# BALKAN SUBJUNCTIVE DISTRIBUTION: WORLD SEMANTICS AND DEFAULT SELECTION

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## **1. INTRODUCTION**

This paper will focus on subjunctive complements in Balkan languages (e.g. Greek, Romanian, Bulgarian etc.), which exhibit a number of unusual syntactic and semantic properties that we will observe later on. Subjunctive mood as such has always presented a particularly difficult subject for linguistic analysis, regardless of the language or the language group that the authors would focus on. The primary reason for this is related to subjunctive distribution, i.e. the types of syntactic environments where this mood category is used. Even though subjunctive has a certain core context of its use, where one typically observes this mood on a cross-linguistic basis, there are also a number of atypical instances of subjunctive distribution that are more difficult to account for, some of which we will observe in this paper as well.

Subjunctive mood is most typically found in embedded clauses introduced under predicates such as desideratives (e.g. *want*) or directives (e.g. *order*), as we can observe in the Romance examples below:

(1)	a.	Je veux que tu viennes.	(French)
		I want1.sg. that you come2.sg.SUBJ	
		'I want you to come.'	
	b.	Ordenó que lo hagas.	(Spanish)
		ordered3.sg. that it do2.sg.SUBJ	
		'He ordered you to do it.'	

The most important semantic difference that the subjunctive clausal complements in (1) exhibit with respect to their indicative counterparts can be described in terms of *world semantics*: while the propositions denoted by indicative complements are typically interpreted in relation to the actual world, subjunctive propositions are generally not. This observation explains the traditional distinction between the indicative and the subjunctive mood in terms of *realis* vs *irrealis* interpretations: while subjunctive typically appears in clauses denoting irrealis meanings, i.e. clauses that are not realized in the actual world, such as those in (1), indicative tends to be associated with more realis interpretations, and appear in clauses involving statements about the actual world.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The traditional definition of the subjunctive in terms of irrealis semantics served as the basis for some of the more fine-grained approaches to this mood which were subsequently proposed in the literature, and which attempted to address some of the problems related to the traditional description of the subjunctive in terms of irrealis. Some of the more influential definitions that were proposed in this context are those based on notions such as non-veridicality (Giannakidou 1998; Zwart 1995), evaluative model shift (Quer 1998), emotivity (Baunaz&Puskas 2014), or intensional world anchoring (Farkas 1992), among others. I will return to the approach put forward in Farkas (1992) a bit later on (see Section 3), because it will be used as the basis for my own analysis of Balkan subjunctive.

Nevertheless, the reason why the subjunctive presents a difficult subject for study has to do with the fact that this mood can also be found in a number of atypical contexts, which are harder to account for. Some problematic instances of subjunctive distribution can be observed in Romance (2a-b) and Balkan (2c-d) examples below:

(2)	a.	Je suis content qu'il vienne.	(French)
		I bel.sg. glad that he come3.sg.SUBJ	
		'I am glad he is coming.'	
	b.	Lamento que se vaya.	(Spanish)
		regret1.sg. that leave3.sg.SUBJ	_
		'I regret that she is leaving.'	
	c.	Ion a reusit sa vina.	(Romanian)
		John managed3.sg. SUBJ come3.sg.	
		'John managed to come.'	
	d.	Arxizo na grafo.	(Greek)
		begin1.sg. SUBJ write1.sg.	
		'I begin to write.'	
		(Roussou 2009: 1815)	

All of the subjunctive complements in (2) involve actual-world interpretations, which means that they are incompatible with the definition of the subjunctive in terms of irrealis. This paper will be primarily focused on the problematic aspects related to subjunctives of the type exemplified in (2c-d), because they are more relevant when it comes to the analysis of Balkan subjunctive in particular, whereas the complements in (2a-b) will be left aside in the present paper because these types of subjunctives are less productive in Balkan than they are in Romance languages.

In Section 2, I will introduce the subject of the Balkan subjunctive (BlkS from now on) from a more descriptive point of view, first outlining its morpho-syntactic realization (2.1), which is different from the one we typically observe across languages, and then describing its distribution (2.2), which will constitute the main focus of the remaining parts of the paper. Section 3 will address the theoretical problems related to BlkS distribution by proposing an innovative approach to BlkS clausal complements, and the selection mechanism that is used to introduce them into the structure. The analysis that I will put forward in this context, which will be based on the theoretical perspective outlined in Farkas (1985, 1992), will argue that the subjunctive selection constitutes a default syntactic option in embedded clausal environments (whereas indicative represents a marked selectional option in this context). Section 4 will then apply this general analysis to the more concrete linguistic data pertaining to BlkS distribution, explaining how my approach can be used to subsume both the more typical as well as the less typical instances of BlkS complementation under the same broad syntactic analysis. In this context, we will observe that different types of BlkS complements undergo varying degrees of structural truncation, which can explain both the formal as well as the semantic contrasts that they exhibit. Section 5 will then conclude the paper by summarizing the most important points that have been brought up.

#### 2. BALKAN SUBJUNCTIVE: GENERAL PROPERTIES

In this section, I will approach BlkS on a more descriptive level, in order to familiarize the reader with the subject. First, I will briefly address the morpho-syntactic realization of BlkS complements, which is different from the one we observe in most other languages, and then I will focus on the issue of BlkS distribution, outlining the problems that this topic poses for

the analysis of the subjunctive mood, which will then be addressed in the subsequent parts of the paper.

## 2.1 BlkS realization

Balkan languages differ from most of their cross-linguistic counterparts when it comes to subjunctive realization because, while subjunctives across languages are typically distinguished from indicatives through verbal morphology, Balkan languages (such as Greek or Bulgarian, among others) do not contain distinctive subjunctive verb forms. Instead, they distinguish indicatives and subjunctives via separate syntactic items, which occupy head positions situated on the left periphery of the embedded clause (Giannakidou 1998; Krapova 1998; Rivero 1994). A couple of illustrative examples of this type of mood marking are provided in (3-4) below:

(3)	a.	O Pavlos ipe oti efije i Roxani.	(Greek)
		the Paul said3.sg. IND left3.sg. the Roxanne	
		'Paul said that Roxanne left.'	
	b.	Thelo <b>na</b> kerdisi o Janis.	
		want1.sg. SUBJ win3.sg. the John	
		'I want John to win.'	
		(Giannakidou 2009: 1886-1887)	

- (4) a. Mislja **che** tja otide. think1.sg. IND she left3.sg. 'I think she left.'
  - b. Ivan zapovjada da dojdes. John order3.sg. SUBJ come2.sg.
    'John orders you to come.'

Even though the exact morphological make-up of the mood markers in (3-4) differs from language to language (e.g. the subjunctive marker is realized as *na* in Greek and as *da* in Bulgarian), the relevant observation is that all Balkan languages use the same type of syntactic strategy in order to distinguish indicatives (3-4a) from subjunctives (3-4b), i.e. distinctive left-periphery mood markers.<sup>2</sup>

There is some disagreement in the Balkan literature when it comes to the analysis of the exact syntactic properties of BlkS markers we observed in (3-4b): some authors viewed these items as complementizers (Comps) externally merged in C (e.g. Agouraki 1991; Dobrovie-Sorin 1994; Krapova 1998); others analyzed them as mood particles, inserted in a lower position within the syntactic structure (e.g. Giannakidou 1998; Philippaki-Warburton 1985; Rivero 1994; Terzi 1992). Even though the analysis in this paper will not be interested in the intrinsic properties of BlkS markers per se, the syntactic approach that I will develop later on will be based on the idea that these items should be seen as particles, merged below C.<sup>3</sup> In the

(Bulgarian)

<sup>&</sup>lt;sup>2</sup> The only Balkan language which is somewhat exceptional in this context is Serbian/Croatian, because it introduces both indicative and subjunctive complements through the item da. Nevertheless, in my previous work I have demonstrated that the indicative and the subjunctive da in this language actually constitute two distinct syntactic items, with the subjunctive da exhibiting the same types of properties as other BlkS markers which are more overtly marked, such as those we observed in (3-4b) above (see Socanac 2011, 2012 a.o.).

<sup>&</sup>lt;sup>3</sup> There is some further disagreement among authors that analyzed BlkS markers as particles as to the exact syntactic head position that serves as the host for such items. The latter have been argued to occupy head positions of projections such as the mood/modality-related MoodP (Giannakidou 1998; Rivero 1994 a.o.), polarity-related PolP (Todorovic 2012) or tense-related TP (Socanac 2017), among others. The claim I made in

examples below, we can observe some preliminary evidence in favor of this type of approach to BlkS markers:

(5)	a.	Mislja che Ivan shte dojde. think1.sg. that-IND John fut. come3.sg.	(Bulgarian)
		'I think that John will come.'	
	b.	Iskam Ivan da (*Ivan) dojde.	
		want1.sg. John SUBJ (John) come3.sg.	
		'I want John to come.'	
(6)	a.	Vreau ca Petru sa citeasca o carte. want1.sg. that Peter SUBJ read3.sg. a book 'L want Peter to read a book '	(Romanian)
	b.	Une dua qe Brixhida te kendoje.	(Albanian)
		I want1.sg. that Brigitte SUBJ sing3.sg.	
		'I want Brigitte to sing.'	

The Bulgarian examples in (5) show us that the BlkS marker (da) is situated lower down in the structure than the indicative Comp (che) because, while the latter appears above the embedded subject, the former must appear below it (unless the subject is post-verbal), or else the result is ungrammatical. The same type of contrast is observed in a wide array of Balkan languages, including Greek or Romanian, among others (Farkas 1984; Rouchota 1994; Roussou 2009). The examples in (6), on the other hand, which are more specific to Romanian and Albanian, provide further evidence in this sense because they show us that BlkS markers (Romanian sa and Albanian te in particular) can appear in the same embedded structure as Comps (ca in [6a] and qe in [6b]), occupying a lower structural position than the latter. The analysis that I will develop in the following parts of this paper will lend further support to the view of BlkS markers as particles inserted below C, because we will see that these items can appear in a number of complements which will be claimed to truncate the embedded CP projection.

## 2.2 BlkS distribution

My primary area of interest in this paper will be BlkS distribution, which will be shown to exhibit a number of atypical linguistic patterns that pose problems for the analysis of the subjunctive. In addition to BlkS complements that we already observed in (3-6), which are more typical from a cross-linguistic perspective because they denote the irrealis-type interpretations that one usually observes with the subjunctive mood, BlkS mood marking is also introduced under a number of additional predicates, which are less typical in this sense because they tend to denote more realis-type interpretations. Some atypical instances of BlkS distribution are exemplified in (7-10) below:

(7)	Marko	zna	da	vozi	auto.	(Serbian)
	Mark kr	now3.s	g. SU	BJ drive	3.sg. car	
	'Mark k	nows	how t	o drive a	car.'	

my previous work is that BlkS markers are inserted under T (due to the temporal properties that they were shown to exhibit), but the question of the exact head position that hosts BlkS particles is not of central relevance for the analysis in this paper (the only important point being that such items are situated below CP in the structure), so I will not further pursue this issue here.

(8)	Ivan se opita da razbere prosa. John tried3.sg. SUBJ understand3.sg. question 'John tried to understand the question.'	(Bulgarian)
(9)	Ion a reusit sa vina. John managed3.sg. SUBJ come3.sg. 'John managed to come.'	(Romanian)
(10)	Arxizo na grafo. begin1.sg. SUBJ write1.sg. 'I begin to write.'	(Greek)

Complements of the type exemplified in (7-10) are not typically observed across languages, which means that BlkS has a wider distribution than most of its cross-linguistic counterparts.

The underlying reason behind the atypical BlkS distribution that we just observed is related to a specific diachronic development that affected languages situated in the Balkan region. The development in question can be described as the *infinitive loss*: most Balkan languages have largely lost their infinitives and replaced them with finite subjunctive clauses (Joseph 1983).<sup>4</sup> As a result, Balkan languages introduce the subjunctive both in control environments (i.e. sentences that exhibit conjoined reference between the matrix and the embedded subject) and in non-control contexts (i.e. sentences where we have a disjoined reference between subjects). This explains why the subjunctive in Balkan languages generally do not employ the subjunctive in subject-control environments, using the infinitive instead. Balkan languages, on the other hand, introduce the subjunctive in basically any type of syntactic environment where languages such as French or Spanish employ either the subjunctive or the infinitive.

The wide-ranging distribution of BlkS that we just observed poses problems for the theoretical analysis of this mood category because the fact that BlkS distributes along such a broad range of syntactic environments also means that it is associated with a greater degree of semantic diversity than is typically the case across languages. For instance, some BlkS complements exhibit the same types of irrealis modal meanings that are typically observed with the subjunctive on a cross-linguistic basis (e.g. 3-4b); others are more realis but can still be related to a type of modality (e.g. 7-8);<sup>5</sup> whereas still others are entirely realis and cannot be related to any modality (e.g. 9-10). Nevertheless, despite such semantic diversity, I will argue that all of these complements should be subsumed under the same embedded clause type, which is lexically selected by the matrix predicate. This is because all of these complements were shown to exhibit a cluster of common clausal properties whereby they differ from their indicative counterparts.<sup>6</sup> The main question that I will be concerned with in

<sup>&</sup>lt;sup>4</sup> The infinitive loss, which is part of a larger range of linguistic phenomena subsumed under the term *Balkan sprachbund*, was subject to some regional variation: on the whole, languages situated more to the South-East of the Balkans (e.g. Greek, Albanian, Bulgarian) have replaced their infinitives with subjunctives to a greater degree than languages spoken more to the West or to the North of the Balkan region (e.g. Romanian or Serbian/Croatian), which still often employ the infinitive (Joseph 1983; Miseska Tomic 2006). In this paper, I will abstract away from such regional variations and only focus on those linguistic varieties which have replaced their infinitives with subjunctives. Thus, for instance, when it comes to a language such as Serbian/Croatian, I will only focus on the Serbian variety in this context because, given that the latter is situated more to the South-East of the Balkans, it employs the subjunctive in control contexts more regularly than Croatian, which is situated more to the West. As a result, I will be referring to this language as Serbian in the present paper.

<sup>&</sup>lt;sup>5</sup> Dynamic modality related to notions such as ability or capacity, in this particular case.

<sup>&</sup>lt;sup>6</sup> See Socanac (2017) for more detail.

the rest of this paper will be to determine how predicates which are as diverse as those we previously observed in (3-10) can nonetheless select the same embedded clause type as their complement. I will address this question by proposing a specific analysis of BlkS selection, which will claim that the latter constitutes the default syntactic option in embedded clausal environments.

## 3. BALKAN SUBJUNCTIVE SELECTION AS SYNTACTIC DEFAULT

The fact that BlkS complements are selected by predicates which are as lexically diverse as those we observed in Section 2 makes it very difficult to argue that all of these verbs can share some type of common feature inherent to their lexical make-up, which would then allow them to select the same type of clausal complement. Here I will claim that there is no such common feature. Rather, subjunctive complements should be seen as selected by default: unlike indicatives, which are introduced through the mediation of a specific mood feature (which will be formalized in more detail in 3.2), subjunctives are selected as a default syntactic option in the absence of the relevant mood feature.<sup>7</sup> The analysis that I will propose in this context will be based on the semantic approach to mood that was put forward in Farkas (1992), which distinguished between subjunctives and indicatives on the basis of the type of world(s) in which they are interpreted. Here I will put forward a syntactic application of the semantic approach developed by Farkas.

## 3.1 Extensional vs intensional world anchoring (Farkas 1992)

Before I move on with my analysis, I will first briefly introduce some of the most important theoretical aspects related to the account put forward in Farkas (1992). Farkas argued that the main semantic difference between indicatives and subjunctives has to do with the fact that the former are interpreted in a single, specific world, whereas the latter are interpreted in a set of worlds. When applying this analysis to clausal complementation, Farkas claimed that indicatives are selected by so-called extensional predicates (e.g. say, know, think etc.), which anchor the embedded proposition to a single world (typically the world of the matrix subject), whereas subjunctives are selected by intensional predicates (e.g. wish, prefer, demand), which anchor the embedded proposition to a set of worlds. This analysis can also be used to explain the differences in propositional content that we typically observe between these two types of complements, namely the fact that only indicatives function as propositions that can be judged as true or false, whereas subjunctives are inaccessible to truth judgments (Jarv&Kissine 2014; Portner 1997 a.o.): given that indicatives are interpreted in a specific world, one can then assess whether or not this world corresponds to the actual world and thus determine whether the indicative proposition is true or false, whereas the same cannot be done with subjunctives because they are not interpreted in any specific world but in a set of worlds.

The reason why Farkas' approach is relevant for this paper is because it will be used to develop a more precise formal analysis in the context of the marked vs default mood selection briefly mentioned above. Note that extensional world anchoring in the sense of Farkas (1992) should be seen as a more specified conceptual option than intensional world anchoring, because the former allows the proposition to be interpreted in a specific world whereas the latter does not. As a result, in Socanac (2017) I have argued that extensional world anchoring

<sup>&</sup>lt;sup>7</sup> The idea that the indicative should be seen as the marked mood and the subjunctive as default was already proposed by a number of authors (e.g. Portner 1997; Schlenker 2005). Nevertheless, the default-mood approach to the subjunctive that I am proposing here differs from these prior approaches: while the latter analyzed mood distinctions from a semantic standpoint, viewing the subjunctive as a semantic default in this context, I approach this issue from a syntactic perspective, claiming that subjunctive clause-type selection constitutes the default syntactic strategy in embedded clausal environments.

is achieved through the mediation of a special mood feature, defined as the W(orld) feature, whereas intensional anchoring obtains in the absence of this feature. In 3.2 I will briefly describe how this analysis can be applied in the context of clausal complementation.

## 3.2 World feature and embedded mood selection

Socanac (2017) argued that the indicative CP corresponds to a marked syntactic option in embedded environments, because it is only selected by predicates containing W (as in [11]), whereas subjunctive selection represents a default option because it takes place in the absence of W (12).



This analysis allowed me to subsume all the instances of BlkS distribution that we observed earlier in 2 under the same syntactic clausal category, regardless of the lexical diversity of BlkS-selecting predicates: given that the selection of subjunctive complements constitutes the default syntactic option, the selecting predicates are not required to share any type of inherent lexical feature in order to introduce the subjunctives as their complements. The only restriction imposed on subjunctive-selecting predicates is that they should not contain the indicative-related W-feature. As a result, the lexical diversity of BlkS-selecting predicates is no longer problematic but is actually expected: if there is no common feature that licenses subjunctive selection, then the predicates that select the subjunctive should be associated with relatively diverse lexical semantics. The main issue that I will be addressing in the remainder of this paper will be to determine how the default-selection approach to the subjunctive which was just outlined can account for some of the more specific problems related to BlkS distribution.

## 4. BALKAN SUBJUNCTIVE AND STRUCTURAL TRUNCATION

This section will be primarily focused on the contrasts that can be observed between the more typical irrealis subjunctives such as those we saw in (3-4b) (reproduced below under [13]), and the atypical realis subjunctives of the type exemplified in (9-10) (reproduced in [14]), which are more problematic in light of the analysis I just outlined.

(13)	a.	Thelo na kerdisi o Janis. want1.sg. SUBJ win3.sg. the John	(Greek)
		'I want John to win.'	
	b.	Ivan zapovjada da dojdes.	(Bulgarian)
		John order3.sg. SUBJ come2.sg. 'John orders you to come.'	
(14)	a.	Ion a reusit sa vina. John managed3.sg. SUBJ come3.sg. 'John managed to come.'	(Romanian)

b. Arxizo na grafo. begin1.sg. SUBJ write1.sg. 'I begin to write.'

#### (Greek)

The more typical BlkS complements in (13) can be straightforwardly incorporated into the default-selection approach to the subjunctive described in Section 3: they exhibit irrealis interpretations compatible with intensional world anchoring in the sense of Farkas (1992), which is expected under the assumption that they are selected in the absence of the W-feature. On the other hand, BlkS complements of the type exemplified in (14), selected by verbs such as aspectuals (e.g. begin, continue) or implicatives (e.g. manage, succeed), present potential problems for my analysis, due to the realis, non-modalized interpretations that they exhibit. The fact that these complements do not denote any type of modality means that they do not quantify over a set of worlds but must instead be interpreted in a single world (typically the actual world of the speaker). This implies that such complements exhibit extensional-type world anchoring in the sense of Farkas, which is unexpected given the claim that BlkS is selected in the absence of W. Nevertheless, in the following several sections, which will look at a range of formal and semantic contrasts that can be observed between the BlkS complements that are in focus here, I will show that the extensional world-anchoring which obtains with realis subjunctives such as those in (14) is not incompatible with the claim that these complements are selected in the absence of W as well.

## 4.1 Control

The first contrast that can be observed between the two types of BlkS complements exemplified in (13-14) is related to the area of control: while the more typical irrealis subjunctives in (13) are compatible with disjoint readings between the matrix and the embedded subject, realis complements in (14) exhibit obligatory subject control.<sup>8</sup> The relevant contrast is illustrated in the examples (15-16) below:

(15) a.	O Pavlos <sub>i</sub> thelei na kerdisi <sub>i/j</sub> . the Paul want3.sg. SUBJ win3.sg. 'Paul wants (him) to win.'	(Greek)
b.	Ivan <sub>i</sub> iska da dojde <sub>i/j</sub> . John want3.sg. SUBJ come3.sg. 'John wants (him) to come.'	(Bulgarian)
(16) a.	Ion <sub>i</sub> a reusit sa vina <sub>i/*j</sub> . John managed3.sg. SUBJ come3.sg. 'John managed (*him) to come.'	(Romanian)
b.	O Ianis <sub>i</sub> arxizei na grafei <sub>i/*j</sub> . the John begin3.sg. SUBJ write3.sg. 'John begins (*him) to write.'	(Greek)

As we can observe thanks to the grammaticality contrasts in (15-16), only the irrealistype subjunctives in (15) allow for disjoined subject readings, whereas the matrix and the

<sup>&</sup>lt;sup>8</sup> Note that the control mechanism in Balkan languages differs from the one we typically observe in most non-Balkan languages, where the control reading usually obtains in the presence of non-finite verb forms such as infinitives. Given the infinitive-loss phenomenon that affected Balkan languages (see 2.2), these languages no longer establish control via infinitive verb forms but rather through the mechanism of *obligatory agreement sharing*, whereby the matrix and the embedded predicate must exhibit common phi-features (see Landau [2004] for more detail). Due to space constraints, I will not discuss this mechanism in further detail here.

embedded subjects in realis complements in (16) must be co-indexed, or else the result is ungrammatical. From now on I will refer to the latter type of complements as C(ontrol) subjunctives (term taken from Landau [2004]), whereas the former will be simply defined as non-control (NC) subjunctives.

Various authors have noted that C subjunctives constitute more deficient syntactic structures than NC subjunctives: while the latter introduce two separate clausal domains, the former involve syntactic restructuring which results in clause union between the matrix and the embedded clause (Krapova 1998; Varlokosta 1993 a.o.). Therefore, whereas NC complements involve bi-clausal structures, C subjunctives constitute mono-clausal structures. The semantic effect which results from this syntactic contrast is the fact that, while NC subjunctives denote two separate events, C subjunctives are associated with single-event interpretations. This observation will be of crucial importance for the analysis in this paper, because it will allow me to account for the semantic contrasts that we previously observed between different types of BlkS complements (namely the fact that NC subjunctives involve intensional world anchoring in the sense of Farkas whereas C subjunctives can be interpreted in a single world) without having to abandon the central idea according to which all of these complements are selected in the absence of the W-feature.

The syntactic contrast between NC and C subjunctives in terms of bi-clausal vs monoclausal structures will be analyzed through the prism of *structural truncation*: NC complements will be viewed as embedded CP domains, whereas C complements will be argued to truncate the embedded CP projection<sup>9 10</sup>. In the following sections, I will first put forward a range of additional syntactic data which argue in favor of this analysis, and then I will further expound on the semantic consequences of the syntactic contrasts between NC and C BlkS complements. This will ultimately allow me to explain the atypical semantic properties that we observed with C subjunctives (i.e. the fact that they involve realis, singleworld interpretations), and reconcile these properties with the idea that such complements are selected under the same type of selection mechanism as NC subjunctives.

#### 4.2 Tense

In addition to control, another area where C subjunctives are more anaphorically dependent on the matrix clause than NC subjunctives is tense. Authors such as Krapova (1998) or Landau (2004) have noted that these two types of BlkS complements differ when it comes to the type of temporal marking they allow in the embedded clause. Observe the grammaticality contrasts in (17-18):

(17) a. Iskah da dojdes vcera / utre.
 wanted1.sg. SUBJ come2.sg. yesterday / tomorrow
 'I wanted you to come yesterday / tomorrow.'

(Bulgarian)

<sup>&</sup>lt;sup>9</sup> In Socanac (2017), I have demonstrated that the structural truncation in question can affect varying parts of the left-periphery structure associated with C BlkS complements (not just the CP projection), but here I will only be focusing on the truncation involving the embedded CP, because this projection is most relevant when it comes to accounting for the contrasts between NC and C subjunctives that will be discussed in this paper.

<sup>&</sup>lt;sup>10</sup> The underlying motivation behind the structural truncation that takes place in the context of BlkS complementation can be related to the default-selection mechanism whereby BlkS complements are introduced into the structure. The analysis I developed in this context is too involved to present it in this paper (see Socanac [2017] for more detail), but the basic idea is the following: given that subjunctive CP complements are selected by default, and not due to any type of feature inherent to the matrix predicate, the predicate in question will not always be lexically compatible with all the features contained in subjunctive CP structure, and will thus delete any embedded projection containing features that do not match its own lexical make-up.

	b.	Naredio je da dodjes juce / sutra. ordered 3.sg. SUBJ come2.sg. yesterday / tomorrow 'He ordered you to come yesterday / tomorrow.'	(Serbian)
(18)	a.	Uspjah da dojda vcera / * utre. managed1.sg. SUBJ come1.sg. yesterday / * tomorrow 'I managed to come yesterday / *tomorrow.'	(Bulgarian)
	b.	Poceo sam da studiram juce / * sutra. began1.sg. SUBJ study1.sg. yesterday / * tomorrow 'I began to study yesterday / *tomorrow.'	(Serbian)

In (17), we can see that NC subjunctives allow for the introduction of conflicting tense markers in the matrix and the embedded clause, i.e. we can introduce a future adverbial in the embedded clause even though the matrix tense is past. C subjunctives, on the other hand, do not allow for this possibility: the tense of the embedded clause must be identical to matrix tense (in this case past), and there can be no conflicting temporal markers in this context, or else the result is ungrammatical, as shown in (18).

Krapova (1998) argued that the data of the type exemplified in (17-18) show us that NC subjunctives introduce two separate time frames, whereas C subjunctives are associated with a single, matrix time frame. This type of contrast is expected under the analysis of BlkS complementation in terms of structural truncation that I introduced at the end of 4.1: while NC subjunctives maintain the embedded CP, and thus correspond to a separate clausal domain associated with a distinct time frame, C subjunctives truncate the embedded CP, and are hence incorporated within the matrix time frame. As a result, the introduction of conflicting tense markers in C subjunctives in (18) produces ungrammaticality for the same reason as it would if such conflicting markers were introduced in the context of simple matrix clauses, as in (19):

(19)	a.	Dojdoh vcera / * utre.	(Bulgarian)
		came1.sg. yesterday / * tomorrow	
	b.	Dodjoh juce / * sutra.	(Serbian)
		came1.sg. yesterday / * tomorrow	
		'I came vesterday/ *tomorrow.'	

The shared pattern observed between the examples in (18) and (19) is expected under the CP-truncation approach to C subjunctives.

## 4.3 Pronoun vs anaphor binding

Another syntactic area that will allow us to observe formal contrasts between NC and C subjunctives has to do with the binding of pronouns vs anaphors, specifically those of the possessive type. A language such as Serbian contains two possessive variants in this context, one of which functions as a pronoun (e.g. njegov/a) while the other functions as an anaphor (svoj/a). Let us first briefly recall the original binding approach to pronouns and anaphors, outlined in Chomsky (1981), which stated that the latter are bound locally, in accordance with the condition A, whereas the former are bound non-locally, in accordance with the condition B (the conditions A and B are summarized in [20] in a somewhat simplified form):

(20) a. A: an anaphor must have an antecedent within its own binding domain.

b. B: a pronoun must have an antecedent outside its binding domain.

When applied to clausal complementation, the generalizations in (20) mean that an anaphor must have an antecedent within the same clause, and cannot be bound by an antecedent from a higher clause, whereas a pronoun exhibits the reverse pattern, i.e. it cannot be bound by an antecedent in the same clause but only by one situated in a higher clause. If we now apply this broader generalization to Serbian possessives introduced above, we will observe that the anaphor *svoj* must be bound within the same clause (21a), whereas the pronoun *njegov* is bound from a higher clause (21b):

(21) a. Marko<sub>i</sub> misli da Ivan<sub>j</sub> vozi svoj\*<sub>i/j</sub> auto. (Serbian) Mark think3.sg. that John drive3.sg. his-an. car
b. Marko<sub>i</sub> misli da Ivan<sub>j</sub> vozi njegov<sub>i/?\*j</sub> auto. Mark think3.sg. that John drive3.sg. his-pro. car

The grammaticality contrasts in (21) are expected given the generalization in (20).

The reason why all of this is relevant in the context of my current argument is because the contrast between possessive pronouns and anaphors that we just observed leads to a specific prediction pertaining to BlkS complementation: if my analysis of the syntactic differences between C and NC subjunctives in terms of structural CP-truncation is correct, then we should be able to observe matrix-embedded anaphor binding in the context of C subjunctives, given that the embedded clause in such cases is expected to be syntactically incorporated within the matrix binding domain, whereas the same type of binding should not obtain with NC subjunctives, given that the matrix and the embedded clause in such cases correspond to two separate binding domains. In (22), we can see that this prediction holds:

- (22) a. Ivan<sub>i</sub> je poceo da vozi svoj<sub>i</sub> auto. (Serbian) John began3.sg. SUBJ drive3.sg. his-an. car 'John began to drive his car.'
  - b. \* Ivan<sub>i</sub> hoce da svoj<sub>i</sub> auto bude u garazi. John want3.sg. SUBJ his-an. car be3.sg. in garage 'John wants his car to be in the garage.'

'Mark thinks that John is driving his car.'

In (22a), we can see that the C subjunctive allows for the embedded anaphor *svoj* to be bound by a matrix antecedent (i.e. the matrix subject *Ivan*), whereas the same type of binding produces ungrammaticality in the case of NC complements such as the one in (22b). This is, once again, fully compatible with my analysis of BlkS complementation in terms of structural truncation: C subjunctives exhibit local binding between the matrix and the embedded clause because the embedded complement in such cases is syntactically incorporated within the matrix binding domain, due to CP truncation, whereas NC subjunctives ban this type of matrix-embedded binding relations because they maintain the embedded CP, and thus constitute a separate binding domain.

## 4.4 Subjunctive complementizers

Another syntactic phenomenon related to BlkS that is relevant for my analysis has to do with the examples that we previously observed in (6) (reproduced under [23] below), which showed us that languages such as Romanian or Albanian feature subjunctive complements where the lower BlkS particle occurs within the same structure as the higher Comp: <sup>11</sup>

<sup>&</sup>lt;sup>11</sup> The Albanian data are taken from Terzi (1992).

(23)	a.	Vreau ca Petru sa citeasca o carte.	(Romanian)
		want1.sg. that Peter SUBJ read3.sg. a book	
		'I want Peter to read a book.'	
	b.	Une dua qe Brixhida te kendoje.	(Albanian)
		I want1.sg. that Brigitte SUBJ sing3.sg.	
		'I want Brigitte to sing.'	

While the Romanian and Albanian examples above served earlier on in 2.1 to demonstrate that BlkS particles are inserted in the structure below CP, they are relevant in the context of the current argument because they allow me to make another prediction pertaining to BlkS complementation, specifically in relation to C subjunctives: if the latter constitute truncated embedded CP domains, as I am claiming here, then they should not allow for the introduction of Comps such as those we observed in (23) (i.e. Romanian *ca* and Albanian *qe*), because the C-head that must host such Comps is truncated. Below in (24) we can see that this prediction holds as well: the introduction of Comps within C subjunctives in Romanian and Albanian results in ungrammaticality.

(24)	a.	Maria incepe (*ca) sa scrie.	(Romanian)
		Mary begin3.sg. (*that) SUBJ write3.sg.	
		'Mary begins to write.'	
	b.	Maria perpiqet (*qe) te shkruaje.	(Albanian)
		Mary try3.sg. (*that) SUBJ write3.sg.	
		'Mary tries to write.'	

The data in (23-24), therefore, lend further support to my syntactic approach to BlkS complements in general.

## 4.5 Semantic world anchoring

So far, we have seen how my analysis of BlkS complementation in terms of CP truncation can be used to account for some of the formal syntactic contrasts observed between NC and C complements. CP-truncation, in effect, efficiently explains why C subjunctives are more anaphorically dependent on the matrix clause than NC complements when it comes to areas such as control, tense or pronoun/anaphor binding. The same analysis also explains why only NC complements allow for the introduction of a separate Comp in certain Balkan languages whereas C subjunctives do not. In this section, I will briefly explain how the same type of analysis can also be used to account for the atypical semantic properties that we observed with realis-type C subjunctives. This will allow me to reconcile the latter with my broader selection approach to BlkS complementation.

The default approach to subjunctive selection developed earlier in Section 3 claims that subjunctive complements are selected by predicates which do not contain the world-anchoring W-feature. Therefore, such predicates should not be able to anchor the embedded proposition to any specific world, given that this type of world anchoring obtains in the presence of W. As a result, the fact that realis, non-modalized C subjunctives that we looked at here must be interpreted in a specific world poses potential problems for my analysis. Nevertheless, the CP truncation approach to C-subjunctives outlined earlier on can also be used to explain why such complements are interpreted in a single world, even though they are selected in the absence of the W-feature.

The fact that C subjunctives truncate the embedded CP, and hence involve syntactic clause union, also implies that the matrix and the embedded clause in such cases are conjointly interpreted from a semantic standpoint: as we already briefly noted in 4.1, such

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clauses function as a single event and a single proposition (unlike NC subjunctives which denote two separate events). As a result, the fact that C subjunctives exhibit realis interpretations and extensional, single-world anchoring is not a consequence of them being selected by predicates containing the W-feature (as is the case with indicatives) but rather a consequence of the structural truncation that they undergo: given that these complements are syntactically incorporated within the matrix CP domain, as a result of embedded CP truncation, they are also extensionally anchored to the actual world via matrix CP, hence their realis interpretations. In this sense, C subjunctives that we looked at here behave as any simple matrix proposition, which exhibits the same type of world anchoring. Therefore, even though these complements posed problems for my analysis of subjunctive selection on the surface, a deeper study of their formal and semantic properties allowed to resolve these problems, and subsume C subjunctives under the same syntactic selection approach as their NC counterparts.

## **5.** CONCLUSION

The syntactic approach to BlkS complementation developed in this paper allowed me to address the most salient problems related to BlkS distribution. First of all, the claim that subjunctive selection constitutes the default syntactic option in embedded clausal environments was used to account for the lexical diversity observed between BlkS-selecting predicates, which does not typically obtain across languages. Secondly, the idea that BlkS complements may involve different types of underlying structures, depending on whether or not they undergo CP-truncation, served to explain why these complements can exhibit different types of semantic world anchoring as well, despite the fact that they are all selected in the absence of the World-feature. In this context, the atypical, single-world interpretations associated with C subjunctives were analyzed as merely an additional manifestation of their syntactic anaphoricity, resulting from the structural truncation that they undergo, which leads to semantic event unification between the matrix and the embedded clause. As a result, my default-selection approach to Balkan subjunctive should be seen as fully compatible with the semantic data pertaining to BlkS distribution, regardless of the semantic contrasts between irrealis and realis-type complements.

#### REFERENCES

- Agouraki, Y. (1991) "A Modern Greek complementizer and its significance for Universal Grammar", UCL Working Papers in Linguistics 3, 1-24.
- Baunaz, L., Puskas, G. (2014) "The selection of French mood", in M.H. Côté and E. Mathieu (eds.) Variation within and across Romance Languages: Selected Papers from the 41th Linguistic Symposium on Romance Languages, John Benjamins, Ottawa.
- Chomsky, N. (1981) Lectures on Government and Binding, MIT Press, Cambridge, Mass.
- Dobrovie-Sorin, C. (1994) The Syntax of Romanian, Mouton de Gruyter, Berlin & New York.
- Farkas, D. (1984) "Subjunctive complements in Romanian", in P. Baldi (ed.) Papers from the XIIth Linguistic Symposium on Romance Languages, John Benjamins, Philadelphia.
- Farkas, D. (1985) Intensional Descriptions and the Romance Subjunctive Mood, Garland, New York.
- Farkas, D. (1992) "On the semantics of subjunctive complements", in P. Hirschbuehler et al. (eds.) Romance Languages and the Modern Linguistic Theory, John Benjamins, Amsterdam.

- Giannakidou, A. (1998) *Polarity Sensitivity as (Non)veridical Dependency*, John Benjamins, Amsterdam/Philadelphia.
- Giannakidou, A. (2009) "The dependency of the subjunctive revisited: Temporal semantics and polarity", *Lingua* 119, 1883-1908.
- Jary, M., Kissine, M. (2014) Imperatives, Cambridge University Press, Cambridge.
- Joseph, B.D. (1983) *The Synchrony and Diachrony of the Balkan Infinitive: A Study in Areal, General and Historical Linguistics*, Cambridge University Press, Cambridge.
- Krapova, I. (1998) "Subjunctive complements, null subjects and case checking in Bulgarian", *University of Venice Working Papers in Linguistics* 8(2), 73-93.
- Landau, I. (2004) "The scale of finiteness and the calculus of control", *Natural Language and Linguistic Theory* 22, 811-877.
- Mišeska Tomić, O. (2006) Balkan Sprachbund: Morphosyntactic Features, Springer, Dordrecht.
- Philippaki-Warburton, I. (1985) "Word order in Modern Greek", *Transactions of the Philological Society* 2, 113-143.
- Portner, P. (1997) "The semantics of mood, complementation and conversational force", *Natural Language Semantics* 5(2), 167-212.
- Quer, J. (1998) Mood at the Interface, Holland Academic Graphics, The Hague.
- Rivero, M.-L. (1994) "Clause structure and V-movement in the languages of the Balkans", *Natural Language and Linguistic Theory* 12, 63-120.
- Rouchotta, V. (1994) *The Semantics and Pragmatics of the Subjunctive in Modern Greek: A Relevance-Theoretic Approach*, PhD dissertation, University of London.
- Roussou, A. (2009) "In the mood for control", *Lingua* 119, 1811-1836.
- Schlenker, P. (2005) "The lazy Frenchman's approach to the subjunctive: Speculations on reference to worlds and semantic defaults in the analysis of mood", in T. Geerts et al. (eds.) Romance Languages and Linguistic Theory, John Benjamins, Amsterdam.
- Socanac, T. (2011) "Subjunctive in Serbian/Croatian", *Generative Grammar in Geneva* 7, 49-71.
- Socanac, T. (2012) "Subjunctive complements in Serbian/Croatian: Distributional issues", *Generative Grammar in Geneva* 8, 1-23.
- Socanac, T. (2017) Subjunctive Complements in Slavic Languages: A Syntax-Semantics Interface Approach, PhD dissertation, University of Geneva.
- Terzi, A. (1992) *PRO in Finite Clauses: A Study of the Inflectional Heads of the Balkan Languages*, PhD dissertation, CUNY.
- Todorovic, N. (2012) *The Subjunctive and Indicative Da-complements in Serbian: A Syntactic-Semantic Approach*, PhD dissertation, University of Illinois.
- Varlokosta, S. (1993) "Control complements in Modern Greek", University of Maryland Working Papers in Linguistics 1, 144-163.
- Zwart, F. (1995) "Nonveridical contexts", Linguistic Analysis 25(3-4), 286-312.