunctive clause is not a phase, *emu* should be bound by the matrix subject, which should give rise to a Principle B violation and ungrammaticality is predicted. However, the example is grammatical.

In section 6 I go on to propose the analysis of the obviation phenomenon based on the distinction between subjunctive and indicative clauses and the properties of their complementizers.

3. Russian Scrambling: Generalizations

Long distance scrambling as exemplified in (6) has long been an object of study in the context of East-Asian languages, including Japanese and Korean.

(6) Long Distance scrambling in Japanese:
- (a) Hanako-ga [Taroo-ga sono hon-o katta to] omotteiru
  H.-nom T.-nom that book-acc bought COMP think
  'Hanako think that Taroo bought that book'
- (b) Sono hon-o_i Hanako-ga [Taroo-ga t_i katta to] omotteiru
  that book-acc H.-nom T.-nom bought COMP think
  'That $book_i$, Hanako think that Taroo bought t_i'

In long distance scrambling a constituent of the embedded clause is moved into the higher clause. In the example above, the base order is illustrated in (6-a), and the scrambled order results from dislocating the constituent *sono hon-o* 'that book' to the matrix clause as shown in (6-b). Saito, 1992, 2003, 2005 outline the major properties of the Japanese long-distance scrambling, considering the property of radical reconstruction to be the defining characteristics of Japanese scrambling: at LF, the dislocated constituent is interpreted in its original position within the embedded CP. The observation that radical reconstruction is a key property of Japanese scrambling is based on a number of tests, including binding tests, observation of quantifier scope interaction, weak crossover effects, and others.

However, the phenomenon of long-distance scrambling is not peculiar to the East-Asian languages. Russian examples involving the dislocation of a constituent of the embedded clause to the matrix clause are cited in Müller and Sternefeld, 1993 based on the work of Zemskaja, 1973. As I will argue, the examples from the works mentioned above do not reveal the entire picture. In this section I will outline the basic facts of Russian scrambling, and draw several generalizations, which have so far gone unnoticed and do not have an explanation in the current literature.

The classic examples of Russian long-distance scrambling is given below in (7-a,b) following Müller and Sternefeld, 1993 (also cited in Boškovic and Takahashi, 1998 and Bailyn, 2004). The unscrambled versions of these sentences are presented in (7-c,d).

(7) Subject scrambling, interrogative matrix CP, indicative embedded CP:
- (a) Ty doktor$_i$ videla kogda t_i pod'ezžal?
  you doctor saw when came
  'Did you see when the doktor was arriving?'
- (b) Ty doktor$_i$ videla čto t_i pod'ezžal?
  you doctor saw that came
  'Did you see that the doctor was arriving?'
- (c) Ty videla kogda doktor pod'ezžal?
  you saw when doctor came
  'Did you see when the doktor was arriving?'
- (d) Ty videla čto doktor pod'ezžal?
  you saw that doctor came
  'Did you see that the doctor was arriving?'

This example illustrates the scrambling of the subject of the embedded non-subjunctive clause to the matrix clause. As we see, this is a matrix yes-no question, and scrambling is allowed in this

environment. Similarly, long-distance object scrambling from non-subjunctive questions is also allowed, as exemplified in (8). As before, the unscrambled sentences are presented in (8-c,d):

(8) Object scrambling, interrogative matrix CP, indicative embedded CP:

(a) Ty soseda$_i$ videla kak Petr bil t$_i$?
you neighbor saw how P. beat
'Did you see how Peter beat the neighbor?'

(b) Ty noski$_i$ videla čto Petr kupil t$_i$?
you socks saw that P. bought
'Did you see that Peter bought socks?'

(c) Ty videla kak Petr bil soseda?
you saw how P. beat neighbor
'Did you see how Peter beat the neighbor?'

(c) Ty videla čto Petr kupil noski?
you saw that P. bought socks
`Did you see that Peter bought socks?'

The subjunctive counterparts of the examples above, which show scrambling from the embedded clause, are also grammatical as shown in (9) and (10)

(9) Subjunctive matrix CP, subjunctive embedded CP:

Ty doktor$_i$ xočeš čtoby t$_i$ cašče priezžal?
you doctor want that-subj more often arrive
'Do you want for doctor to arrive more often?'

(10) Object scrambling, interrogative matrix CP, subjunctive embedded CP:

Ty soseda$_i$ xotela čtoby Petr pobil t$_i$?
you neighbor want that-subj P. beat
'Did you want Peter to beat the neighbor?'

The examples above are yes-no questions, where the matrix verb *xotet*' 'to want' selects a subjunctive clause, introduced by the subjunctive complementizer *čtoby* (which is distinct from the ordinary non-subjunctive complementizer *čto*).

All the data presented above is compatible with the data from Müller and Sternefeld, 1993. However, this is just a part of the entire picture. As one might notice, all the grammatical examples of long-distance scrambling in Russian so far were given in interrogatives. The situation with declaratives shows a surprising asymmetry with respect to subjunctive/non-subjunctive embedded clauses.

(11) Declarative matrix CP, subjunctive embedded CP:

(a) ?Ja doktor$_i$ xoču čtoby t$_i$ cašče priezžal.
I doctor want that-subj more often arrive
'I want doctor to arrive more often.'

(b) ?Ja soseda$_i$ xoču čtoby Petr pobil t$_i$.
I neighbor want that-subj P. beat

'I want Peter to beat the neighbor.'

(12) Declarative matrix CP, indicative embedded CP:

(a) *Ja doktor$_i$ videl čto t_i pod'ezžal.
I doctor saw that arrive
'I saw that doctor arrived.'

(b) ?Ja soseda$_i$ videl čto Petr pobil t_i.
I neighbor saw that P. beat
'I saw that Peter beat the neighbor.'

As one can see from (11) and (12b), declarative sentences in which one of the constituents of the embedded subjunctive clause undergoes long-distance scrambling are mildly deviant, as well as the declarative sentences with long-distance object scrambling from indicative embedded clause; however long-distance subject scrambling is prohibited from declarative clause with indicative embedded clauses, as shown in (12a).

The table in (13) summarizes the data discussed in the previous sections:

(13) Summary of the presented data:

	Subjunctive	Indicative
Scrambling (matrix interrogatives)	Ok	Ok
Subject Scrambling (matrix declaratives)	Ok	*
Object Scrambling (matrix declaratives)	Ok	Ok
Obviation	Yes	No

To my knowledge, there is no analysis which can account for the data presented above in this section. In the Section 5 I will present the relevant analysis partially explaining the distribution of Russian LD-scrambling, which is based on the distinction between subjunctive and indicative clauses.

4. Theoretical Framework with Applications to Russian

4.1. Pesetsky-Torrego, 2004

In my analysis of indicative/subjunctive distinction in Russian, I follow the framework outlined in Pesetsky and Torrego, 2004, which I will briefly summarize below. It is based on the possibility of feature sharing, and allows a feature to have several instances in various locations within the syntactic tree. The crucial operation for Pesetsky and Torrego is the following version of Agree stated in (14).

(14) Agree: Feature Sharing Version (from Pesetsky and Torrego, 2004)
(a) An unvalued feature F (a probe) on a head H at syntactic location α (F_α) scans its c-

command domain for another instance of F (a goal) at location β (F_β) with which to agree.

(b) Replace F_α with F_β, so that the same feature is present in both locations.

A crucial assumption for Pesetsky and Torrego's, 2004 analysis is that of feature sharing, which plays an important role in Agree operations: there may be multiple instances of a single feature after the application of Agree. After probing by a head with an unvalued feature, the features of a goal and a probe enter in an Agree relation, and both become instances of the same feature.

Another crucial assumption which is needed to maintain feature sharing is the elimination of Chomsky's Valuation/Interpretability Biconditional that allows only uninterpretable and unvalued <*u*F -val> and interpretable and valued <*i*F +val> features. In the new system by Pesetsky and Torrego, 2004, two more types of features are allowed: uninterpretable and valued <*u*F +val> and interpretable and unvalued <*i*F -val>. Furthermore, Pesetsky and Torrego follow Chomsky, 2001 in proposing that unvalued features act as probes, but differ in allowing interpretable and unvalued <*i*F -val> features to act as probes (which were absent for Chomsky).

One more crucial point for Pesetsky and Torrego is the adoption of the Thesis of Radical Interpretability from Brody, 1997:

(15) Thesis of Radical Interpretability (from Brody, 1997)

Each feature must receive a semantic interpretation in some syntactic location.

The Thesis of Radical Interpretability means that every feature must have at least one interpretable instance, and an uninterpretable feature must delete at the interface with semantics once it is valued: that means that uninterpretable feature must get valued in order to be deleted.

4.2. Move-F

The operation of covert feature movement Move-F was considered in Chomsky, 1995. A set of formal features (FF) of a head can adjoin to another head, forming a complex, consisting of features of both heads. For instance, features of an object of a transitive verb can adjoin to the complex *v*+V, which is formed by raising of the main verb V and adjoining it to the *v*. The result of this adjunction is a complex *v*+V+FF(object). That, for instance, would allow object agreement to be checked and accusative case to be assigned. In a similar fashion, the formal features of the subject under certain circumstances can adjoin to T, resulting in the complex T+FF(subject). Adopting the framework of Pesetsky and Torrego, 2004, I propose that Move-F happens after probing by an unvalued feature, and if this feature is "strong" (or in other words, is endowed with the EPP-subfeature), the Move-F of the goal features takes place, and as a result the set of formal features of the goal adjoins to the probe.

Crucially, a set of formal features of a nominal element is indistinguishable from a nominal element itself from the view of computational system. Among other things, that means that the set of formal features adjoined to a higher head must satisfy principles of Binding theory.

4.3. T-to-C movement in Russian and Status of Russian Complementizers

In this section I will briefly consider the status of T-to-C movement in Russian, and its consequences for status of Russian complementizers *čto* and *čtoby*, which are complementizers in indicative and subjunctive embedded clauses respectively.

Pesetsky and Torrego, 2001 argue that in English T-feature on C can be satisfied by T-to-C movement, and in such cases the overt complementizer *that* appears as a C head (which in itself is a manifestation of T-to-C movement). Below I investigate the facts from Russian relevant to the setting of T-to-C parameter in both indicative and subjunctive clauses.

The arguments in Pesetsky and Torrego, 2001 are, among other facts, based on *that*-omission asymmetry in English which is presented in the example (16) below.

(16) (a) [That Sue will buy the book] was expected by everyone.
(b) *[Sue will buy the book] was expected by everyone.

This paradigm shows that sentential subjects lacking an overt complementizer are prohibited in English. The explanation proposed by Pesetsky and Torrego, 2001, stems from the fact that if *that* is absent in the clause, the T-to-C movement did not take place, and T-feature on C was satisfied by subject movement. Therefore, there are no instances of interpretable T in the CP system of the embedded clause, and it cannot be attracted by the matrix T, as the matrix T would not be able to satisfy its properties. This would render the sentence (16-b) ungrammatical. If T-to-C movement took place, as in the case where the overt complementizer *that* is present, T on the embedded CP is the actual tense of the sentence, is interpretable and does not delete. That allows the attraction of the entire clause by the matrix T, and therefore sentential subjects with the overt complementizers are allowed.

Now turning to the situation in Russian, we can observe that the facts differ from English.

(17) (a) *(*Čto) Paris posadili v t'ur'mu nikogo ne udivilo.
that P. put to jail nobody not surprise
'That Paris was put to jail didn't surprise anybody'
(b) To, čto Paris posadili v t'ur'mu nikogo ne udivilo
that-pro that P. put to jail nobody not surprise
'The fact that Paris was put to jail didn't surprise anybody'

The preposed clausal subjects are prohibited in Russian, regardless of whether the complementizer is present or absent. The only way to convey the meaning similar to the meaning of English example (17-a) is to use an overt pronominal element *to*, which selects a clausal complement. Applying the same line of reasoning as before, we can confirm that the complementizer *čto* does not have properties similar to English complementizer *that*, which allows English clauses to be subjects, and to check features of T. Russian clauses with the overt complementizer can not raise to the Spec,TP position and check features of T. That might serve as evidence that C in Russian lacks T-feature and the Russian indicative complementizer *čto* is not an instantiation of T-features moved to C.

Taking the facts above as evidence for the lack of T-to-C movement in Russian, one question remains: what is a structural position of the Russian complementizer? Adopting the theory of Landau, 2007, which states that only categories with phonologically overt heads can be selected as subjects, we are

bound to conclude that the actual location of the indicative complementizer *čto* in Russian is a Spec,CP. Following Landau's reasoning, if *čto* were located in the head position of CP, Russian would allow clausal subjects, as does English for clauses with overt *that*.

Note that the analyses by Pesetsky and Torrego, 2001, and Landau, 2007 actually complement each other. Both of them strongly predict that the head position in the CP is empty in Russian indicative clauses.

Another support for the specifier status of Russian indicative complementizer comes from the fact that Russian indicative clauses can not be topicalized, as shown by ungrammaticality of the example (18):

(18) *Čto Maša kupila Mercedes, ja slyshal.
that M. bought Mercedes I heard
'That Masha bought Mercedes, I heard'

In the similar fashion, under Landau, 2007 approach, only phrases with overt heads are allowed to be topicalized. Since the topicalization of the clause with the overt complementizer is impossible, the head of CP position is empty.

Additional support for the absence of T-to-C movement in Russian comes from the pilot study undertaken by the author which looks at the acquisition of the array of facts related to T-to-C parameter in English by Russian native speakers (Antonenko, 2006). Russian speakers tend to have difficulties acquiring *that*- and *for*-trace effects, *that*- and *for*-omission asymmetries. I also investigated the properties of the interlanguage grammar of the Russian learners of L2 English. The study showed that the English specific nature of *that* and *for* seems to be absent from the interlanguage grammar on Russian learners of English. I also observed the clustering of properties related to *that*-effects: speakers who disallow complementizers in case of *wh*-extraction from the embedded clauses, also do not allow clausal subjects, even if *that* is present. If Full Transfer/Full Access hypothesis (Schwartz and Sprouse, 1996) is correct, we can consider these findings as an indirect evidence for absence of T-to-C movement in Russian indicative clauses.

Now I will draw my attention to the nature of a subjunctive complementizer *čtoby*. This element can be treated as morphologically complex, consisting of a complementizer *čto* and a particle *by*. The particle *by* in Russian can appear separately from the complementizer, as in the example (19):

(19) (a) Pošel by ty v kino!
Go by you to cinema
'Why don't you go to the movies?'
(b) S kem by vypit' vodki?
With whom by drink vodka
'With whom can I drink vodka?'
(c) Esli by u menja byli den'gi, ja by uexal v Islandiju
If by at me were money I by go to Iceland
'If I had had money, I would go to Iceland'

These example show that *by* occurs mostly at second position of the clause, and can follow a wide variety of elements, such as imperative (19-a), *wh*-element (19-b), or can be used in conditionals (19-c). Assuming that *wh*-elements are located in Spec,CP, it seems plausible that *by* occupies the head

position within CP-domain. Further, clauses with *by* do not have a fixed tense interpretation, and are often *irrealis*. Thus it would be tenable to postulate the uninterpretable unvalued T-feature <*u*T –val> on the particle *by*. In the next section we will see how this assumption allows us to account for the the facts about Russian subjunctives.

5. Analysis of Indicative and Subjunctive Clauses

In this section of the paper I provide an analysis of the structure of subjunctive clauses in Russian within the framework of Pesetsky and Torrego, 2004. But before getting to the analysis itself, a few remarks about Russian subjunctive clauses are in order.

Russian subjunctive clauses are introduced by the complementizer *čtoby*. The verb in the subjunctive clause is morphologically in the past tense, and no other verbal forms are allowed, as shown in the example (20):

(20) (a) Ivan xočet čtoby Maša pročitala/čitala "Vojnu i Mir"
I. wants that-subj M. read-pst.perf/-pst.imperf "War and Peace"
'Ivan wants for Masha to read "War and Peace"'
(b) *Ivan xočet čtoby Maša čitaet/pročitaet/budet čitat' "Vojnu i Mir"
I. wants that-subj M. read-pres/-fut.perf/-fut.imperf "War and Peace"

This restriction is not present in indicative clauses, as illustrated by the example (21):

(21) (a) Ivan skazal čto Maša pročitala/čitala "Vojnu i Mir"
I. said that M. read-pst.perf/-pst.imperf "War and Peace"
'Ivan said that Masha have read/was reading "War and Peace"'
(b) Ivan skazal čto Maša čitaet/pročitaet/budet čitat' "Vojnu i Mir"
I. said that M. read-pres/-fut.perf/-fut.imperf "War and Peace"
'Ivan said that Masha is reading/will have been read/will be reading "War and Peace"'

A few more words need to be said about the interpretation of subjunctive sentences like the ones mentioned above in (20-a). Despite the fact that the verb in the embedded subjunctive clause is morphologically in the past form, the event denoted by embedded clause is not situated in the past, neither with respect to the event in the matrix clause, nor with respect to the speech act. On the contrary, the event described in the embedded clause (*a reading of "War and Peace"* in (20-a)) is *irrealis* and might happen in the future with respect to the time of the event described in the matrix clause (*the volition act* in (20-a)). Therefore, based on this observation, I will propose that there must be "communication" between the matrix and embedded clauses in order to get the corresponding LF. The two clauses must communicate in order for the lower subjunctive clause to receive its temporal anchoring. The precise nature of this "communication" will be clear from my analysis.

In what follows I apply the theoretical framework outlined in Section 4 to subjunctive and indicative clauses in Russian. I assume that even though the verb in the subjunctive clauses is morphologically past, it bears different temporal features (I will elaborate on this issue later). For instance, in Romance languages (like Spanish, Italian, and French), the subjunctive is a separate form of the verb, distinct from the past form. I propose that the fact that the subjunctive form of the verb is identical to the past tense form in Russian is just an idiosyncrasy.

Further, from the data presented above in (20) and the semantic interpretation of the subjunctive sentences which I provided, I conclude that the subjunctive form of the verb bears an unvalued T feature, unlike verbs in other finite forms (for example, past).

(22) (a) Ivan xočet čtoby Mašha pročitala "Vojnu i Mir" [Subjunctive]
I. wants that-subj M. read-subj "War and Peace"
'Ivan wants for Masha to read "War and Peace"'

(b) Ivan skazal čto Mašha pročitala "Vojnu i Mir" [Indicative]
I. said that M. read-pst.perf "War and Peace"
'Ivan said that Masha have read/was reading "War and Peace"'

That means that in the sentences in (22) the verb *pročitala* 'read' comes from the lexicon embedded with different features: in sentence (22-a) it bears a <*u*T -val> feature, whereas in the sentence (22-b) it bears a valued instance of the T feature <*u*T +val>.

My proposal about the subjunctive vs. indicative clauses are summarized below in what I will call the Subjunctive parameter:

(23) Subjunctive parameter
(a) (In Russian,) the subjunctive form of the verb bears a <*u*T -val> feature;
(b) (In Russian,) finite forms of the verb bear <*u*T +val> feature.

I claim that the adoption of the Subjunctive Parameter in (23) within the Pesetsky and Torrego, 2001, 2004 framework allows us to account for the obviation phenomenon illustrated in section 2.

In what follows I will show how the derivation of indicative clauses works, and then proceed to the subjunctive.

5.1. Indicative clauses

Recall that by Subjunctive parameter, the indicative verbs have <*u*T +val> T-feature. The derivation proceeds in a standard bottom-up way. The verbal projection vP is built in a standard manner with V adjoining to v. If the embedded clause of a sentence is indicative (as in (22-b)), after T is merged into the tree structure, its interpretable but unvalued feature <*i*T -val> probes to find its goal, finding it in the <*u*T -val> feature on the subject DP (assuming that Nominative case is an instantiation of the T-feature on D, Pesetsky and Torrego 2001). After the Agree operation takes place, the features on T and the subject D are linked, and become instances of the same feature. However, since the subject DP's T-feature is unvalued, the shared T feature also becomes unvalued. The EPP subfeature of T-feature on T is active, and the featural complex of the embedded subject attaches to T forming a complex T+FF (emb. subj.). However, because only valued features can be interpreted, T must probe further down in the tree in order to find a value. The second probing finds a goal <*u*T +val> on the finite verb within the vP projection. After the Agree operation, all three T-features - those on T, the subject DP and V become instances of the same feature, and the valuation of the <*i*T> on T takes place, resulting in the valuation of <*u*T> on subject DP also. After this step, all T-features in the embedded clause are valued. Subject EPP, being a phonological condition, will be satisfied by further raising of the embedded subject to Spec,TP. Now, there are no unvalued features left in the embedded clause, and its derivation can stop. Notice that there is no movement to the CP domain, as nothing in the CP domain will be able

to probe and attract a goal. After merge of the complementizer *čto* into the Spec,CP position, the lower CP phase is completed with no elements but the complementizer on its edge. After that the material is sent off to interpretation.

5.2 Subjunctive clauses

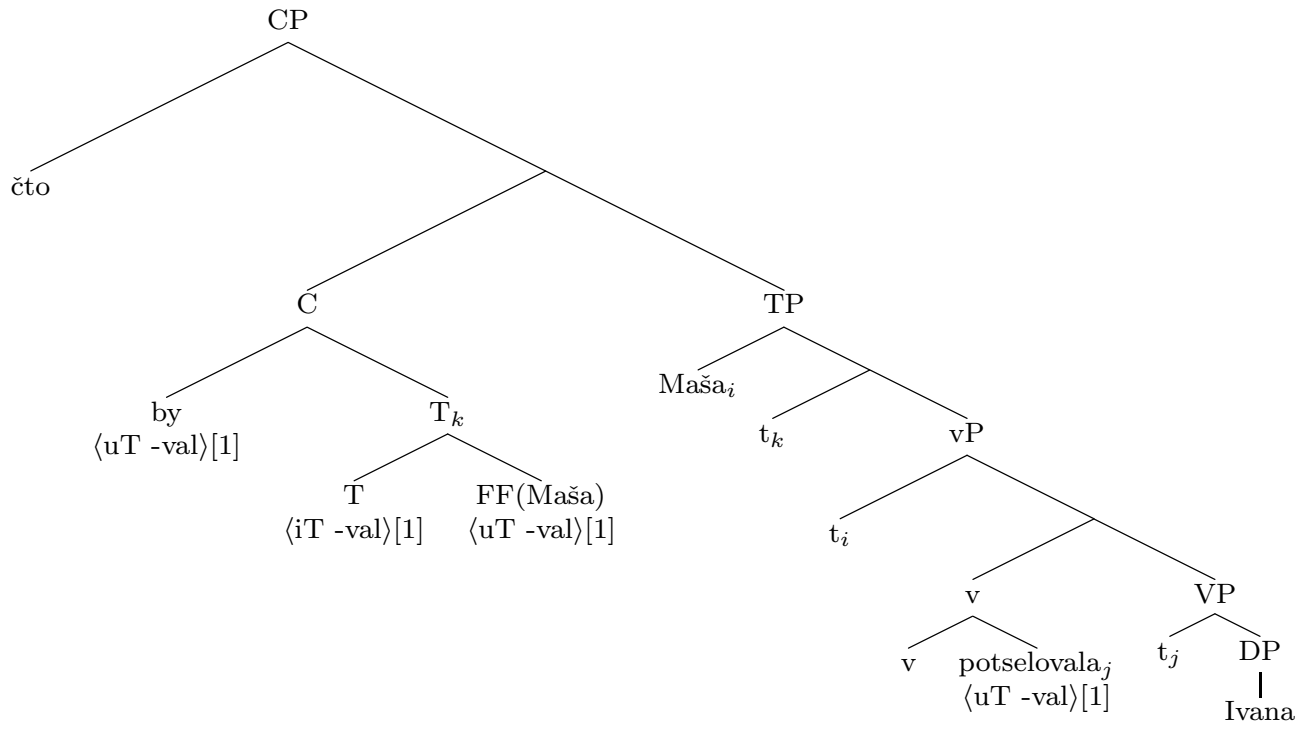
In the case of Russian subjunctive clauses applying the analysis proposed above gives surprisingly different results. Following the proposed Subjunctive Parameter (23), I claim that the subjunctive verb comes from the lexicon with the unvalued T feature <*u*T -val>. This contrasts with the verbs in indicative clauses, which enter the numeration with valued T features. Also, I would assume the presence of *by* in the numeration for selectional purposes (I would claim that volitional predicates, such as *xotet'* 'to want', select CPs headed by *by*. Therefore, if *by* is not present in the numeration, the derivation will crash.). As I assumed above, *by* also comes from the lexicon endowed with uninterpretable unvalued <*u*T –val> feature. Now let's consider the derivation of the subjunctive clauses.

The embedded vP is built in a standard fashion. After that the T is merged into structure. In a similar way to the case of indicative clauses, the embedded T probes and Agrees first with the subject DP, and then with the verb (to be more precise, v+V complex), resulting in feature sharing among all these elements, making the T-features on T, the subject DP and v+V all being instances of the same feature. In a similar way to the indicative case, because of the EPP subfeature of T-feature on T, the formal featural bundle of the embedded subject adjoins to T, forming a complex T+FF(emb. subj.). However, unlike in the case of indicative clauses, no valuation can occur at this point, since the T-feature on the embedded subjunctive verb is not valued. Therefore the derivation proceeds by merging of *by* in the C-head position. I would claim, following lines of Rizzi and Shlonsky 2005, that this element can satisfy the subject EPP phonological requirements of the TP.

T-feature of *by* is unvalued, and therefore must probe down to find its goal. The first goal it finds is a T +FF(emb. subj.) complex with unvalued T-feature. Feature sharing Agree operation takes place, and the instances of the T-feature on *by*, on T, on the embedded subject, and on the embedded verbal complex become instances of the same feature. Further, the featural bundle created in T adjoins to *by*. After that the complementizer *čto* is merged into the Spec,CP position and the resulting configuration by the completion of the embedded CP-phase is given in (24), where the index [1] shows which T-features are instances of the same feature, and DP_{low} is a the subject of the embedded clause.

Crucially, even though there are unvalued features by the end of the derivation of this phase, the derivation does not crash, since the unvalued T-feature was able to move to the edge of CP-phase to the C-head position (bolded in (24)), and therefore will remain accessible for further Agree relations with the probe from the higher domain.

(24) $[_{CP}$ čto **by<*u*T -val>[1]+T<iT -val>[1]+FF(emb. subj.)** $[_{TP}$ DP_{low} v+V<*u*T -val>[1] ...



Further, the elements of the matrix clause are merged in the structure: V/v with the <*u*T +val> (since the matrix verb is finite), and matrix subject DP with the instance of <*u*T -val>. Recall that V in the subjunctive constructions selects CPs headed by *by*. This selectional property would result in the featural complex, which is by that moment in derivation is present on *by,* to move and adjoin to the matrix V. By the time the vP of the matrix clause is completed, the featural bundle raised from the head of embedded CP and adjoined to the V, and further to v, still does not have a value for its T-feature. The configuration at this stage of the derivation is given in (32)[1]:

(25) [$_{vP}$ DP$_{high}$<uT -val> v+V<uT +val>+**C<*u*T -val>[1]+T<iT –val>[1]+FF(emb. subj.)** ... [$_{CP}$ čto **by**...

Notice, that here featural complex in the head of vP position has two different types of T-features: one marked with [1], indicating that it came from the embedded clause, and all other instances which by that moment did not enter the Feature sharing version of Agree relationship. At the next stage, the matrix T, endowed with <*i*T -val> feature, is merged into the structure. Since it is an interpretable feature, it probes down, finding the T-feature of the matrix subject and Agrees with it, resulting in a shared feature between it and the matrix subject DP. As before, the formal feature bundle of the matrix subject adjoins to T. Further, since the T-feature of the matrix T is still unvalued (as none of the elements with which it has agreed have provided it with a value), it probes down one more time and finds the matrix v+V+C+T+FF(emb. subj.) complex as a goal. The Agree operation at this stage makes all the T-features on the matrix and embedded Vs, and the T-features in the featural complex located in

[1] I will not go into details of how and why *by* gets pronounced in the lower clause, and why its phonological features do not raise along with the formal featural complex to the position in the matrix clause. I will stipulate that there is a morphological process which results in fusion of *čto* and *by* under adjacency, and therefore they form a phonological complex *čtoby*.

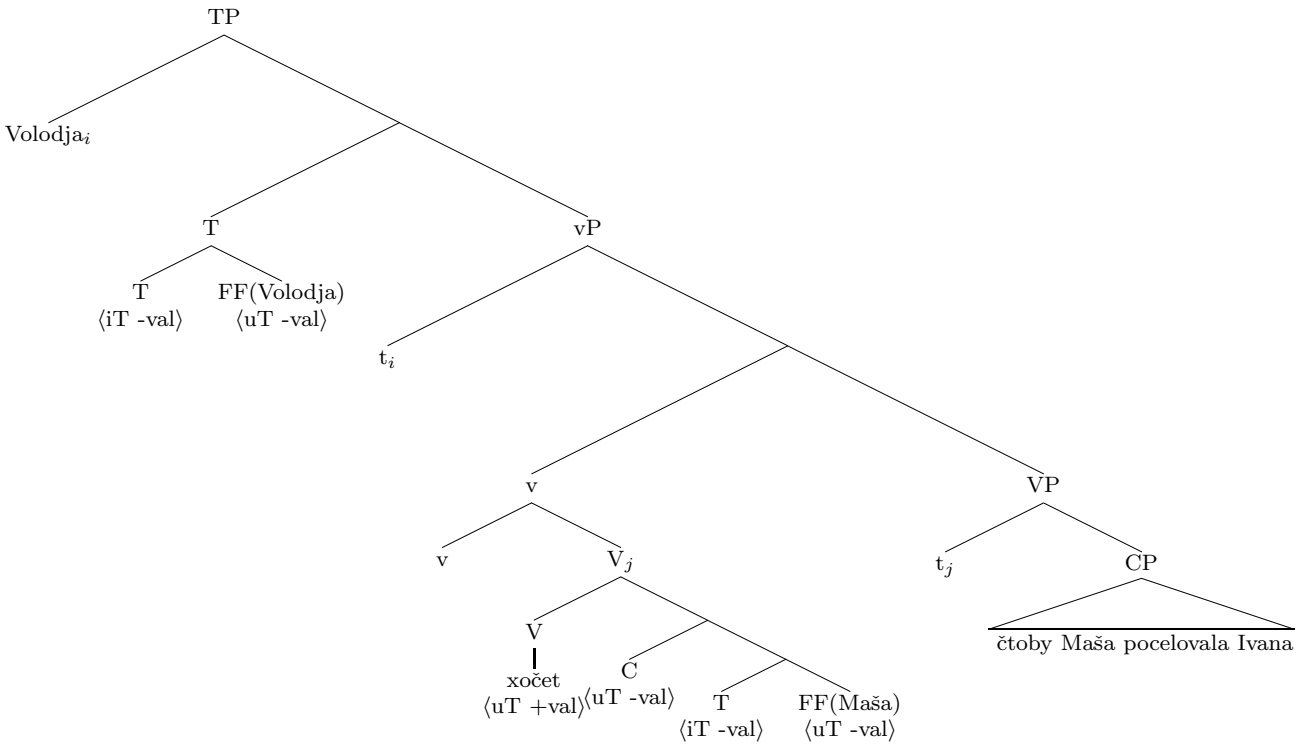
the matrix v-head position instances of the same feature, and values them, acquiring the value from the <*u*T +val> matrix verb.

After this crucial step, all T-features introduced so far in both matrix and embedded clause are the instances of the same T-feature, and all of them become valued. The resulting structure is shown in (26). As before, the bolded features are the features which raised from the embedded clause:

(26) [$_{TP}$ T<*i*T +val>[1]+FF(matr. subj.) [$_{vP}$ DP$_{high}$<uT +val>[1] v+V<uT +val>[1]+**C<*u*T +val>[1] +T<iT +val>[1]+FF(emb. subj.)** ... [$_{CP}$ što **by**...

(27) presents an example of the sentence with the subjunctive embedded clause, and gives an example of the tree before the final valuation has taken place:

(27) Volodja xočet čtoby Maša potselovala Ivana
V. wants that-subj M. kiss I.
'Volodja wants Mary to kiss Ivan'



5.3 Obviation explained

Now I turn to examine the consequences of the proposed analysis for the obviation phenomenon, and show how it can explain some of the subjunctive/indicative asymmetries introduced in section 2.

I propose that the obviation constitutes a violation of Principle B. As I mentioned earlier in my consideration of Move-F, the featural bundle of the nominal is indistinguishable from the nominal itself from the point of computational system, and therefore the formal features complex can enter into binding relations (cf. Saito, 2005, 2003 where he proposes that the <Arg> feature of nominals participates in binding relations.). In my view here, Principle B is violated if the bundle of formal

features FF of the pronominal element is locally bound by the its antecedent or the set of formal features of its antecedent.

This analysis of the indicative embedded clauses allows an account of obviation facts in indicative sentences from examples (1-b) and (2-b) in section 2, repeated here in (28):

(28) (a) Volodja$_i$ skazal čto on$_{i/j}$ potseloval Nadju
V. said that he kissed N.
'Volodja$_i$ said that he$_{i/j}$ kissed Nadja.'

(b) Volodja$_i$ skazal čto Nadja potselovala ego$_{i/j}$
V. said that N. kissed him
'Volodja$_i$ said that Nadja kissed him$_{i/j}$.'

In (28-a) above the embedded subject is in the T-domain, and therefore cannot be bound by the *Volodja*, since the matrix subject cannot see inside the lower CP-phase. A similar situation can be observed in (28-b): the embedded object is located low inside the embedded CP-phase and therefore cannot be bound by the matrix subject. Therefore, no violation of Principle B arises, and both examples are grammatical.

The examples with possessive pronouns and anaphoric possessors are similar to those in (4), but when the embedded clause is indicative, also these can be analyzed in the same manner:

(29) (a) Volodja$_i$ skazal čto ego$_i$ žena poexala v Evropu
V. said that his wife go to Europe
'Volodja$_i$ said that his$_i$ wife went to Europe'

(b) *Volodja$_i$ skazal čto svoja$_i$ žena poexala v Evropu
V. said that self's wife go to Europe
'Volodja$_i$ said that self$_i$'s wife went to Europe'

In the example (29-a) the possessive pronoun within the embedded subject is not locally bound by the matrix subject, since it is in the embedded T-domain and thus is not visible for computational system from the outside of the lower CP-phase. Therefore, no violation of Principle B is incurred. In (29-b), the matrix subject cannot bind within the lower CP-phase for the same reasons, and thus the anaphoric element *svoja* 'self's' is not bound, resulting in a Condition A violation.

Now I will consider the obviation phenomenon in the case subjunctive embedded clauses. The relevant examples are repeated in (30):

(30) (a) *Volodja$_i$ xočet čtoby on$_i$ potseloval Nadju
V. wants that-subj he kissed N.
'Volodja wants to kiss Nadja'

(b) Volodja ugovoril Nadju$_i$ čtoby ona$_i$ poexala v Evropu
V. convinced N. that-subj she go to Europe
'Volodja convinced Nadja to go to Europe'

(c) Volodja$_i$ xočet čtoby ego$_i$ žena poexala v Evropu
V. wants that-subj his wife go to Europe
'Volodja$_i$ wants his$_i$ wife to go to Europe'

(d) *Volodja$_i$ xočet čtoby svoja$_i$ žena poexala v Evropu
V. wants that-subj self's wife go to Europe
'Volodja$_i$ wants self$_i$'s wife to go to Europe'

In the example (30-b), the FF bundle of the embedded subject ends up adjoined to the matrix v+V complex, which is higher in the structure, and therefore not in a c-command relationship with matrix object *Nadju,* and thus no violation of Principle B occurs. Also, the formal feature bundle of the embedded subject is at the same time deeply embedded within the complex in the v-head of the matrix clause above the matrix object *Nadju*'s formal features. Therefore, the violation of Principle C also does not occur, as the feature bundle of the matrix subject will not be able to bind outside of its featural complex.

An account for the previously problematic example with the possessive pronoun, (30-c), is possible in terms of the proposed analysis by adding one more assumption, which I refer to below as feature splitting:

(31) ***Feature splitting:*** formal features of the DP may move separately from the formal features of the possessor.

By the time the lower CP is completed, the embedded subject *ego žena* 'his wife' is inside the TP, and the formal features of *žena* 'wife' are attached to *by* of the embedded clause (feature splitting has resulted in independent movement of the formal features of *žena* 'wife' from within the subject DP). After the movement and adjunction of the formal features of *žena* into embedded C the matrix vP is being completed, the formal features of the embedded subject are adjoined to v+V complex, and the matrix subject *Volodja* is merged into the Spec,vP. Schematically, this moment is represented in (32):

(32) [$_{vP}$ Volodja$_i$ v+V+...+FF(žena$_j$) [$_{CP}$ ... [$_{TP}$ [ego$_i$ žena] ...

Notice, that the index *j* is no longer on the embedded subject, since this coindex remains associated with the formal featural complex of the *žena*, which has moved to the matrix v. The next step of the derivation is shown below in (33).

(33) [$_{TP}$ Volodja$_i$ [$_{vP}$ t v+V+...+FF(žena$_j$) [$_{CP}$ ... [$_{TP}$ [ego$_i$ žena] ...

At the point at which *Volodja* moves to Spec,TP, the material buried inside the lower CP-phase is inaccessible for evaluation of binding principles. Therefore, Principle B is not violated.

The explanation of the ungrammaticality of the example in (30-d) follows along in the same fashion. The relevant structures at the point at which construction of matrix vP and TP respectively has been completed are given in (34):

(34) (a) [$_{vP}$ Volodja$_i$ v+V+...+FF(žena $_j$) [$_{CP}$ ... [$_{TP}$ [svoja$_i$ žena] ...
(b) [$_{TP}$ Volodja$_i$ [$_{vP}$ v+V+...+FF(žena $_j$) [$_{CP}$ ... [$_{TP}$ [svoja$_i$ žena] ...

As we can see in (34-b), the anaphor is not c-commanded by its antecedent, and therefore Principle A violation triggers the ungrammaticality of this sentence. Again, in this analysis we make use of the proposed Feature splitting principle, leaving the FF bundle of the reflexive *svoja* 'self's' inside the TP

of the embedded clause.

Similarly in the example (30-a), by the time the matrix vP phase is completed the configuration is the following:

(35) $[_{vP}$ Volodja$_i$ v+V+...+FF(he$_i$) $[_{CP}$ ... $[_{TP}$ he ...

The Principle B is violated at this configuration, and it will remain violated as soon as *Volodja* moves to the Spec,TP, triggering the sentence ungrammatical:

(36) $[_{TP}$ Volodja$_i$ $[_{vP}$ t v+V+...+FF(he$_i$) $[_{CP\ ...}$ $[_{TP}$ he ...

5.4 Further evidence

Now consider a situation in which the embedded clause has a dative subject (Bailyn, 2004). The relevant example is given in (37). Observe, that in this case there are no obviation effects:

(37) Volodja$_i$ xočet čtoby emu$_i$ bylo xorošo
V. wants that-subj he-dat be good
'Volodja wants to feel good'

Following the proposal of Pesetsky and Torrego, 2001, the T-feature on D is realized as nominative case. It is this fact that accounts for the adjunction of embedded nominative subjects formal features to the embedded T, and subsequent raising of T+FF(emb. subj.) complex first to the embedded C, and later to the matrix v+V complex to check features with the matrix T. However, in the absence of nominative case, no such adjunction is possible because of the lack of T-feature on the dative subject. Therefore, when the subject of the embedded clause is dative, there is no raising of its features from the embedded clause into the matrix clause. That results in FF of dative subjects staying within the embedded TP, and therefore Principle B is not violated in sentences with embedded dative subjects. This explains grammaticality for sentences like (37), and thus the observed absence of obviation effects is accounted for.

6. *Scrambling*

Now, as we have explained the difference between the subjunctive and indicative clauses with respect to the phenomenon of obviation, I will go back to the issue of scrambling, and show how the analysis of the subjunctive/indicative distinction allows us to account for the asymmetries with respect to long-distance scrambling, when only object scrambling is allowed in declarative sentences when the embedded clause is indicative, and both subject and object scrambling are allowed when the embedded clause in subjunctive.

The relevant examples demonstrating subject scrambling from the section 3 are repeated in (38). These examples show that the long-distance subject scrambling is possible when the embedded clause is subjunctive (even though the corresponding sentences are degraded, (38-a)), and banned if the embedded clause is indicative (38-b); however object scrambling is allowed out of both indicatives and subjunctives, as shown in (38-c,d):

(38) (a) ?Ty doktor$_i$ xoceš ctoby t_i cašce priezzal. [Subjunctive]
you doctor want that-subj more often arrive
'You want doctor to arrive more often.'

(b) *Ty doktor$_i$ videl cto t_i pod'ezzal. [Indicative]
you doctor saw that arrive
'You saw when doctor arrived.'

(c) ?Ja soseda$_i$ xoču čtoby Petr pobil t_i. [Subjunctive]
I neighbor want that-subj P. beat
'I want Peter to beat the neighbor.'

(d) ?Ja soseda$_i$ videl čto Petr pobil t_i. [Indicative]
I neighbor saw that P. beat
'I saw that Peter beat the neighbor.'

First, I will argue that the ECP (Rizzi 1990, 2004, Rizzi and Shlonsky 2005) is responsible for the availability of the object scrambling. Whichever version of the ECP is adopted, objects are allowed to move freely.

As for the movement and scrambling of subjects, I will resort to the Criterial Freezing, introduced in Rizzi 2004, and Rizzi and Shlonsky 2005. In the first part of Criterial freezing condition, they assume that an element, which is moved to a position, associated with some interpretive property, which they call a criterial position, becomes frozen in place. This condition successfully accounts for impossibility of elements, which have already undergone topicalization, focalization, *wh*-movement to the scope position, etc. to move further. The second part of the Criterial freezing deals with subjects. They argue that the subject positions (Spec, TP) is also a criterial position, and once the element is moved into it, it remains frozen. Further, they argue in details, that in order to be able to move thematic subjects, the EPP requirement of T must be satisfied by some other element. In this case, the thematic subject does not move through a criterial position, and therefore is not frozen.

Adopting the Criterial Freezing condition from Rizzi and Shlonsky 2005, the objects are free to move, as they do not end up in a criterial positions. There is not need for the objects to satisfy any criteria, and they are free to move out of their base-generated position to the position in the higher clause. The mild deviance of the examples with object scrambling is of the same nature as subjacency violations in English. I can stipulate, that these mild subjacency violations stem from the need to create an escape hatch for the objects on the edge on the embedded CP, such as an extra specifier position, so that they can be moved out of the phase.

In order to account for the difference between subjunctive and indicative clauses with respect to subject scrambling, I return to the derivation of the embedded subjunctive clause. Recall that in the indicative embedded clauses, the C position is phonologically empty (the complementizer *čto*, as argued above, is located in the Spec,CP position). Further, as I discussed above, the embedded subject ends up in the Spec,TP position. Such subject position is criterial (following Rizzi and Shlonsky 2005), and therefore the constituent which ends up in such a position remains frozen for future movement. This explains the unavailability of the subject scrambling in case of indicative embedded clause. Notice, that the violation of Criterial freezing is much more severe than the violation of the subjacency, and therefore the sentence is ungrammatical, and not just mildly deviant.

What remains to be answered now is why the subject scrambling is possible out of subjunctive embedded clauses. As I mentioned before, the complementizer *čtoby* in subjunctives in Russian exhibit

different properties from the indicative complementizer *čto*. I analyzed *čtoby* as a complex consisting of *čto*, located in the Spec,CP, and the actual complementizer *by*, which occupies the C position. Based on this analysis, it is possible to find an alternative strategy for subject to move out of subjunctive clause. Crucial question at this point is what satisfies the phonological subject EPP condition on the embedded Spec,TP. Following the theory proposed in Rizzi and Shlonsky 2005 for the difference between French complementizers *que*/*qui* I will argue, that the same explanation applies to the Russian case. Rizzi and Shlonsky claim that the EPP on the embedded clause in French can be satisfied by the expletive *–i*, assuming that the French complementizer *qui* consists of *que+i* (following Taraldsen 98). They propose the mechanism of how Subject EPP can be satisfied by not only merge into the specifier position, but also in the head-head configuration.[2]

The same mechanism is applied to Russian would allow satisfaction of the subject EPP by *by* element, thus not requiring for subject to move to the criterial position (Notice that this strategy is impossible in indicatives, since there is no overt element in the head of CP in such case.). Now, as the subject is not frozen, it is free to move, and therefore, the subject scrambling will only trigger mild subjacency violation, exactly as with the object scrambling, which stems from the need to create an escape hatch.

As I showed in this section, the distinction between the complementizers for the subjunctive and indicative clauses, and adoption of some version of ECP would predict the impossibility of the subject scrambling out of indicative clauses, while allowing subject scrambling from subjunctive clauses, and object scrambling from both types of clauses.

7. Crosslinguistic Facts

The phenomenon of obviation is not specific to the Russian language. In fact, most of the languages that exhibit a subjunctive/indicative distinction display similar effects in subjunctive clauses. The examples from (39) to (42) illustrate this point.

(39) *Spanish:* (from Jakubowicz, 1984)

(a) El presidente$_i$ dijo [que él$_i$/pro$_i$ invitará a todos]
the president said that he/pro invite-ind everybody
'The president$_i$ said that he$_i$ will invite everybody' [Indicative]

(b) *El presidente$_i$ desea [que él$_i$/pro$_i$ invite a todos]
The president desired that he/pro invite-subj everybody
'The president$_i$ desired that he$_i$ invites everybody' [Subjunctive]

(40) *French:*

(a) Jean a dit [qu'il$_i$ va au cinéma]
J. aux said that he go to movies
'Jean$_i$ said that he$_i$ will go to the movies' [Indicative]

(b) *Jean veut [qu'il$_i$ aille au cinéma]
J. want that he go-subj to movies
'Jean$_i$ wants that he$_i$ go to the movies' [Subjunctive]

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[2] For the purposes of the current paper, I will skip the precise description of the mechanism proposed in Rizzi and Shlonsky 2005.

(41) *Basque:* (from San Martin, 2000)

Nik$_i$ [pro$_{*i}$/John joatea] nahi dut
I-erg pro/John go-nom-det-abs want 3abs-1erg
'I want him/her/you/they/John to go'

(42) *English:*

(a) John$_i$ said that he$_i$ is going to the bar.

(b) *John$_i$ required that he$_i$ go to the bar. [Subjunctive?]

I claim that an analysis similar to what I have proposed for Russian can be applied to these languages as well. The details of this analysis require further research, and the scrambling/extraction properties in these languages need to be explored further.

However, not all languages show effects similar to Russian. As is well known, some Balkan languages such as Romanian, Bulgarian, Greek, do not display obviation effects in subjunctive clauses, as shown in the example (43) for Romanian.

(43) *Romanian:* (from Dobrovie-Sorin, 2001)

Ion$_i$ vrea sa plece pro$_{i/j}$ devreme mâine.
John wants sa leave-3sg.subj early tomorrow
'John wants to leave early tomorrow'

In order to propose explanation for Romanian facts, one needs to look at the structure of complementizer, and explain why the formal features of Romanian embedded subjects do not end up in the position within the matrix clause. One possible explanation will be based on the different featural structure of Romanian complementizers, which might not attract T along with embedded subject feature complex. However, more research needs to be done in order to explain the facts.

8. *Conclusion*

In this paper I have proposed an analysis of the differences observed between subjunctive and indicative clauses in Russian following the framework proposed by Pesetsky and Torrego, 2004. I claimed that in the subjunctive clauses, Tense-transfer from the main clause T is necessary for the T-feature on the subjunctive T to get valued. I also argued that the formal features of the subject of the subjunctive clause participates in "transmitting" the tense, being adjoined to the matrix v+V complex. This analysis allowed for an explanation the obviation phenomenon.

Further, I proposed an ECP based analysis of long-distance scrambling asymmetries in Russian, and showed how its properties and the conditions on its availability follow from the analysis of the subjunctive/indicative distinction and the properties of indicative/subjunctive complementizers.

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