

Distribution of PRO in Serbian Subjunctives

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Abstract

The paper investigates distribution of PRO in Serbian subjunctives by following the tenets of Landau's (2000, 2004) theory of control. The goal of the paper is to present theoretically-based and empirical evidence for two types of Serbian subjunctives: Type I and Type II, and to argue that PRO is generated and motivated independently of Case or Binding Theory. I make three main claims in this study. First, PRO in Serbian subjunctives depends on the interaction of Tense [T], Agree [Agr], and Reference [R]. Second, Type I subjunctives allow only PRO, which is anaphoric, or [-R], while Type II subjunctives allow a lexical DP or pro, which is [+R], or an independent reference. In addition, I argue that Type I subjunctives are untensed, whereas Type II subjunctives are tensed. Third, Landau (2004) assumes that [-R] prohibits PRO from being dispatched to the spell-out immediately, and that PRO enters Agreement with the matrix functional head. I argue that his theory has fallen short of providing conceptually strong arguments for such a stipulation. Instead, I propose Harwood's (2015) variable phase approach that heeds to more dynamic phase structure. By 'shifting' the phase to a higher level domain, that is to the matrix clause vP, PRO becomes accessible to the probe, and the derivation of subjunctives converges.

Key words: PRO, Serbian, subjunctives, tense, agreement

1 Introduction

Standard grammars (Stanojčić & Popović, 1992; Piper et al., 2005) group Serbian subjunctives among *da* (complementizer) + present constructions. This classification is mainly based on their structure, which is illustrated in (1).

- 1) a. Ona voli da radi.
 She like.PRES.3sg that work.PRES.3sg
 (She likes to work.)
- b. Ona nastoji da bude poznati maneken.
 She intend.PRES.3sg that be.PRES.3sg famous model
 (She intends to work.)

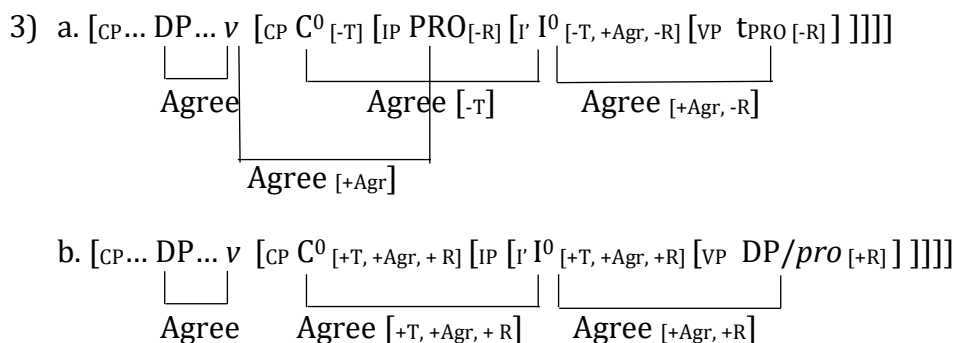
Latest work on Serbian syntax maintains, though, that Serbian subjunctives should be treated as a separate syntactic unit analogous to subjunctives in other languages (Janić, 2012, Miškeljin, 2012; Todorović, 2012). Yet, irrespective of some recent analyses, descriptions of Serbian subjunctives are generally sparse in literature on Serbian syntax, and theoretical considerations that underlie the exploration of Serbian subjunctives are mainly absent from the research.

In this paper, I present a detailed exploration of Serbian subjunctives by making three major assertions. First, there are two types of Serbian subjunctives: Type I and Type II, both of which are complement clauses. Subjunctive types are determined based on the selecting predicates and the subjects generated in the complement clause. Type I subjunctives bear PRO, while Type II subjunctives are specified for a lexical DP or *pro*. This is shown in (2)a and (2)b, respectively.

- 2) a. Ona počinje da PRO broji.
 She start.PRES.3sg that PRO count.PRES.3sg
 (She is starting to count.)
- b. Ona je odlučila da *pro* učestvuje.
 She AUX decide.PAST.3sg that *pro* participate.PRES.3sg
 (She decided to participate.)

Second, to classify Serbian subjunctives and systematically account for the distribution of PRO (and other empty categories), I adhere to Landau's (2000, 2004) theory of control whose fundamental claims are grounded in Chomsky's (2000, 2001) Minimalist approach. I, therefore, provide an analysis of Type I and Type II Serbian subjunctives. The analysis is shown in (3)a and (3)b.¹

¹ I assume that there is a [T] feature that can be assigned to the head INFL. Therefore, I will use [T] to indicate the feature Tense and I⁰ and IP to indicate the head INFL and the INFL phrase, respectively.



Third, according to Chomsky's (2001) phase approach (which constitutes an important part of Landau's (2000, 2004) theory), PRO finds itself within the IP of the embedded clause wherefrom it is sent to the spell-out. This renders it inaccessible for further syntactic operations. Thus, Landau's (2004) argument that PRO enters Agreement with the functional head of the matrix clause cannot hold. To disentangle this conundrum, I maintain Harwood's (2015) concept of the variable phase approach. In this approach, sub-numerations constitute a phase, but are not contingent on any particular head. I claim that the numeration has not been exhausted and that the CP does not need to be a phase. Instead, the vP of the matrix clause is the phase where PRO may freely enter Agreement with the functional head.

In the following section, I introduce Serbian subjunctives and theoretical assumptions that underlie the present analysis. The theoretical concepts comprise the summary of approaches and descriptions of PRO, and Landau's (2000, 2004) theory of control. In Section 3, I identify the main issues that have provided an impetus for the study, and I outline the objectives of the study. A comprehensive analysis of Serbian subjunctives and their interpretation is presented in Section 4. In Section 5, I summarize the main points of the study.

1.1 Serbian Subjunctives

Subjunctive structures in Serbian are embedded complement clauses preceded by the complementizer *da* (Janić, 2012). Their content is licensed by the predicate of the matrix clause that determines whether subjunctive clauses will allow tense variations or the tense will be restricted to the present tense.² For example, in (4)a and (4)b, the embedded clause is specified for the present and past tense, respectively, while the subjunctive clause in (4)c only permits the present tense.

- 4) a. On se nada da Marko dolazi.
 He self hope.PRES.3g that Marko come.PRES.3sg
 (He hopes that Marko is coming.)

² The tense that is being used in these subjunctive clauses is purely morphological, that is, it has agreement morphology.

- b. On se nada da je Marko došao.
 He self hope.PRES.3sg that AUX Marko come.PAST.3sg
 (He hopes that Marko came.)
- c. On uspeva da postigne pogodak
 He manage.PRES.3sg that score.PRES.3sg goal
 (He manages to score the goal.)
- d. On uspeva da *je postigao pogodak
 He manage.PRES.3sg that *AUX score.PAST.3sg goal
 (He manages to *scored the goal.)

(4)d is ungrammatical because the matrix verb cannot select the subjunctive structure that bears the tense other than the present tense.³

While standard grammars do not allocate too much of their resources on subjunctives in Serbian, some of more recent works have explored the status of Serbian subjunctives (Belić, 2005; Kim, 201; Janić, 2012; Miškeljin, 2012; Todorović, 2012). Janić (2012) claims that representations of subjunctives are complementary to those of indicatives in that the main distinction is made between indicative and subjunctive selecting predicates. On one hand, indicative verbs are semantically permeated with the content that is part of a real-life, factual activity or state. On the other hand, subjunctive selecting verbs are usually the verbs that refer to wishes, possibilities, desires, or the so-called irrealis state. Serbian subjunctives are not substantially different in this respect. Following Krapova's (1998, 2001) assumption of distinct types of subjunctives, Janić (2012) distinguishes between weak and strong subjunctives. The division is mainly based on the properties of the selecting matrix verb and the subjects of the complement clause they allow (PRO or DP/*pro*). Unlike Janić (2012), who does not adhere to any particular syntactic framework to account for Serbian subjunctives, Krapova (1998, 2001) offers a classification of Bulgarian subjunctives that is predicated on the Minimalist assumptions (Chomsky, 2000, 2001). The author (1998) contrasts Type I and Type II Bulgarian subjunctives. In addition, she assumes that there is a V-to-T-to-C movement within the CP phase and that PRO, in Type I subjunctives, receives the Null Case (Martin 2001). Miškeljin's (2012) paper follows, not only Krapova's (1998) categorization, but also Landau's (2000, 2004) theory of control. Her study is one of the few (if not the only one) that provides some evidence for Landau's (2000, 2004) system based on subjunctive structure in Serbian. The author (2012) explores untensed and tensed infinitivals and subjunctives, whereby the latter are divided into Type I and Type II. Miškeljin (2012) unorthodoxly, and contrary to Landau's (2004) assumptions, argues that both types allow PRO as their subject. In addition, the author divides Type II subjunctives into non-obviative and obviative. The former allow only a lexical DP or *pro*, whereas the latter license only PRO.⁴

³ The tense of the subjunctive selected by the verb 'hope' is an exception. The majority of Type II selecting predicates can only license the present tense morphology, which I indicate in the analysis. I also show that both types of Serbian subjunctives do not differ in terms of the tense they permit, but only in the selection of subjects.

⁴ This is incorrect as the only difference between obviative and non-obviative subjunctives is in [Agr] on C⁰ (Landau, 2004, p. 857).

Governed by the previous research on Serbian subjunctives, I provide evidence for two types of subjunctives. They are selected based on the semantic content of the matrix verb and the interaction of tense and agreement (which are syntactically motivated). Contrary to Miškeljin (2012), I do not maintain that both types allow PRO. Instead, I claim that Type I Serbian subjunctives allow only PRO, while Type II can license either a DP or *pro*.

2 Theoretical Considerations

In the following two sections, I present relevant background theoretical assumptions. First, I describe the null category, PRO. Then, I elaborate on the fundamentals of the theory that underlies the entire present paper analysis – Landau’s (2000, 2004, 2006) theory of control.

2.1 PRO

PRO is considered to be a null element specified and licensed by the verb of the matrix clause. It thus receives its theta-role from the matrix verb and assumes the position of the subject of the embedded non-finite clause (Adger, 2003). The main motivation behind stipulating PRO stems from the Theta Criterion (Chomsky, 1981) which specifies that each argument of the verb must be assigned a theta-role. Therefore, sentences such as (5) require an empty category to behave as a subject that is phonetically null. PRO in (5) is co-indexed with John and, thereby, anaphoric.

5) John_i managed to PRO_i pay for the tickets.

Chomsky (1981) defines PRO as a pronominal anaphor, which indicates that it is both [+pronominal] and [+anaphoric]. According to the Binding Theory, PRO can be both bound (Principle A) and free (Principle B) (Chomsky, 1981). The distribution of PRO as both an anaphor and a pronominal has been temporarily solved by the PRO Theorem, which argues that PRO cannot be governed (Adger, 2003; Carnie, 2007). If PRO is ungoverned, then it cannot be case-marked. However, evidence from Icelandic (Sigurðsson, 2008), Russian (Moore & Perlmutter, 2000; Landau, 2008), and Hungarian (Tóth, 2000) reveals that PRO can actually bear case like any other lexical DP (quirky case in Icelandic, structural in Russian and Hungarian). Chomsky and Lasnik (1993) have invested a lot of effort into solving this issue by stipulating the Null Case that would be assigned to PRO to escape the violation of the Visibility Condition. Null Case can be assigned only to PRO, that is, no other lexical or empty element is permitted to receive this case. Such a stipulation and the fact that, to account for PRO, one needs both the PRO Theorem and Case theory, is in a direct opposition to the Minimalist Program that adheres to the idea of reducing theoretical stipulations to minimum (Hornstein, 1999).

Therefore, a number of scholars have investigated PRO and sought to develop a theory of control that pertains to the principles of Minimalism.⁵ One of these theories is Landau's (2000, 2004) theory of control. In the following section, I will describe basic mechanisms that govern this theory.

2.2 Theory of Control

Landau's (2000, 2004, 2006) theory of control is an attempt to find a unifying theoretical framework that would define control cross-linguistically. The author (2000, 2004, 2006) attempts to develop a system that "generates a typology of clausal complementation with minimal recourse to external stipulations" (Landau, 2000, p. 814). The 'minimal recourse' is constituted of certain parameters and operations. I will now describe the theoretical vocabulary indispensable for understanding the theory.

There are two types of syntactic objects necessary to understand any control theory: nominal phrases and complement clauses. Landau (2000, 2004) categorizes the latter into infinitives, subjunctives and indicatives. These are, in turn, either tensed or untensed. As regards nominal phrases, i.e. subjects of the embedded clauses, their properties ought to indicate a referential contrast between lexical DPs and *pro*, on one hand, and PRO, on the other hand. Landau (2000, 2004) uses a rich scope of privative features specified on functional heads and DPs to show the distribution of subjects. Functional heads I^0 and C^0 are specified for [T] and [Agr], while DPs and null elements (*pro* and PRO) bear a reference feature [R] (Reuland & Reinhart, 1995). [T] can occur on C^0 if, and only if, the tense of the embedded complement is selected by the matrix predicate. If the tense is free, i.e. independent, C^0 does not bear [T]. Anaphoric tense, [-T], is assigned to the two functional heads if these are specified for the tense identical to the one in the matrix clause. The dependent tense [+T] is assigned elsewhere. The configuration of [T] is summarized in (6).

- 6) a. Anaphoric tense = [-T] on I^0/C^0
 b. Dependent tense = [+T] on I^0/C^0
 c. Independent tense = [+T] on I^0 , \emptyset on C^0

Landau (2004, p. 839)

Tense is semantic, which indicates that a complement clause may bear [+T], i.e. it can be tensed, but carry no tense morphology, or it can be [-T] and possess the tense morphology. What regulates the morphology of the embedded clause is the feature [Agr]. This feature is

⁵ Hornstein (1999) lays out the movement theory of control in which he dispenses with theta-roles on lexical DPs and treats theta-roles as features. PRO is forgone as its place is taken by a lexical DP or *pro* that emerges in the vP, and moves in consecutive steps to the subject position of the matrix clause. Culicover and Jackendoff (2001) claim that this is not the way control works. They raise the questions of control with verbs such as 'promise' and 'vow', and extend their argument to a number of examples stemming from nominal structures. The authors (2006) argue that control ought to be completely handed over to semantics. I follow Landau's (2000, 2004) theory of control as it offers a middle ground between these theories. It balances syntactic, morphological and semantic descriptions in order to provide motivation for PRO, and it does this by relying mostly on features and operations that are already present in the theory.

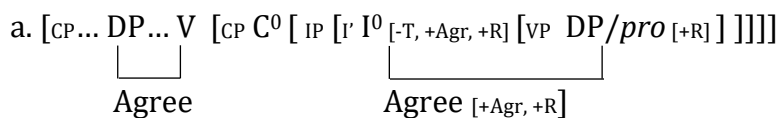
strictly morphological for it stands for a bundle of phi-features. Thus, if there is agreement morphology, [+Agr] is present on I⁰, while its presence on C⁰ is parasitic on [+T].

Another feature mentioned above that is quite important for the distribution of lexical DPs and null elements is [R], or the reference feature. It was first stipulated by Reuland and Reinhart (1995), who postulated it for the purposes of explaining Dutch and German *sich*. It is specified on PRO as anaphoric, that is, [-R], while it is [+R] on *pro* or a lexical DP. Landau (2004) considers PRO to be an SE-like anaphor, which is “not subject to condition A (since they lack a reflexivizing function) but are subject to Chain Condition, which forbids them from heading chains” (p. 841). The feature is assigned a plus or minus value on the nominal phrase under specific configurations. For example, “whenever I⁰ or C⁰ are specified for [+T, +Agr], then they automatically come to bear [+R]; any other feature constitution – [+T, -Agr], [-T, +Agr], [-T, -Agr] – is associated with [-R]” (ibid., p. 842). Albeit a straightforward stipulation, the R-assignment rule serves to distinguish PRO from lexical DPs or *pro* on independent interpretive grounds.

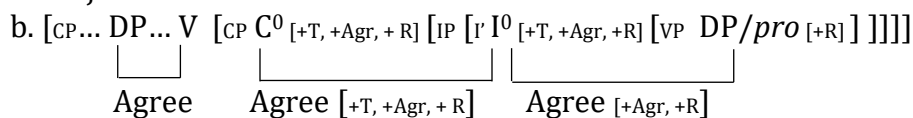
Lastly, in order for the clausal and nominal syntactic objects to interact, as is the goal of every control theory, there needs to be a connecting element. Syntactic operations (as per Chomsky 2000) provide the ‘machinery’ for this. The operation Agree, specifically, ensures that all the objects enter Agreement and match and check their features. According to Landau (2004), the probe is the matrix functional head (either T or *v*) whose potential goal is PRO due to its anaphoric [-R] (p. 843). The probe, an essential bolt in the Agree operation, is a way of coindexing PRO’s phi-features with those of antecedent. When two syntactic objects enter the agreement relationship, their features are checked against each other.

Therefore, feature configurations and the interaction of operations⁶ are sufficient for a derivation of infinitives, indicatives, and subjunctives. (7)a below shows Landau’s (2004) ‘calculus’ of an indicative, no-control clause, and no-control F(ree)-subjunctive clause is displayed in (7)b.

7) Indicative clause



F-subjunctive clause



Since indicative complements, (7)a, have independent tense, the embedded C⁰ is assigned no [T, Agr] features, which further implies that R-assignment rule cannot be applied to C⁰. (7)b, on the other hand, indicates that Balkan F-subjunctives bear dependent tense and agreement. All the features are present on the two functional heads, C⁰ and I⁰, and they cancel each other by checking and matching under Agree. Landau (2004) argues that “checked

⁶ Landau (2004) refers to this interaction as the ‘calculus of agreement and tense’.

features persist to the end of their phase, the controller DP does not “use up” the features of that functional head, which can enter another checking relation before they are erased” (p. 843). Therefore, [-R] features on PRO are interpretable and visible to Agree from the outside of the CP phase, while [+R] features check off each other on I⁰ and C⁰ without triggering Agree between the matrix functional head and the lower-level DP or *pro*.

3 Objectives

There are in particular three main issues that I attempt to address in this study. First, previous research has shown that Serbian subjunctives have not been explored in a principled way within more recent theories, such as Landau’s (2000, 2004) theory. Second, the classification of Serbian subjunctives lacks solid empirical and conceptual support. Third, mechanisms that trigger the emergence of PRO have frequently been linked to Case and Binding, which requires a lot of additional structure. I believe that syntactic ‘instruments’ independent from Case or Binding can accommodate the distribution of PRO.

To provide answers to the raised issues, I adhere to the basic tenets of Landau’s (2000, 2004) theory of control. My objective is to present a typology of Serbian subjunctives with a complementizer *da*, and to argue that the distribution of PRO is derived on the grounds of tense and agreement interaction rather than the intrinsic properties of PRO, Binding or Case theory. Therefore, the main research question of the present study is: *How is PRO distributed in Serbian subjunctives?*

4 Analysis

In the analysis, I first provide a categorization of Serbian subjunctives and their feature specification. The categorization is contingent on semantic properties of selecting predicates, whereas the feature configuration development is predicated on Landau’s (2000, 2004) theory. Next, I show the interaction of mechanisms behind the distribution of PRO in Serbian subjunctive clauses, which presents the longest part of the analysis. Lastly, I draw parallels of PRO in Serbian subjunctives with other languages (Balkan languages).

4.1 Categorization

Maintaining Krapova’s (1998) and Janić’s (2012) categorization of Bulgarian and Serbian subjunctives, I classify Serbian subjunctives into Type I and Type II subjunctives. To account for the categorization, though, governed by the fact that semantic properties of the matrix verb guide the selection of subjunctives, I have developed a classification of Serbian subjunctive selecting predicates. These can be viewed in the list below.⁷

⁷ The list is tentative and based on other authors’ works (Giannakidou 2009, Landau 2004 (EC & PC selecting predicates), Todorović 2012, Janić 2012).

Serbian subjunctive selecting predicates

Type I:

Aspectual (početi, stati, nastaviti...) ('begin, start, stop, continue...')

Modal (moći, morati, trebati, biti sposoban da...) ('can, must, need, be able to...')

Implicative (usuditi se, uspeti) ('dare, manage...')

Factive (mrzeti, ne voleti...) ('hate, dislike...')

Type II:

Desiderative (želeći, preferirati, odlučiti, zahtevati, nadati se, planirati...)

('want, prefer, decide, demand, hope, desire, plan...')

Commissive (ponuditi, obećati, zavetovati se...) ('offer, promise, vow...')

Directive: (narediti, predložiti...) ('order, suggest, recommend...')

According to some accounts (Belić, 2005; Janić, 2012; Miškeljin, 2012), Type I predicates select complement clauses that restrict the tense specification to the present tense. Type II subjunctives are slightly more flexible with respect to their morphological tense specifications as they allow more variable tense selection. However, I claim that this view is incorrect because both subjunctive types allow only the present tense morphology. This is shown in examples in (8).⁸

8) a. Type I

Ne volim dugo da pešačim.
pro [I] not like.PRES.3sg long that walk.PRES.3sg
 (I don't like to walk for a long period of time.)

b. Type I

Ne volim dugo da *sam pešačio.
pro [I] not like.PRES.3sg long that AUX walk.PAST.3sg
 (I don't like to *walked for a long period of time.)

c. Type II

Ponudio sam Marku da dodje.
*pro*_i [I] offer.PAST.3sg AUX Mark that come.PRES.3sg
 (I offered Mark to come.)

⁸ I have not specified whether the matrix clauses select PRO or *pro* as this will be shown in the subsequent section.

d. Type II

Ponudio sam Marku da *je došao
*pro*_i [I] offer.PAST.3sg AUX Mark that AUX come.PAST.3sg

Type II selecting predicates, akin to Type I predicates, prohibit any other tense but the present tense morphology. Therefore, the difference between Type I and Type II subjunctives is only visible through the selection of their subjects (PRO or DP/*pro*).

4.2 Feature Specification

Whether PRO or DP/*pro* will be the subjects of the embedded clause is predicated on the argument structure that matrix verbs license (Janić, 2012). Hence, the semantic classification of subjunctive selecting predicates is most certainly quite useful. Still, in order to precisely determine the distribution of subjunctive subjects, I put forward a feature configuration of the two types of Serbian subjunctives. I assume that Type I subjunctives are analogous to Landau's (2004) Balkan C(ontrolled)-subjunctives, whereas Type II subjunctives are equated with Balkan F(ree)-subjunctives. The configuration of features on Serbian subjunctive functional heads is presented in Table 1.

Table 1: Feature configuration of I^0 and C^0 of Serbian subjunctives

	Type I	Type II
I^0	[-T, +Agr]	[+T, +Agr]
C^0	[-T]	[+T, +Agr]
Subject	[+R]	[+R]

By definition (R-assignment rule), Type I subjunctives ought to select PRO, as it is [-R], while the subject of Type II subjunctives is [+R], that is, either a lexical DP or *pro*. The full feature specification is shown in Table 2.

Table 2: Complete feature configuration of Serbian subjunctives

	Type I PRO	Type II DP/ <i>pro</i>
I^0	[-T, +Agr]	[+T, +Agr]
C^0	[-T]	[+T, +Agr]

4.3 Interpretation

Such a specification should thus ensure a full and systematic interpretation of Serbian subjunctives. I present the analysis of Serbian subjunctives in (9), whereby PRO is the subject of Type I (9)a, and *pro* is the subject of Type II subjunctives (9)b.

- 9) a. [CP... DP Marko... v pokušava [CP C⁰ da [-T] [IP PRO [I' I⁰ [-T, +Agr, -R] [VP t_{PRO} [-R] glumi]]]]]
-
- |-----|
|-----|
|-----|
- Agree
Agree [+Agr]
Agree [-T]
Agree [+Agr, -R]

Marko_i try.PRES.3sg that PRO_i act.PRES.3sg
(Marko is trying to act.)

- b. [CP...DP Marko... v želi [CP C⁰ da [+T, +Agr, +R] [IP [I' I⁰ [+T, +Agr, +R] [VP DP/pro [+R] glumi]]]]]
-
- |-----|
|-----|
- Agree
Agree [+T, +Agr, +R]
Agree [+Agr, +R]

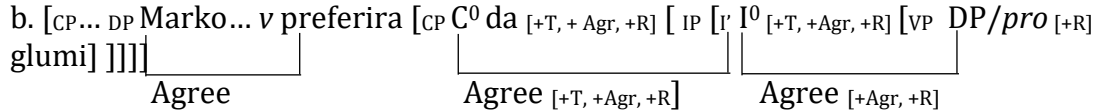
Marko_i want.PRES.3sg that *pro*_i act.PRES.3sg
(Marko wants to act.)

(9)a does not allow a lexical DP or *pro* to assume the position of the subject of a subjunctive clause because of the anaphoric [-R]. [-R] can be specified only on anaphoric PRO which enters the Agreement relationship with the functional head of the matrix clause. [-T] on I⁰ is checked against [-T] on C⁰, while [-R] is checked on I⁰. PRO moves to the [Spec, IP] as it is required to find the closest slot to the functional head of the matrix verb that licenses it through Agree. Although PRO is not at the edge of the phase, it is visible to the probe because of its anaphoric feature. In (9)b, the functional head of the matrix clause does not enter any relationship with a lexical DP or *pro* because the subject of the subjunctive clause bears [+R] feature. [+R] is first checked off at I⁰, and then at C⁰, at the end of the phase. Therefore, the predicate of the matrix verb in (9)b specifies both the tense and agreement configuration, which are [+T] and [+Agr], and the reference, which is independent of the subject of the matrix clause, i.e. it is non-anaphoric [+R]. This configuration and the interaction of features provide syntactic evidence for what appears to be a semantic and morphological issue. In addition, tense and agree feature specifications and their interaction indicate that Type I Serbian subjunctives are untensed ([-T]) with a full morphological structure [+Agr], whereas Type II Serbian subjunctives are both tensed and morphologically inflected. This is shown in (10).⁹

- 10)a. [CP... DP Marko... v uspeva [CP C⁰ da [-T] [IP PRO [I' I⁰ [-T, +Agr, -R] [VP t_{PRO} [-R] glumi]]]]]
-
- |-----|
|-----|
|-----|
- Agree
Agree [+Agr]
Agree [-T]
Agree [+Agr, -R]

Marko_i manages.PRES.3sg that PRO_i act.PRES.3sg
(Marko manages to act.)

⁹ For more examples, view Appendix A and B.

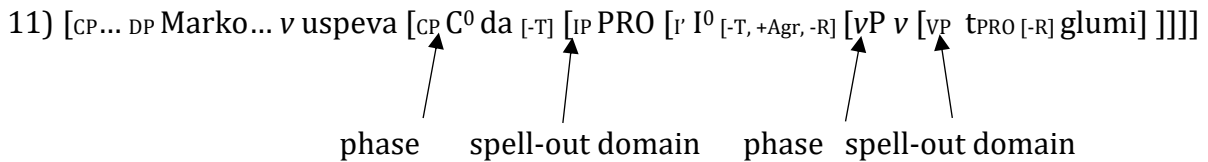


Marko_i prefer.PRES.3sg that *pro*_i act.PRES.3sg
(Marko prefers to act.)

Landau's (2000, 2004) theory assumes that PRO is accessible for Agree despite its position within the IP, that is, it enters the Agreement relationship with the functional head of the matrix clause by crossing the phase. Chomsky's phase theory (2000, 2001) argues that there are two major phases, CP and vP. They are determined in the numeration that comprises sub-numerations. These in turn constitute phases. CP would be a higher phase, while vP is the clause-internal phase. Still, phases are not sent to the spell-out in their entirety, but

“only the complement of the phase head, the spell-out domain, is sent to spell-out, whilst the phase head and its specifier, the phase edge, remain in the syntax and are only spelt out with the higher phase. A side effect of all this is that any material contained inside the completed spell-out domain would be unavailable for further syntactic computations” (Harwood, 2015, p. 526).

Phases and spell-out domains are shown in (11).



Hence, PRO emerges in the spell-out domain and should not be further accessible to syntactic computations, that is, “if an item has been shipped off, along with the rest of the spell-out domain, to PF and LF, then it is no longer visible to the syntactic component, and so cannot enter into any further syntactic operations with elements outside of the phase” (Harwood, 2015, p. 825).

Following Landau (2004), a way to solve this hindrance is to make another stipulation in claiming that PRO is visible to the probe due to its [-R] feature, which is anaphoric, and it needs to be coindexed with the subject of the matrix clause. This, however, seems to be a stipulation that does not completely solve the issue. Therefore, I maintain Harwood's (2015) proposal of dynamic approach to phases.¹⁰ The author's (2015) main argument is that “the phase is not complete until the last item in sub-numeration has been merged into the workspace, irrespective of what the last item is” (p. 557). Such a state of affairs permits the last item in the sub-numeration to project to vP, which would make up a phase consisting of

¹⁰ This approach is based on some previous phase structure approaches such as Bobaljik and Wurmbrand (2005), Wurmbrand (2014), and Bošković (2013, 2014).

[v, CP, C, IP, I], that is, instead of being the phase head, C⁰ is merely the head of the internal CP.¹¹ This is shown in Figure 1.

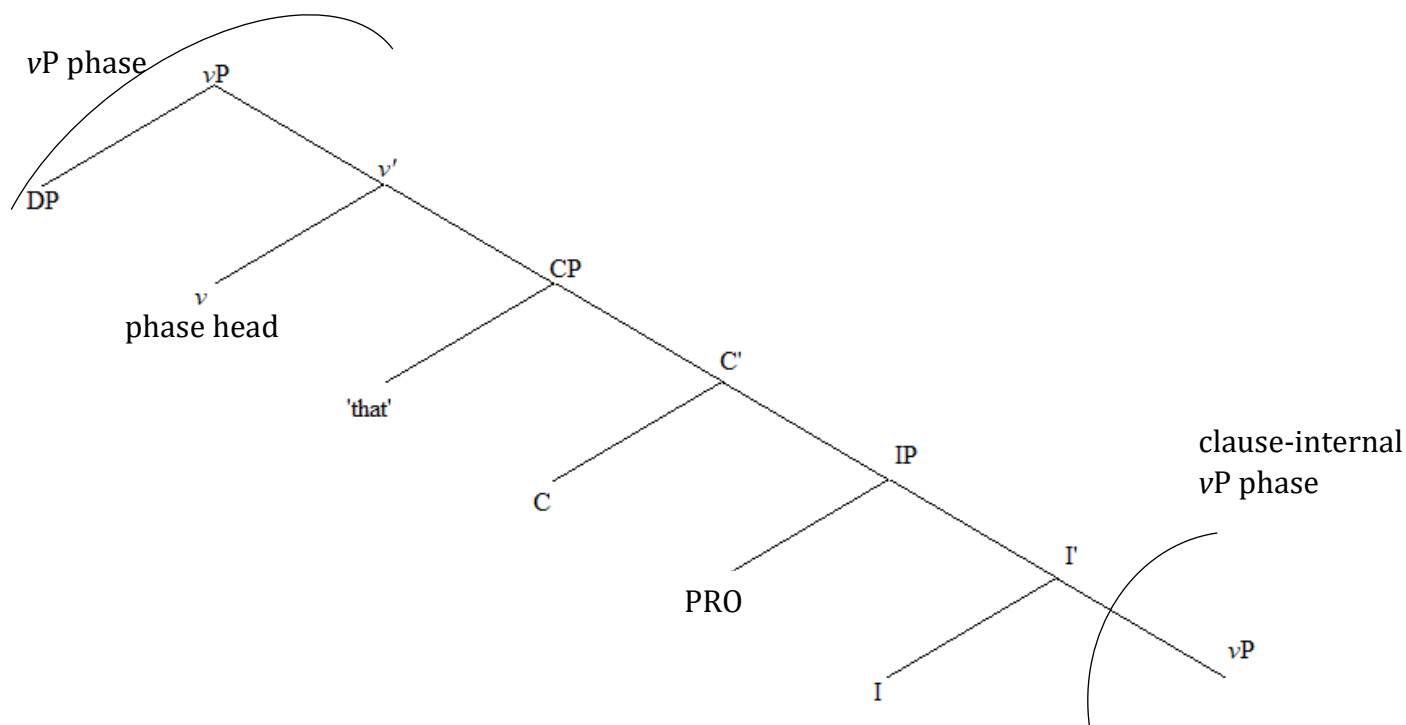


Figure 1: Variable phase structure – Type I Serbian subjunctives

In this way, the distribution of PRO is thoroughly and efficiently motivated without resorting to redundant rules or stipulations. PRO is visible to the functional head, and, thereby, accessible for further syntactic computations when it moves to the spec IP position. Contrary to PRO, a lexical DP or *pro* of Type II subjunctives in Serbian does not enter agreement with the functional head of the matrix clause due to their [+R]. Therefore, the internal CP phase is retained (Fig. 2).

¹¹ Type I subjunctives are usually selected by predicates that are referred to ‘complex predicates’, especially aspectual and modal verbs. This is another reason why it can be assumed that a phase is not complete until all the elements in the numeration merge.

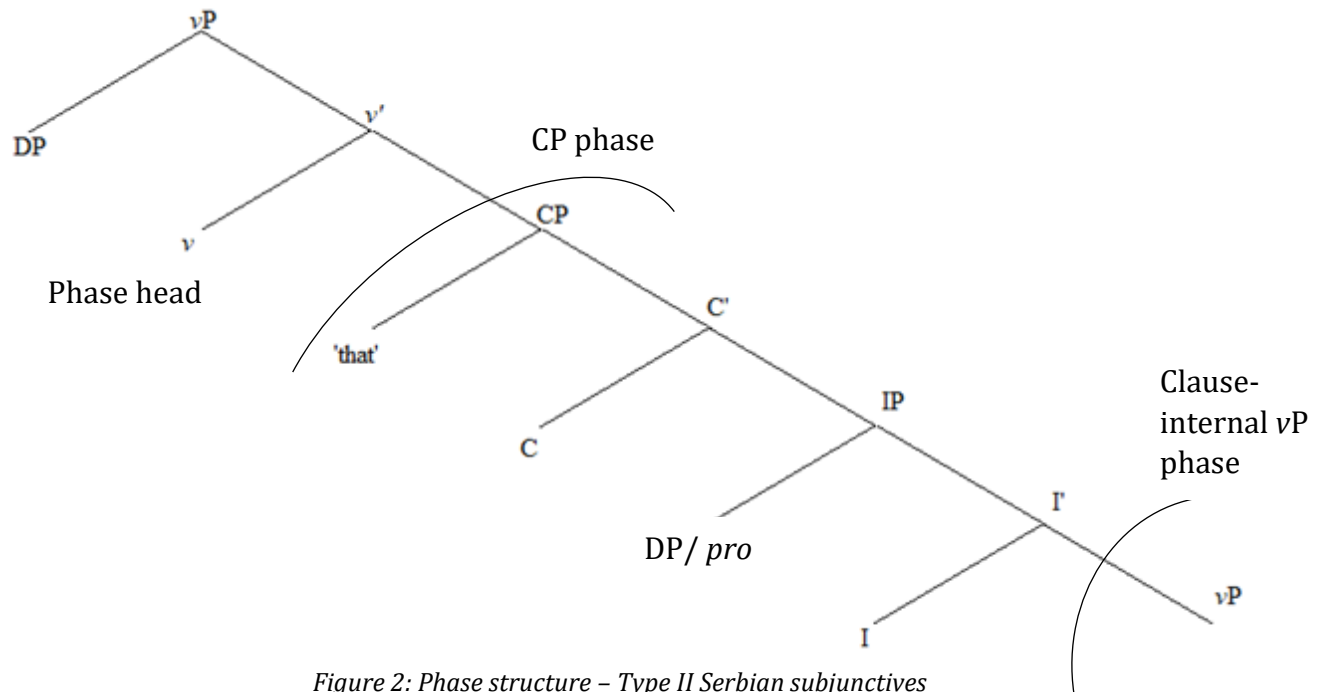


Figure 2: Phase structure – Type II Serbian subjunctives

4.3.1 Balkan Languages

Landau's (2004) calculus and Harwood's (2015) phase structure approach can in a unifying and systematic way explain the motivation for PRO in Type I Serbian subjunctives. I argue that the analysis can be applied to subjunctives in other Balkan languages such as Bulgarian (Krapova, 1998), Romanian (Dobrovie-Sorin, 1993), Greek (Terzi, 1997), and Albanian (Dobrovie-Sorin, 2001). Although almost all these languages belong to different language families, they are spoken mainly in the Balkans, which renders them Balkan languages. I show in (12) that PRO is generated in Bulgarian, Romanian, Greek, and Albanian subjunctives in the same manner as in Serbian Type I subjunctives.¹²

12) a. Bulgarian

Ivan₁ se opita da PRO₁ razbere vprosa
 Ivan₁ try.PAST.3sg that PRO₁ understand.PRES.3sg question
 (Ivan tried to understand the question.) (Krapova, 1998, p.74)

b. Romanian

Maria₁ a încercat să PRO₁ plece.
 Maria₁ try.PAST.3sg that PRO₁ leave.PRES.3sg
 (Maria tried to leave.) (as per Dobrovie-Sorin, 1993)

¹² For a more detailed analysis of these examples see Appendix C.

c. Greek

I Maria₁ prospathise na PRO₁ divasi.
 The Maria₁ try.PAST.3sg that PRO₁ read.PRES.3sg
 (Maria tried to read.) (Terzi, 1997, in Landau 2004)

d. Albanian

Beni₁ filloi të PRO₁ lexonte Tre Muskëtjerët.
 Beni₁ start.PAST that PRO₁ read.PRES.3sg Three Musketeersë
 (Beni started to read Three Musketeers.) (as per Dobrovie-Sorin, 1993)

PRO is generated as the subject of the subjunctive clause within the vP phase because it is anaphoric [-R], and enters Agreement with the matrix functional head. Checking and deletion of [T] and [Agr] on I⁰ and C⁰ control the derivation of the entire sentence, wherein the subjunctive is untensed, but bears the agreement features.

5 Conclusion

In this paper, I have managed to provide an answer to the research question which explores how PRO is distributed in Serbian subjunctive clauses.

First, I have shown that there are two subjunctive types, Type I and Type II. The former selects PRO, while the latter licenses the DP or *pro*. Type I subjunctives are [-T], but [+Agr], which means that they are untensed despite agreement morphology on the embedded verb, while Type II Serbian subjunctives are both tensed and permit tense morphology in the embedded clause. Type I subjunctives are, therefore, analogous to Landau's (2004) C-subjunctives, and Type II subjunctives share the identical configuration to that of F-subjunctives in Balkan languages (p. 869). Furthermore, if one is to maintain Landau's (2004) control typology, it can be claimed that Type I subjunctives exhibit Obligatory Control, whereas Type II Serbian subjunctives pertain to No Control (p. 869).

In addition to categorizing Serbian subjunctives and describing how their subjects are generated the analysis reveals that Landau's (2000, 2004) theory requires a different phase structure approach, for Chomsky's (2000, 2001) phase theory is limiting with regard to the distribution of PRO within Serbian subjunctives. The approach I assume is Harwood's (2015) phase structure approach. The author (2015) puts forward an idea of a derivation system that "continues to merge items from the sub-numeration until there is no more material left to (externally) merge" (p. 558). Under these circumstances, one can assume that, with Type I Serbian subjunctives, CP is not a phase, but a complementizer of the vP. PRO is thus freely allowed to enter the Agree relationship with its licensor under the same phase. By assuming the variable phase approach, and by following Landau's (2000, 2004) concepts of control, I have illustrated that the distribution of PRO in Serbian subjunctives is detached from either Case or Binding. In addition, it can be motivated not only in Serbian subjunctives within this theoretical framework, but also in subjunctives cross-linguistically. I have demonstrated that

the distribution of PRO can be accounted for in other Balkan languages such as Bulgarian, Romanian, Greek and Albanian.

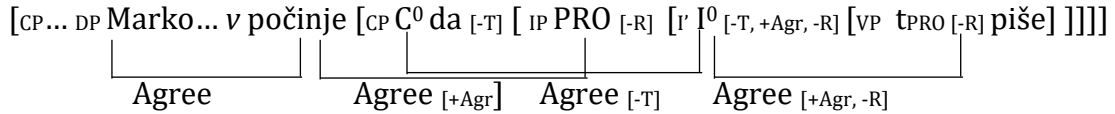
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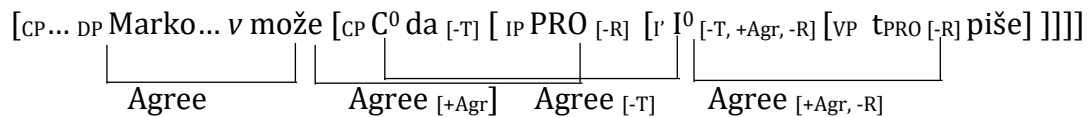
Appendix A: Type I Serbian Subjunctives

13)a. Aspectual



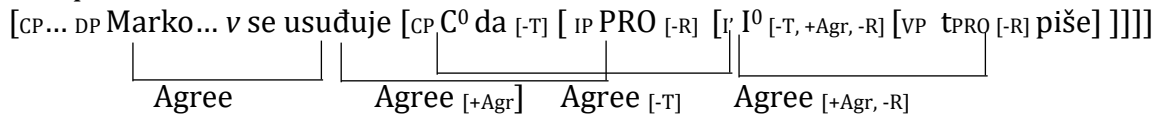
Markoi start.PRES.3sg that PRO_i write.PRES.3sg
(Marko is starting to write.)

b. Modal



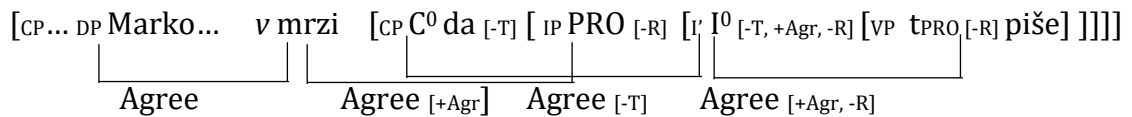
Markoi can.PRES.3sg that PRO_i write.PRES.3sg
(Marko can write.)

c. Implicative



Markoi self.dare.PRES.3sg that PRO_i write.PRES.3sg
(Marko dares to write.)

d. Factive



Markoi hate.PRES.3sg that PRO_i write.PRES.3sg
(Marko hates to write.)

Appendix B: Type II Serbian Subjunctives

14)a. Desiderative

[CP... DPMarko...*v* zahteva [CP C⁰ da [+T, +Agr, +R] [IP [I' I⁰ [+T, +Agr, +R] [VP DP/*pro* [+R] piše]]]]]

 Agree
 Agree [+T, +Agr, +R]
Agree [+Agr, +R]

Marko_i demand.PRES.3sg that *pro*_i write.PRES.3sg
 (Marko demands to write.)

b. Commissive

[CP... DPMarko...*v* se nudi [CP C⁰ da [+T, +Agr, +R] [IP [I' I⁰ [+T, +Agr, +R] [VP DP/*pro* [+R] piše]]]]]

 Agree
 Agree [+T, +Agr, +R]
Agree [+Agr, +R]

Marko_i self.offer.PRES.3sg that *pro*_i write.PRES.3sg
 (Marko offers to write.)

c. Implicative

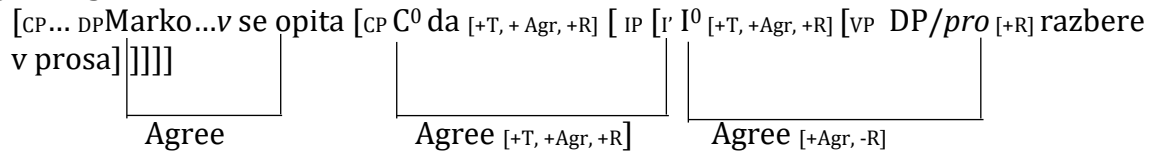
[CP...DPMarko...*v* predlaže [CP C⁰ da [+T, +Agr, +R] [IP [I' I⁰ [+T, +Agr, +R] [VP DP/*pro* [+R] piše]]]]]

 Agree
 Agree [+T, +Agr, +R]
Agree [+Agr, +R]

Marko_i suggest.PRES.3sg that *pro*_i write.PRES.3sg
 (Marko suggests that he should write.)

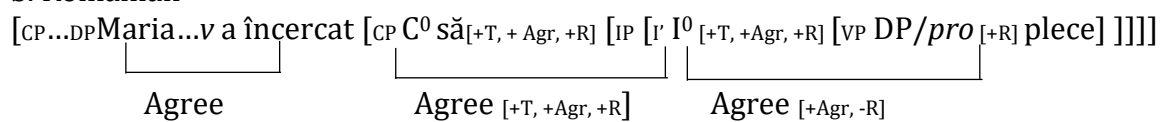
Appendix C: PRO in Balkan Languages

15)a. Bulgarian



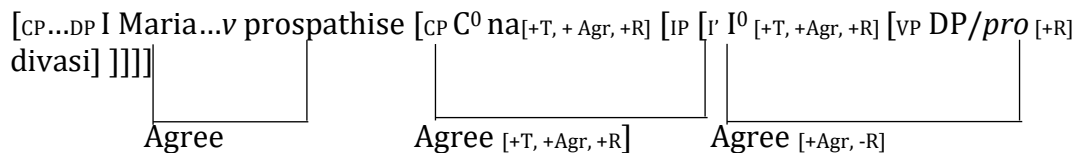
(Ivan tried to understand the question.) (Krapova, 1998, p. 74)

b. Romanian



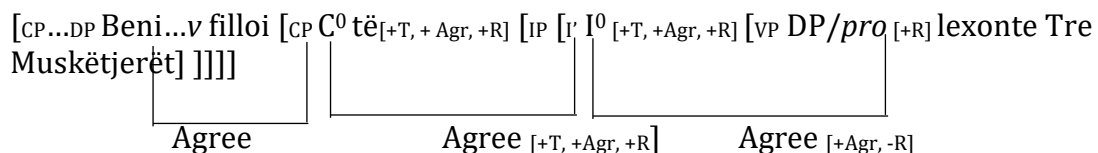
(Maria tried to leave.) (as per Dobrovie-Sorin, 1993)

c. Greek



(Maria tried to leave.) (Terzi, 1997, in Landau, 2004)

d. Albanian



(Beni started to read Three Musketeers.) (as per Dobrovie-Sorin, 2001)

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