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Syntactic Strategies Behind Free Relatives

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Izvod: IZ	Tema ove teze je sintaksa dopunskih nominalnih klauza i neodređenih generalizirajućih zavisnih rečenica u engleskom i srpskom jeziku. Ovaj rad nudi zajedničku analizu niza fenomena koji su karakteristični za dopunske relativne klauze u engleskom i srpskom, u duhu pristupa *zajedničkih struktura* ili *višestruke dominacije*. Ovaj pristup pretpostavlja postojanje posebne vrste sintaksickog spajanja konstituenata, koje se naziva i *kalemljenjem*, a ovaj rad dokazuje njegovu validnost i emprijisku zasnovanost. Glavna teza ovog rada je da kalemljenje omogućava jednostavnije objašnjenje niza fenomena vezanih za karakterstike dopunskih nominalnih klauza u oba jezika. Što se tiče podataka iz srpskog jezika, ova teza pokazuje da je pogrešna uobičajena konstatacija o slobodnijoj distribuciji dopunskih nominalnih klauza u jezicima sa fonološki nerealizovanim subjektom, i nudi analizu činjenica koje su u tom pogledu relevantne. Ova teza takođe nudi analizu neodređenih generalizirajućih zavisnih klauza u srpskom jeziku tako što definiše tip konstrukicje koji se može smatrati ovom vrstom klauze, kao i meru u kojoj ona deli svojstva sa ovim tipom klauza u engleskom jeziku. Ovaj rad obrazlaže zašto je pomeranje predikata adekvatnija analiza ovih konstrukcija od analize poznate kao *pitanje plus brisanje*. Konačno, ovaj rad nudi zanimljivo zapažanje u vezi sa prirodom klauza koje imaju funkciju predikata u prostim rečenicama sa glagolom biti.

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	distribution of FRs in langugages with null subjects is wrong, and the analysis of the relevant data is provided. This thesis also provides an account of specificational pseudoclefts in Serbian – determining what counts as this type of construction and to what degree it matches the properties of English specificiational pseudoclefts. It has been argued that their derivation involves predicate raising and not the question-plus-deletion analysis. Finally, this work provides an important insight into the nature of clausal predicates inside copular constructions in English and Serbian the key properties that connect them.
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1   IZVOD

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Ova teza takođe nudi analizu neodređenih generalizirajućih zavisnih klauza u srpskom jeziku tako što definiše tip konstrukicje koji se može smatrati ovom vrstom klauze, kao i meru u kojoj ona deli svojstva sa ovim tipom klauza u engleskom jeziku. Ovaj rad obrazlaže zašto je pomeranje predikata adekvatnija analiza ovih konstrukcija od analize poznate kao *pitanje plus brisanje*. Konačno, ovaj rad nudi zanimljivo zapažanje u vezi sa prirodom klauza koje imaju funkciju predikata u prostim rečenicama sa glagolom biti.

2   ABSTRACT

The topic of this thesis is the syntax of free relative clauses and specificational pseudoclefts, with the focus on English and Serbian. It offers a unifying analysis for the range of phenomena related to the syntax of free relative clauses in English and Serbian, within a structure sharing, or multi-dominance approach. This approach assumes the existence of a particular type of displacement in syntax, which is referred to as *grafting*, and argues for its validity on theoretical and empirical ground.

It is argued in this thesis that grafting enables a more parsimonious account of a range of phenomena related to the properties of free relatives in both languages.

As far as the Serbian data is concerned, it has been shown that the common observation about a less constrained distribution of FRs in langugages with null subjects is wrong, and the analysis of the relevant data is provided.

This thesis also provides an account of specificational pseudoclefts in Serbian – determining what counts as this type of construction and to what degree it matches the properties of English specificiational pseudoclefts. It has been argued that their derivation involves predicate raising and not the question-plus-deletion analysis. Finally, this work provides an important insight into the nature of clausal predicates inside copular constructions in English and Serbian the key properties that connect them.

Contents

3 Introduction

3.1 Goals

The topic of this thesis is the syntax of headless relative clauses or free relatives (FRs). The crucial challenge for the syntactic theory lies in the apparent paradox within the term 'headless relative clause' itself, since the defining property of the relative clause is that it has a nominal antecedent, i.e. it is embedded inside an NP. The type of embedded clause we will discuss here is illustrated in (1).

(1) a. Jim will make what you choose from the catalogue.

    b. She talked to whoever arrived within the first hour.

    c. What Mary is is a naïve girl.   (pseudocleft)

While (1a-b) occur in an argument position of the main clause lexical verbs, therefore resembling embedded questions, (1c) is an example of a pseudo-cleft construction, a copular construction with a fair share of its own specific semantic and syntactic features. What brings these two types of wh-clauses together is their status of headless relative clauses. They are to be distinguished from those in (2) and (3).

(2) a.   Jim will make the thing/any thing that/which you order from the catalogue.

b.   She talked to the girl/any girl who arrived within the first hour.

c.   The thing Mary is is a naïve girl.

(3) a.   She wants to know what you have ordered from the catalogue.

b.   She asked who arrived within the first hour.

The near paraphrases of (1) given in (2) feature a headed relative clause, which may indicate that (1) and (2) should be assigned analogous structures. Also, the need to consistently distinguish between the selectional properties of a verb like *ask* or *know* (cf. 3), which allows a clausal (question CP) complement, and a verb *make* (cf.1), which does not, suggests that the verbal complement in this case should be analyzed as a nominal phrase (DP). The DP approach was proposed in one of the early accounts by Bresnan & Grimshaw (1978), and their analysis treats the relative pronoun in FRs as the nominal head of a relative clause.

On the other hand, we may treat (1a-b) and (3a-b) as analogous structures after all. Since in both cases we are dealing with the embedded clauses without the external non-pronominal head, it is plausible that their structure is essentially the same. An in-depth investigation of FRs in other Germanic languages, such as German and Dutch (see Groos & Van Riemsdijk 1981) gives credence to such a view. On this approach, the relative pronoun is part of the CP, albeit embedded within a null-headed DP structure.

It seemed for a long time that the choice between the *Head account* and the *Comp account* is more or less an empirical issue. However, more recent theoretical developments opened up a third way to tackle the conflicting evidence - to treat FRs as syntactically ambiguous structures. This analysis allows us to treat the relative pronoun as functionally/structurally ambiguous, that is, the wh-element is shared between two independent clauses. As it will be shown in this thesis, this account offers a more straightforward explanation of the puzzling and conflicting evidence cross-linguistically. However, it does so at the expense of introducing a new syntactic operation in our theoretical toolbox – *grafting*, a type of operation *merge*, which was proposed independently by Citko (2005) and Van Riemsdijk (2006a,b).[1]

One of the goals of this thesis is to compare the data from a Slavic language, namely Serbian, with the data mainly taken from English, a representative of the Germanic language group. What makes these languages comparable in terms of FRs is the well-known phenomenon of the category and case matching effects, illustrated by (4) and Serbian examples in (5).

(4) a.   I will buy what (ever) you recommend.

     b.   I will buy what (ever) you vote for.

     c.   *I will buy for what (ever) you vote.

---

[1] Grafting is the term introduced by Van Riemsdijk (2006a,b), while Citko (2005) labels this operation as 'parallel merge'.

(5) a. Kupiću   šta (god)   mi   ti   preporučiš.

    buy-fut-1sg   what-acc *god*   me-cl   you recommend

    "I will buy what(ever) you recommend to me."

   b. Kupiću   šta   mi   (god)   ti   preporučiš.

    buy-fut-1sg   what-acc   me-cl   *god*   you recommend

    "I will buy what(ever) you recommend to me."

   c. *Kupiću   čemu (god)   se obradovao.

    buy-fut-1sg   what-dat *god* self made-happy

    "I will buy whatever he got excited about."

In both English and Serbian, the selectional properties of the main verb and the embedded one have to be observed, and the case of a wh- relative pronoun has to be licensed by both the higher and the embedded verb. The case-matching constraint is violated in (4c) where the case licensor is the preposition, while in (5c) the dative required by the embedded verb does not match the accusative case licensed by the higher verb.

I will argue here for the unifying grafting account of the Free Relatives. As shown in Milićević (2008), this approach can provide a sound account of the well-known category and case matching effects in Serbian FRs too. In the work presented here I will support this approach more extensively, and also provide an account of the internal syntax of the

FRs, and the internal structure of FR wh-constituents. That we are dealing with a complex structure is obvious from the (optional) placement of clitics in this type of clauses in Serbian, which is illustrated in (5a-b).

In addition, the approach I will argue for regarding the internal structure of the FRs, provides a better insight into the differences in the distribution of FRs between English and Serbian. As noted in the literature, English (among other Germanic languages) does not tolerate any violation of the case-matching constraint in these constructions, while most Slavic languages do allow it if the FR is associated with the subject position.

(6) a. Who(ever) arrived on time was participating in the event.

   b. *Whom(ever) you saw in the building was participating in the event.

   c. * To whom(ever) we talked then was participating in the event.

(7) a. Ko (god)   je   stigao   na vreme   učestvovao je.

      who*god*   aux arrived on time   participated aux

      "Whoever arrived on time participated."

   b. Koga   (god)   si   video   u   zgradi učestvovao je.

      whom   *god*   aux saw   in building participated aux

      "Who ever you saw in the building participated."

c. S   kim   (god)   smo tada pričali   učestvovao   je.

with who-inst *god*   aux then talked   participated   aux

"Whoever we talked to participated."

While English does not allow the case (6b) and category mismatch (6c), Serbian does (7). The challenge here is to account for such difference, preserving a unifying analysis of the FR's internal structure, as well as the assumption that the syntactic operations and the conditions under which they take place universally hold. In the FR analysis proposed in this thesis, the idea that the FR is a type of headed relative clauses is entirely dispensed with. It will be shown that the contrast observed above comes from the fact the FR is not the actual subject of the main clause. My claim is that a true FR is never allowed in the canonical (Spec-TP) subject position in Serbian and that the embedded clauses in (7) are in the A-bar position, base-generated as left-disclocated topics and not the main clause arguments. In this respect, my analysis fits the Alexiadou &Anagnostopoulou (1998) approach to the distribution of preverbal subjects in null subject languages.

Finally, I will address the structure in (1c) where an FR is part of a specificational copular clause - a specificational pseudocleft (SPC). The examples below are a brief illustration of another interesting difference between the relevant data in English and Serbian.

(8) a.   What John likes is a fool / are fools.

b.   Fools is what John likes.

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(9) a. *Šta Jovan voli je budala / su budale.

     what Jovan likes is fool are fools

     "What Jovan likes is a fool / are fools."

    b. To što Jovan voli je budala / su budale.

     that what Jovan likes is fool are fools

     "What Jovan likes is a fool / are fools."

While English features a true FR in the subject position of copular clauses, Serbian does not allow it. In the approach taken in this thesis, evidence from (9) only further supports the idea that true FRs in Serbian do not take the subject position. The analysis of Serbian pseudoclefts by Hartmann & Milićević (2015) shows that though SPCs in Serbian do exhibit some of the expected connectivity effects, the syntactic strategy for deriving them is distinct from that in English in that it does not involve a true FR, but a subtype of light-headed relative clause. The analyisis of the Serbian data supports the predicational approach to the derivation of SPCs cross-linguistically. As will be discussed in more detail later on, the type of relative clause a language may utilize in forming a specificational clause of this type largely depends on the features of its pronominal system, and the way animacy is encoded in the relevant type of relative clauses.

To sum up, the goal of this thesis is to argue for the the grafting analysis of FRs in Serbian, and to show that, in this way, it is possible to account for the distributional differences between the Slavic and Germanic FRs consistently and with fewer stipulations. Furthermore, I will argue for a novel perspective on the distribution of FRs

in Slavic in Germanic, claiming that it is the distribution of Slavic FRs, not Germanic, which is more constrained regarding the argument positions in which they occur, as well as the positions inside copular constructions. Once the internal structure of the FRs is understood better, it will become clear that from the perspective of Serbian there is no need to relativize the case-matching constraint in free relative clauses.

3.2 Theoretical background and the methodology

3.2.1 Theoretical framework

The framework for this analysis of free relatives and related constructions is that of generative grammar, or more precisely the Minimalist Program. This is the natural choice for the comparative syntactic work due to the basic assumption about the nature of language and the tools it provides for the study of its properties.

On the more traditional approaches to comparative linguistic studies, the lack of an underlying strong hypothesis about the existence and nature of Universal Grammar (UG) led to the descriptions of various, language specific syntaxes, which could only identify the differences among languages, without any accurate account of the derivational processes that produced them, let alone identifying the points of cross-linguistic syntactic divergences in a coherent fashion.

UG has been extensively argued for ever since Chomsky (1965), and from the early days of generative grammar the idea of its existence gained support from various fields

studying the acquisition and production of language. Based on the idea that language is a unique and universal biological trait of humans, the new theoretical framework started to evolve, and linguistic research was defined as a search for the universal set of rules and conditions that determine the shape of natural language. This meant that grammar rules were no longer considered to be "language and construction specific" (cf. Chomsky 1995; p. 170), but incorporated into a universal mechanism underlying the language faculty.

The framework was gradually defined as the Principles and Parameters (P&P) approach, and very soon it gave impressive results. It defines the universal component of grammar as a set of principles and a limited set of parameters that determine the variation in the generated output. The variety of outputs is what we observe as language variation, and it is limited and predictable. In the 1980s this approach was articulated within the Government and Binding Theory (GB). The model included the phrase structure theory (X-bar theory), which defined the procedure for building possible linguistic expressions. The derivation was assumed to take place at two different levels of representation - the Deep Structure (D-Structure) and Surface Structure (S-Structure) and it involved different principles at each level. The Projection Principle and Theta-role assignment were observed at D-Structure, while Case Assignment, for instance, or Binding were applied at S-Structure.

 As the P&P framework soon gained a large empirical base, it also became possible to reassess some of its basic assumptions about the model of UG. An attempt to keep such assumptions to a necessary minimum led to the emergence of the Minimalist program.

3.2.2   The Minimalist Program

In 1993, Chomsky started arguing for a reduction of preconceptions about the exact shape of the model within which we analyze linguistic data. This is why Minimalist Program (MP) is not to be understood as a new theory of grammar, but a research program that tries to keep the basic assumptions within the model to a minimum. Chomsky defines it as the "virtual conceptual necessity" (cf. Chomsky 1995; p. 169), or those assumptions that are not evoked for theory-internal reasons. What is conceptually necessary in MP is to presume that language consists of a lexicon and the computational system to which the lexical items are fed, and which generates possible linguistic expressions. The legitimacy of those expressions is determined at the two interface levels with the external systems: articulatory-perceptual (the level of phonetic form – PF) and conceptual-intentional (the level of logical form – LF). If the generated expression meets the output conditions at both of these levels, it is a well-formed linguistic object. This is commonly represented as Y-model of grammar.

Lexicon

computational system

PF   spell-out   LF
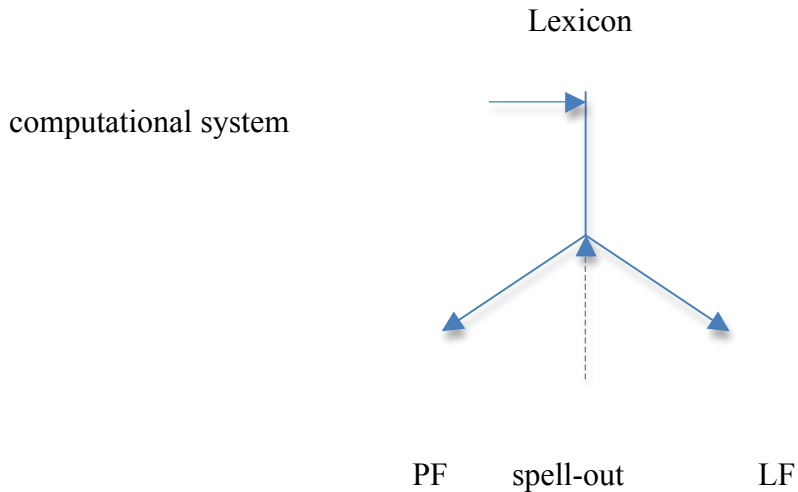
One of the things that MP abandones is the two-level syntactic representation from the GB theory, since this division was in place for theory-internal reasons. The notion of government, central to the application of various principles within GB is also abandoned as possibly misguiding, since it was used as a cover term for various structural relations (such as the head-complement and head-specifier relations), and to define various licensing domains (such as the binding domain or case-licensing domain).

Within this simplified approach to the procedure relating the sound and meaning, the differences among languages fall from the feature specifications of the languages' lexical arrays and the way PF conditions are met.

3.2.3 Computational system in the MP

As this thesis will follow the MP agenda in the analysis of FRs, a brief review of the kind of computational system this program assumes is due, introducing the notions relevant for the discussion here, namely the structure-building operations and the case-licensing mechanism.

In the MP the notion of government is dispensed with in favor of sisterhood relations, which define distinct minimal domains (specifier-head or head-complement domain). Syntactic operations that link lexical items into headed phrasal projections are Merge, and Move *(re-merge)*.[2] These two operations constitute the entire mechanism executing derivations. Merge is an operation that links items from the lexicon in a binary fashion, while Move is the second instance of merge with its own set of properties and refers to the displacement of an item from its base-generated position. The derivations are also guided by the principles of economy and favor simpler/shorter, or less costly steps.

Case-licensing in the MP happens locally. Case can be viewed as an uninterpretable, formal feature of a lexical item, which may be visible but not interpretable at PF, unless it is found in a proper configuration, where it gets eliminated. The understanding of the mechanism of its elimination has also been shaped gradually. At first (Chomsky 1995), it was envisioned as a feature-checking mechanism, which happens in a local, spec-head relation with a relevant functional head. This also meant that case-checking involved

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[2] The terms External Merge and Internal Merge (move) are used in the literature in the same sense.

movement to the specifer position of the relevant functional phrase (presupposing the existence of the distinct functional domains designated for the licensing of the two structural cases).

Chomsky (2000, 2001) proposes feature-valuation as an alternative to feature-checking and feature movement. In this model, the unvalued case feature gets valued under agreement with an adequate probe. The agreement relation between the probe and the goal is established under the following conditions: a) if the features are matching, b) observing locality, c) under c-command (where a probe c-commands a goal). Once it is established, the valuation of the relevant features takes place. The new understanding of the structural conditions on syntactic agreement enabled the emergence of the notion of multiple feature valuation. Thus, Hiraiwa (2005) develops an approach where a single head can probe for multiple goals simultaneously, and where the probe-goal relation is bi-directional.

Thus, as a brief illustration, in a tree representing a clausal structure that minimally contains the projections schematized in (10) for example, a probe, the functional head in the verbal domain (Asp^0) probes for all the goals it c-commands, which have the relevant/matching features (NP_2 and NP_3), the relevant features being their unvalued case. At the same time, since the feature-valuation is a bi-directional process, the NPs themselves valuate the aspect features on Asp^0. These assumptions are backed up with empirical evidence regarding the intricate agreement patterns in the domain of case licensing. The same approach can be applied to other phenomena related to agreement, as was shown in an account of negative polarity items licensing by Zeijlstra (2004). Leaving the argumentation and empirical support for multiple and simultaneous feature-valuation

aside, since it falls beyond the scope of this thesis, it would be enough to say at this point that this conception of the operation agree can also capture the case licensing in FR constructions. In fact, in her account of the case-matching phenomena in Polish FRs, Citko (2005) also essentially assumes that the relation between the goal and the probe is symmetric and that the goal can enter into agreement relation with more than one probe.

(10)

CP
C'
C^0 TP
T'
T^0 vP
NP_1 v'
v^0 VP
NP_2 V'
V^0 NP_3
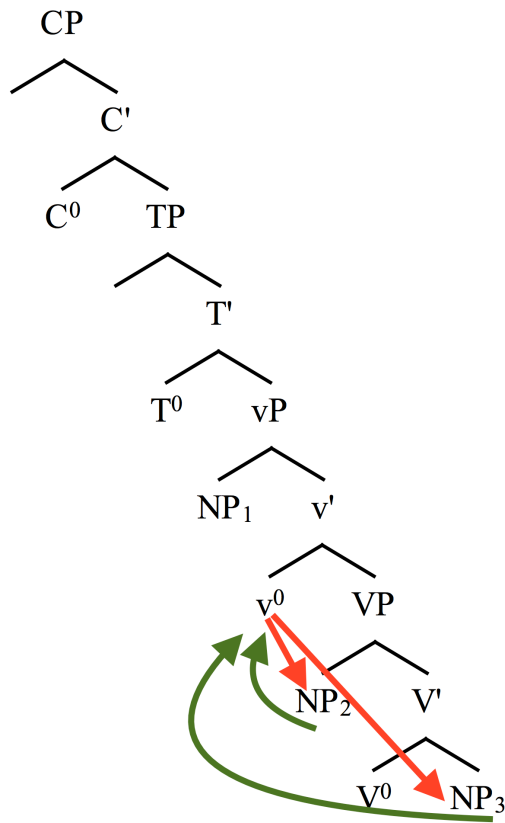
3.2.4 A third kind of Merge – Grafting

In Chomsky (2001), the operations Merge and Move are equally available/logical. Merge refers to the procedure of joining two complete syntactic objects together forming a new constituent. Move is taken to another instance of Merge, which takes a subpart of a syntactic object and remerges it with its host. Since both operations are logically possible and only a stipulation would exclude one, the concern about the existence of more than one operation should not exist.

However, as Van Riemsdijk (2006) points out, this also means that any other logical versions of Merge could be a valid syntactic operation unless excluded by a stipulation. One such alternative is merging a subpart of a syntactic object with a different host (as if it was merged for the first time). This is shown in (11) where a syntactic constituent C is shared by two parallel derivations.

(11)
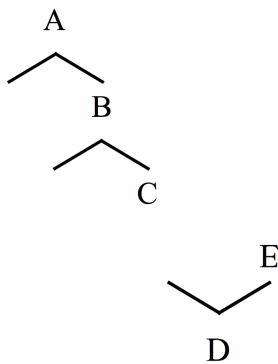
This new kind of merge has the properties of both Merge and Move and Van Riemsdijk refers to it as Grafting. The structure derived in this way consists of two independent derivations (clauses), which share a constituent. Independantly, Citko (2005) explores the same possibility, i.e. a third type of merge that would share the properties of the existing ones – a Parallel Merge in her terminology. However, in her theory, once Parallel Merge is applied, further movement is allowed, which raises a range of theoretical concerns and consequences, I would not necessarily commit to in this thesis.

3.2.5 Methodology

As is customary in the generative tradition, the data in this research consisted of the elicited grammaticality judgements. Since the topic of this study is the internal structure of free relative clauses and their distribution in argument positions in Serbian and English, a relevant set of Serbian data was designed, and it involved FRs in both the preverbal subject positions and postverbal subject and object postions, as well as SPCs. The constructed sentences were randomized, divided in sets and periodically distributed among the participants.

The judgements for Serbian were obtained from 20 native speakers, age 20-70. Most of them didn't have any linguistic background. They were asked to mark with a star every ungrammatical sentence in a given set, or to use a question mark if they are uncertain of its (unacceptability). They were also encouraged to add a comment next to any of the sentences if they want to clarify their judgement.

As far English is concerned, the elicited judgments of the same type of data were taken from the existing literature, or they were designed and tested with a few native speakers. Given that the analysis itself makes predictions for other languages featuring FCs, those predictions were again checked against the existing analyses of the relevant constructions in some of those languages. By counterbalancing the positive and negative evidence, the relevant conclusions were drawn and will be presented here.

3.3 Outline of the thesis

The results of my research are presented in the following 5 chapters. Chapter 2 provides a description of the FR construction and an outline of the two dominant syntactic approaches to the analysis of FRs crosslinguistically. It also introduces the major problem for a unifying analysis of the relevant cross-liguistic data – the properties of FRs in the subject position that vary among languages.

In chapter 3 I describe the two types of FRs in Serbian and propose the analysis of the matching phenomena following the grafting approach by Riemsdijk (2006), I focus on the internal structure of the FR, and the structure of wh-constituents.

Chapter 4 presents the non-matching facts we find with the subject FRs in Serbian, and argues for the grafting analysis that would account for them too. The major claim is that this approach enables us to relate the pro-drop in Serbian to the absence of the matching effects in a more elegant and non-stipulative way.

That the FRs are indeed not externally headed unless grafted, and are, therefore, truly free is further supported by the analysis of specificational pseudoclefts in Serbian, which I provide in chapter 5. The analysis itself is based on Hartmann & Milićević (2015). In addition, I provide a comparative view of the facts in English and Serbian, and offer an account for the lack of specificational FRs in Serbian. Chapter 6 summarizes the main advantages of the FR construction analysis proposed in this thesis.

4   Free Relatives

4.1 Properties

As sketched out in the introduction, the discussions in this thesis revolve around the peculiar properties of the free relative clauses, given in (1) and repeated below, and I will now address their basic properties, and the general approaches to accounting for them.

(12)   a.   Jim will make [what(ever) you choose from the catalogue].

          b.   She talked to [whoever arrived within the first hour].

          c.   [What Mary is] is a naïve girl.

As noted by Caponigro (2003), FRs have been attested in many Indo-European languages (Bavarian, Dutch, English, German, Swiss German, West Flemish, Yiddish, Catalan, French, Italian, European Portuguese, Brazilian Portuguese, Romanian, Sardinian,

Spanish, Bulgarian, Croatian, Macedonian, Polish, Russian, Serbian, Slovenian, Albanian, Modern Greek, Estonian, Finnish, Hungarian, Modern Hebrew, Modern Moroccan Arabic).

They are introduced by a wh-word, and as far as their semantics is concerned they can always be replaced with a truth-conditionally equivalent DP or PP.[3] In terms of interpretation, then, an FR could be viewed as a type of relative clause (13), though the head of such relative clause, or the term whose denotation should be restricted by it, is not overtly present is syntax.

(13)   a.   Jim will make [CP what(ever) you choose from the catalogue].

        a'.   Jim will make [DP the thing(s) you choose from the catalogue].

        b.   I will stay [CP where(ever) John stays].

        b'   I will stay [PP at the place where John stays].

The fact that there is no overt syntactic head in FRs coincides with the category and case-matching constraints. In English, a language without morphological case on wh-words it is the categorical matching that has to be obeyed, as shown in (6c) and repeated below.

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[3] Caponigro (2003) notes that such DP and PP constituents may not necessarily occur in the very same syntactic position as the corresponding FRs. He points to the observation by Groos and Van Riemsdijk (1981) that in Dutch DPs cannot occur postverbally, while FRs can.

(14)   * To whom(ever) we talked then was participating in the event.

Both the main clause verb and the verb inside the embedded FR have to select for the same phrasal category. The main clause verb in (14) does not select a PP, while the embedded verb does, hence the ungrammaticality. The examples from Bresnan & Grimshaw (1978), also mentioned in Bury (2003; p.176) show that categorical matching holds also for the selected adjective and adverb categories.

(15)   a.   John will be [however tall his father was].

        b.   I'll word my letter [however you word yours].

        c.   I'll put my books [wherever you put yours].

In other the Germanic languages with morphologically expressed case on the relative pronoun the CMC has to be obeyed too. The German examples, taken from Van Riemsdijk (2006a; p.344), illustrate the phenomenon.

(16)   a.   Wer   nicht   stark   ist muss   klug   sein.

              who-nom   not   strong   is   must   clever be

              "Who is not strong must be clever."

        b.   *Wen   /   *wer   Gott *e* schwach   geschaffen hat muss klug sein.

              whom-acc   who-nom   God *e* weak   created   has must clever be

              'Who God has created weak must be clever.'

(17)   a.   Ich vertraue wem   du vertraust.

       I   trust   who-dat you trust

       "I trust who you trust."

       b.   Ich vertraue *wen   /   *wem   du mir empfiehlst.

       I   trust   whom-acc   whom-dat   you me recommend

       "I trust who you recommend to me."

In (16b) the subject of the main verb should be in nominative case while the trace of the wh-word in the embedded clause is in the object position where the accusative gets licensed. As a consequence neither the nominative nor the accusative form of the wh-word is acceptable. Also in (17b), since the main verb object should be accusative and the main verb object in dative, neither i form of the relative pronoun is allowed in this position. Only a matching case in the object position as illustrated in (16b), where both verbs license the dative, is grammatical.

A solid amount of study on the FRs, which cannot be given full credit here due to space reasons, on the FRs is centered on the matching phenomena. I will, however, outline the main approaches in their analysis.

4.2 The interpretation of FRs

There is no consensus on the semantics of the FRs. Central to this issue is the meaning of wh-constituent, which in English occurs with or without *ever*, an item that has its counterpart in Serbian – the particle *god*. The type of semantics it contributes to the structure is the key issue in the semantic debates on FRs. Since the current account is syntactic, I will only informally present three major ways in which wh-ever constituents are characterized.

Free relative pronouns have been viewed as universal quantifiers, definite descriptions or free choice items. Most often they are treated as ambiguous between quantifiers and definites. For some authors, this depends on the presence of *ever* (Bresnan and Grimshaw 1979, Larson 1987, Tredinnick 1995), which is illustrated in (18). In (18a) the reading of *whatever* is that of a universal quantifier and is taken to have the same interpretation as *everything*. In (18b) the interpretation would be that there is a unique thing that I intend to share upon receiving it. There is, however, opposition to this view (Jacobson 1993, Rullman 1995), since (18a) can be interpreted as *whatever it is that you send me*, again expressing uniqueness. The same type of inherent ambiguity exists in Serbian FR pronouns, wh-(*god*) expressions, as seen from the possible paraphrases of (19a and (20a) in (19b-c) and (20b-c).

(18)　　a.　I will share whatever you send me.　　(universal)

　　　　b.　I will share what you send me.　　(definite)

(19)　　a.　Kupiću　　šta　　(god)　ti　preporučiš.
　　　　　　buy-fut-1Sg　what-acc　　god　you　recommend

　　　　　　"I will buy what(ever) you recommend."

　　　　b.　Kupiću　　onu stvar　koju　ti　preporučiš.
　　　　　　buy-fut-1Sg　that thing　　which　you　recommend
　　　　　　"I will buy the thing you recommend."

　　　　c.　Kupiću　　svaku　stvar/　stvari　koje　ti　preporučiš.
　　　　　　buy-fut-1Sg　all　　things　things　which　you　recommend
　　　　　　"I will buy every thing/ the thing(s) you recommend."

(20)　　a.　Prihvatiću　　koga　　(god)　ti　preporučiš.
　　　　　　accept-fut-1Sg　whom-acc　*god*　you　recommend

　　　　　　"I will accept whom(ever) you recommend."

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b. Prihvatiću onu osobu koju ti preporučiš.

accept-fut-1Sg that person which you recommend

"I will accept the person you recommend."

c. Prihvatiću svaku osobu koju / osobe koje ti preporučiš.

accept-fut-1Sg every person which persons which you recommend

"I will accept every person / the person/people you recommend."

In both examples, the object of the main clause can be interpreted as a unique entity, which falls within the restriction provided by the relative clause. However, it can refer to more than one entity, as indicated (19 c and 20c), which can be interpreted either as universally quantifying over a set restricted by the relative clause, or expressing unqueness.

Serbian particle *god* semantically matches the contribution of *ever* in English FRs. One could say, that when it is present, it forces the universal reading of the FR. However, Jacobson (1995) notes that, unlike universal quantifiers, FRs allow singular pronominal reference by *it* ((21b) and (22b)).

(21) a. * Whoever listened to every word the PM said, claims it was silly.

b. Whoever listened to whatever the PM said, claims it was silly.

(22) a. *Ko god je   saslušao svaku   premijerovu reč tvrdi   da je ta blesava.

who god aux listened every   PM-poss word   claims   that is it silly

"Whoever listened to the PM's every word claims it was silly."

   b. Ko god je   saslušao šta god   je premijer rekao tvrdi   da je to blesavo.

who god aux listened what god   aux PM   said claims that is it silly

"Whoever listened to whatever the PM said claims it was silly."

Also, unlike universal quantifiers the FR wh-items cannont be modified by *almost* or *nearly* (cf. Carlson 1981). The same can be established for Serbian, as shown in (24).

(23)   a.   I will share almost / nearly everything you send me.

     b.   I will share *almost / *nearly whatever you send me.

(24)   a.   Kupiću   skoro sve   što   ti   preporučiš.

buy-fut-1Sg almost everythinggod what   you recommend

"I will buy almost everything you recommend."

b. Kupiću   *skoro šta   (god)   ti   preporučiš.

buy-fut-1Sg almos   what-acc *god*   you recommend

To account for these distributional differences, at the same time preserving the uniqueness interpretation of the FRs, Jacobson (1995) introduces the notion of maximal plural entity – an entity defined as consisting of as many atomic individuals as can be found in a given domain with a required property. Thus, the number of atomic individuals contained within a maximal plural entity can be one or more atomic individuals. In (21b) and (22b) therefore, the proposition does not entail that there is more than one person who actually heard what the PM said. What these sentences entail is only that there is one entity, which can be interpreted as a group or as a single individual, which satisfies the denotation of the predicate (*listening to the PM*). The universal quantifying force of the FRs is on this approach only apparent.

The third view of the semantics of FRs is that they are free-choice expressions. The sentences above can in fact be paraphrased using *anything*, which can have a free-choice interpretation in English, as can be seen from the comparison of (25a) and (25b).

(25)   a.   I will share whatever you send me.

        b.   I will share anything you send me.   (free-choice)

(26) a. Kupić́u   šta   (god) ti   preporučiš.

          buy-fut-1Sg what-acc   god you recommend

          "I will buy what(ever) you recommend."

      b. Kupić́u   bilo šta što   ti   preporučiš.

          buy-fut-1Sg be-what what   you recommend

          "I will buy anything you recommend."

That would imply that the particle *god* (or *ever*) strengthens the free-choice reading of the variable introduced by a wh-word. This is proposed by Dayal (2005). In her view, the free choice reading is special in that it is arrived at via the introduction of possible words in the interpretation of FRs, i.e. a type of modality. On this interpretation, in at least one of the possible worlds there is an individual that uniquely satisfies the denotation of the predicate.

On one hand, treating FRs as free-choice expressions seems to clash with the uniqueness reading available for these expression, and even if we treated them as regular FC items, that would not resolve the issue of their quantificational force. Namely, the analysis of the free choice items themselves is highly contentious, since they can also be seen as either the indefinites carrying a universal implicature of some sort (Giannakidou 2001, Romero and Choi 2008, Milić́ević́ 2008), and the universal quantifiers (Dayal 1998). One strong indication that the free choice approach is actually on the right track comes from Serbian, which has a set of morphologically distinct expressions with an exclusive free-

choice reading (*bilo*-wh-words) and constrained distribution (cf. Milićević 2008). As we can see in (26), they can be used interchangeably with FRs preserving the intended meaning.

The matter of the FR interpretation is far from resolved. It seems that whichever of the three tracks for describing the denotation of FRs one adopts, the availability of the other two interpretations need to be accounted for in terms of a pragmatic implicature.

In this thesis I will not offer a semantic account of Serbian FRs, but will return to the issue in the discussion on FRs in pseudoclefts in chapter 5.

4.3 Previous accounts

4.3.1 Head Account

Turning to the accounts of the syntactic properties of FRs, I will now present the two competing approaches and their basic assumptions.

Bresnan and Grimshaw (1978) provide one of the early analyses, which represent the so-called Head Account. Since the embedded wh-word satisfies the category and case-requirements of the main verb, they propose that the wh-word itself is the external nominal head of the relative clause (see also Hirschbuhler 1976, Grimshaw 1977, Larson 1987). The free relative in (12a), repeated below in (27a) can therefore be schematically represented as (27b).

(27)   a.   Jim will make [what(ever) you choose from the catalogue].

b. *Head account:*

[DP *whatever* [CP/TP you choose from the catalogue]]

Bresnan and Grimshaw (cf. also Larson 1987) argue that the embedded clause in (27) is adjoined to the DP wh-phrase). In this way, they can explain the categorial matching phenomena we find in English, since the DP in (12a) is indeed selected by the main verb. In the same fashion one can account for the examples in (15b-c), where an AP or AdvP is selected by the main clause predicate. Also, instances of an apparently optional occurrence of the preposition inside an FR (28a) can be explained as the consequence of the varying selectional properties of the verb (28b and b'). Namely, if it is the main clause preposition that selects for a DP, the preposition-stranding inside the relative clause can occur. If it is the main clause verb that selects for a PP, the preposition stranding inside the adjoined clause is not an option.

(28) a. I'll talk to whoever you talk (to)

b. I'll talk to [DP whoever [CP/TP you talk to].

b' I'll talk [[PP to whoever] [CP you talk]]

However, the head account cannot be easily extended to other Germanic or any other language exhibiting CMC, illustrated in (16) and (17). For this, additional stipulations are necessary. The issue of the link between the wh-word and the related argument position

in the relative clause remains open, and even if one postulates an empty category of a special kind or an operator, this is an unwelcome stipulation. It could be argued that the gap inside the relative clause contains a trace, but it is not clear how exactly the wh-element is remerged with its clause. Furthermore, if there is no movement, it would require a postulation of a special mechanism to explain the case matching involved, since the wh-word is external to the relative clause itself.

4.3.2 Comp Account

A different approach, taken in the literature is the Comp account, formed within the GB framework, which treats the FR as structurally related to embedded questions (cf. Kuroda 1968, Quicoli 1972, Hirschbuhler 1976, Groos and Van Riemsdijk 1981, Suner 1984, Grosu and Landman 1998). Its schematic description (using again example (27a)) is given below.

(29)   *Comp account*:

       [DP *pro* [CP *whatever* [TP you recommend]]]

In this type of analysis, the wh-word is internal to the embedded clause. It is moved from its base generated position to Spec CP, just like it would in any other wh-clause. What is special about FRs is that it is externally headed by a phonologically null element.

One convincing reason to treat the wh-element as part of the CP comes from German, and it is exemplified in (30).

(30) a. Der Hans   hat [das Geld]   zurückgegeben [das   er gestohlen hat].

the Hans   has   the money returned   which he stolen   has

"Hans returned the money he had stolen"

b. *Der Hans   hat zurückgegeben,   [das Geld,   das er   gestohlen   hat].

the Hans   has returned   the money that he stolen   has

c. *Der Hans   hat [was]   zurückgegeben, [er gestohlen   hat].

the Hans   has [what]   returned   he   stolen   has

(Van Riemsdijk 2006a:344)

In German, a headed relative clause can be extraposed (extracted from the DP and moved to the right), which is shown in (30a). However, this movement never includes the external nominal head (30b)[4]. Under the head account of FRs, where a relative pronoun is the DP head, it would be expected that (30c), another case of extraposition, is grammatical. Since this is not the case, (as pointed out for the first time by Groos and

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[4] German and Dutch do not have Heavy NP shift.

Van Riemsdijk 1981), it can be concluded that the relative pronoun is not just another regular nominal head of a relative clause.

On the Comp approach the external nominal head of an FR is an empty category, and since the theory already allows two types of phonologically null pronominals, *pro* and *PRO*, this seemed like a viable solution to the problem. In fact, both options have been proposed in the GB framework. Harbert (1983) argues for representing the null head of the FR as *PRO*. Since PRO is in the governed position it is unable to meet the subcategorisation and case requirements by the matrix verb, so these requirements must be met by the wh-word in the Spec-CP of the free relative.

However, that *PRO* is licensed under government in the first place is more puzzling. In addition, the case assignment of this sort would be non-local, which further complicates the matter.

That the pro-form in question is *pro* seemed more plausible, given that the clauses in question are finite and the predicates' arguments receive structural case. This has been suggested by Suñer (1984) among others.

Although, empirically, this approach seemed to be more promising, it faces a few problems too. While *pro* is indeed a null pronominal occurring in case positions cross-linguistically, this is not the property of Germanic languages. As is well known, *pro* is licensed in the subject position by the strong finite features of the verb.[5] To take an

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[5] In Indo-European languages, the strength of finite features seems to correlate with the richness of finite inflection on the verb, though, in this context, the notion of 'richness' can be somewhat vague.

example of English, we know that it does not have null subjects in finite clauses. In addition, none of the languages discussed here has *pro* objects, and as can be seen from the data provided here, FRs have freer distribution, hence occur in both subject and object positions. Obviously, this solution would require a substantial redefinition of the domains and conditions for the distribution of *pro*.

Another problem is the case-licensing mechanism involved. To explain why *pro* and the wh-word inside the relative clause share the same case, again, a special mechanism should be provided. On the common GB assumptions, the relative pronoun and the nominal head meet the case requirements in separate domains, and no matching expected. The way the problem can be handled in this approach (as in Groos and Van Riemsdijk 1981) is to assume that the C position of the embedded FR is accessible to the matrix verb. The CMC thus remains a special case even on the comp account.

4.3.3 Grafting

Though both of the approaches above provide important insights into what syntactic mechanisms are at the heart of the problem, they cannot account for the CMC without stipulations. To do that, it seems we should reassess the theoretical tools used in the analysis. A more novel approach, which is yet to gain more empirical support, is the account that I refer to as grafting. As mentioned already in the introduction grafting is the type of operation distinct from both merge and move, by virtue of sharing the properties of both. De Vries (2005,) refers to it as *external remerge*, and Citko (2005) labels it as

parallel merge. It builds a syntactic object that is shared between two parallel clausal domains in all relevant respects. In Van Riemsdijk's account of FRs (2006), a wh-NP is grafted into the complement position of the main clause verb, which straightforwardly accounts for the observed category and case matching, without assuming any empty elements in the course of the derivation. Thus, it plausibly represents the simplest analysis of the phenomena under the discussion.

One might wonder whether the theoretical pasimony is achieved at the expense of introducing another stipulation, albeit of a different kind, and the answer to this is no. As mentioned in the introduction of this thesis, grafting is a logical possibility, a distinct logically possible type of displacement, and not an ad-hoc operation that solves a structure-specific problem. Also, the re-assessment of what displacement is is characteristic of the syntactic theory, and even necessary. That it is a principled theoretical intervention, which is not structure specific was thoroughly elaborated by De Vries (2009), who offers a summary of the phenomena that have been dealt with in terms of multi-dominance, or shared-structure, and they include: right node raising (McCowley 1982), across-the-board movement Citko (2005), FRs, transparent free relatives (Van Rimesdijk 1998, 2006), parasitic gaps (involving sideward movement before fronting in Nunes 2001, 2004), relative clauses (sideward movement of the NP head in Henderson 2007), coordinated wh-constructions (Gračanin-Yuksek 2007) among others.

Any concern that allowing shared structure might lead to overgeneration is natural too, but it only opens the issue of what the constraints on the type of displacement involved are, and it by no means excludes it.

4.4 Free Relatives in the subject position

In addition to accounting for the existance of the CMC, a proper analysis of FRs should also provide an answer to the question of the extent to which this constraint holds cross-linguistically. Although, evidence from across languages for the CMC in the intrenal argument positions (modulo case-syncretism which is language specific) converges, this is not the case with the subject position.

As shown above, in Germanic languages, such as English or German, the category matching and case-matching are obligatory in the subject position.

(31) * To whom(ever) we talked then was participating in the event. (*category matching)*

(32) *Wen / *wer Gott *e* schwach geschaffen hat muss klug sein.

whom-acc who-nom God *e* weak created has must clever be

'Who God has created weak must be clever.'

(case-matching)

In languages like Spanish or Catalan, this is not the case, as noted by (Hirschbühler and Rivero 1981, 1983, Suñer 1983, 1984, Harbert 1983).

(33)   a.   [A qui has parlat] està malat.

to whom have-2sg spoken is sick

"Who you have spoken to is sick."

    b. [Con   quien   me quiero   casar] està   en la   esquina.

        with   whom   me want   marry is   on the   corner

        "Who I want to get married to is on the corner."

In the examples above the subject position is filled with a categorially non-matching PP. As noted by Izvorski (1997), Slavic languages too, allow the non-matching of the subject FR. She provides us with the following examples in Polish, Bulgarian and Serbo-Croatian:

(34)   a. [S kogoto govoriš] pečeli sastezanieto.

         with whom speak-2-sg wins race-det

         "Whoever you speak with wins the race."

    b. [Kogoto celuneš] pečeli sastezanieto.

      who-acc kiss-2-sg wins race-det

      "Whoever you kiss wins the race."

c. [Z kimkolwiek porazmawiasz] zrozumie çie.

with whoever talk-fut-2sg understand-fut-3sg you

"Whoever you talk to will understand you.]

(Polish)

d. [Kogo nie zapytasz] wskaże ci drogę.

who-acc not ask-2-sg show-fut-3sg you way

"Whoever you ask will show you the way."

(Polish)

e. [S kime god budeš pričao] osvojiće šampionat.

with who-inst *god* be-2sg talk win-fut-3sg championship

"Whoever you talk with will win the championship."

(Serbo-Croatian)

f. Kome god budeš pomogao osvojiće šampionat.

who-dat *god* be-2sg help win-fut-3sg championship

"Whoever you help will win the championship."

(Serbo-Croatian)

Some researchers have related this phenomenon to the property of being a pro-drop (or null subject) language. Indeed, all of the Romance and Slavic languages mentioned above, including Serbian, allow null subjects in finite clauses, whereas German and English do not. The challenge now becomes two-fold: to maintain a unifying account of the internal structure of FRs and account for the variation described. I will therefore briefly outline how the two types of COMP analysis fare with it.

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For Harbert (1983), in languages that have non-matching FR subjects, FRs are headed by two types for null external heads. In the internal argument position they are headed by *PRO* (35a), whereas in the subject position the same null head is *pro* (35b).

(35) a. [NP *PRO* [CP wh…]]   matching effects

      b. [NP *pro* [CP wh…]]   no-matching

In the non-matching case, it is *pro* that satisfies the selectional properties of the verb, so no matching applies to the wh-word. The undesirable aspect of this solution is that it assumes the existence of two types of FRs based on their syntactic position and nothing else.

Suñer, on the other hand, maintains the same analysis of the internal structure of FRs (represented schematically in 35b) regardless of their syntactic position. She states the CMC as an independent condition for the identification of *pro*. It says that *pro* and the adjacent wh-relative pronoun must be non-distinct. It is then argued that the above condition is inapplicable in pro-drop languages, if the FR clause is in the subject position, since in these languages, the features of $INFL^0$ (or Tense) already identify *pro*,

However, in addition to earlier objections regarding the occurrence of *pro* in the object position, we may add another one regarding the condition utilized in this account. The problem is that CMC does not seem to follow from the syntax of relative clauses in general, since there is no obligatory case matching between the external head of a relative clause and the relative pronoun found elsewhere. This condition, then, seems to be

designed for the FR construction exclusively. Also, as an independent condition on the relation between the null relative head and the relative pronoun, it should not be relativized depending on the external distribution of the FR. In other words, if other syntactic relations can cancel its application it probably shouldn't exist as an independent condition at all.

Finally, *pro* in the subject FRs is not entirely empirically supported once we take a closer look at the data from the pro-drop languages. As Hirschbühler and Rivero (1981) and Izvorski (1997) note, left-dislocated free relatives, featuring a resumptive pronoun in the main clause also do not exhibit the case-matching effects. Izvorski provides the following examples from Bulgarian and Modern Greek.

(36)   a.   [Kogoto celuneš]   **(toj)**   šte spečeli   sastezanieto.

            who-acc kiss-2-sg   **he**   will win   race-det

            "Whoever you kiss, he will win the race."   (Bulgarian)

       b.   [Opion filisis]   aftos   tha kerdisi   ton agona.

            who-acc kiss-2-sg **he**   will win   the race

            "Whoever you kiss, he will win the race."   (Modern Greek)

What the examples above indicate is that FRs in the preverbal position can be associated with a co-referential nominative pronoun in the matrix. In the light of these facts, it does not seem possible to assume that the matrix Tense identifies null *pro*, and the FR clause itself does not seem to be in the subcategorized position. Therefore, Izvorski pursues the

idea that Slavic preverbal FRs are not subjects of the matrix at all, an option that will be investigated more in Chapter 4 from the perspective of Serbian. For now, it suffices to say that a unifying account of FRs that would capture the variation in the application of the matching constraints remains to be the challenge. In what follows I will present an analysis of FRs that may be more successful in that respect.

4.5 Concluding remarks

To conclude this chapter, I will summarize its main points regarding the challenges a proper analysis of the FR construction faces. There are striking similarities among FRs in various languages, one of which is that they involve a special pronoun, or a wh-word, which is optionally overtly marked as quantifying, or expressing a meaing similar to the meaning of quantifiers. Semantically, this expression has been analyzed either as universal quantifier, a definite expression, or a free choice item.

The hallmark syntactic properties of the FR construction cross-linguistically are the categorial selection matching and CMC. The two influential approaches to these phenomena are the head account and the comp account. The advantages of the former approach are that it successfully accounts for the categorial matching in English, and the puzzle of the missing prepostion inside the relative clause. It does so without stipulating empty elements in the syntax of this construction. However, it cannot account for the gap inside the relative clause, nor can it be extended to the languages that in addition to categorial matching exhibit the CMC.

The comp account, on the other hand, gained more influence in the field due to its cross-linguistic empirical coverage. It successfully captures the similarity between FRs and other wh-clauses, such as embedded questions. This however, has been done with additional stipulations regarding nature of the null external head of the FR, and it requires special assumptions regarding case licensing. This is probably, the biggest theoretical problem a comp-account is facing, since it must assume exceptional case licensing across CP domains.

The more unorthodox way of approaching the matter has emerged in the more recent work within the Minimalist Program, and its crucial idea is that multiply dominated, or shared constituents are well-formed syntactic objects. They follow from the introduction of the third, equally plausible type of merge, which I refer to as grafting. The benefits of this approach are yet to be seen, and one of the main goals of this thesis is to investigate them by looking into Englsih and Serbian.

5   Serbian Free Relatives as Grafts

5.1 Properties of FRs in Serbian

In this section, I will introduce the main formal properties of FRs in Serbian. First, I will focus on the classification of these clause based on the morphological properties of the wh-contituents that introduce them. This classification will be followed by the discussion of both categorial and case matching constraints that FRs have if they occur in the object

position of the main clause. As will be shown, a close inspection of the data will lead to an accurate generalization regarding these conditions in Serbian. The subject FRs of both types will be postoponed to chapter 4, since they exhibit distinct syntactic behaviour, which deserves special consideration.

5.1.1 Wh-words in FRs

Let us first examine the kind of FRs we find in Serbian, based on the type of wh-pronoun that may introduce them.

There are two classes of wh-words they may contain and a specialized particle that they can, or must combine with. One class of wh-words has the case paradigm and exhibits animacy distinction, but no overt gender and number agreement, and I will refer to them as *default singular wh-words* (Def-Sg WH), listed in the first column in (37). The other class consists of the wh-words marked for case, number and gender, (*+φ wh-words* in (37)). While the former can, the latter must combine with an FR particle. Thus, we can distinguish three types of this construction: an FR with a wh-word morphologically marked for case and animacy (of the *who*/*what* type in English), an FR with the same type of wh-word followed by a particle *god*, and an FR with a wh-word marked for case and agreement/φ-features followed by a particle *god* (comparable to *which* in English). The three-way distinction is illustrated in (38-40).

(37)

Case	Default Sg WH		+ɸ WH					
	Animate	Inanimate	Msc.Sg.	Fem.Sg.	Neut.Sg.	Msc.Pl.	Fem.Pl.	Neut.Pl.
Nominative	Ko	Šta	Koji	Koja	Koje	Koji	Koje	Koja
Genitive	Koga	Čega	Kojeg	Koje	Koje	Kojih	Kojih	Koje
Dative/Locative	Kome	Čemu	Kojem	Kojoj	Kojem	Kojim	Kojim	Kojoj
Accusative	Koga	Šta	Kojeg	Koju	Koje	Koje	Koje	Koju
Instrumental	Kim(e)	Čim(e)	Kojim	Kojom	Kojim	Kojim	Kojim	Kojom

(38)   *Defult Sg WH*

a. Kupiću   šta   ti   preporučiš.

   buy-fut-1Sg what-acc   you recommend

      "I will buy what you recommend."

b. Prihvatiću   koga   ti   preporučiš.

   accept-fut-1Sg   whom.acc   you recommend

   "I will accept whom you recommend."

(39)   *Def-Sg WH + god*

    a. Kupiću   šta   god ti   preporučiš.

        buy-fut-1Sg what-acc   god you recommend

        "I will buy whatever you recommend."

    b. Prihvatiću   koga   god ti   preporučiš.

        accept-fut-1Sg   whom.acc   *god* you recommend

        "I will accept whomever you recommend."

(40)   *+φ WH + god*

    a. Kupiću   koju   god   knjigu   ti preporučiš.

        buy-fut-1Sg which-acc   *god*   book-acc   you recommend

        "I will buy whichever book you recommend."

    b. Prihvatiću   koju   god kandidatkinju   ti   preporučiš.

        accept-fut-1Sg   whom-acc-fem   *god* candidate-fem   you recommend

        "I will accept whichever candidate you recommend."

c. *Kupiću   koju   knjigu   ti   preporučiš.

buy-fut-1Sg which-acc   book-acc   you recommend

d. *Prihvatiću   koju   kandidatkinju   ti   preporučiš.

accept-fut-1Sg   whom-acc-fem   candidate-acc-fem   you recommend

The relevant data in English is comparable with the data in Serbian. Namely, the wh-words showing animacy distinction (*who* and *what*) can be combined with *ever* in FR clauses (41), while *which* must be combined with it (42).

(41)   *Who/What + (ever)*

a. I will buy what you recommend.

b. I will accept whom you recommend.

c. I will buy whatever you recommend.

d. I will accept whomever you recommend.

(42)   *Which + ever*

a. I will buy whichever book you recommend.

b. I will accept whichever candidate you recommend.

c. * I will buy which book you recommend.

d.   *I will buy which candidate you recommend.

Also, +*φ* wh-words, but not default singular wh-words, can occur in regular, externally headed relative clauses.

(43)   a.   Kupiću   knjigu   koju   ti   preporučiš.

buy-fut-1Sg book-acc   which-acc   you recommend

"I will buy the book that/which you recommend."

b.   Prihvatiću   kandidatkinju   koju   ti   preporučiš.

accept-fut-1Sg   candidate-acc-fem   which-acc-fem   you recommend

"I will accept the candidate that/which you recommend."

c.   *Kupiću   knjigu   šta   ti   preporučiš.

buy-fut-1Sg book-acc   what-acc   you recommend

"I will buy the book that/which you recommend."

d.   *Prihvatiću   kandidatkinju   koga   ti   preporučiš.

accept-fut-1Sg   candidate-acc-fem   whom-acc   you recommend

"I will accept the candidate that/which you recommend."

In this respect, English is different in that allows animate wh-words (*who*, *whom*) in externally headed relative clauses. They alternate with *which* to distinguish animate from inanimate heads of relative clauses.

(44) a. I will buy that thin book, which Sam recommended.

   b. I will accept that blond candidate, whom Sam recommended.

5.1.2 Matching Constraints in Serbian FRs

5.1.2.1 Category matching condition on object FRs

In Serbian FRs, both category and case-matching constraints can be observed. The grammaticality contrast in (45) seems to come from the fact that the main verb in these examples selects for an NP, while the embedded verbs selects a PP.

(45) a. Kupiću šta   (god) ti preporučiš.

     buy-fut-1Sg what-acc god you recommend

     "I will buy what(ever) you recommend."

   b. *Kupiću s čime (god) imaš iskustva.

     buy-fut-1Sg with what-inst *god* have-2Sg experience

     "I will buy what(ever) you are experienced with."

Also, unlike in English (46a), in Serbian, in addition to the matching of the verbs' categorial selection properties, if the relevant category is a PP, the identity of the P^0 has to match too (46b-c). Thus, (46b) is ungrammatical because, *put* and *drink* select different prepositions and the PP exemplified here matches only the requirements of the embedded verb. with different case licensing properties.

(46)　　a.　I will live in whatever town you talked about.

　　　　　b.　*Staviću cveće iz čega (god) pijemo vodu.

　　　　　　　put-fut flowers from what-gen god drink-1Pl water

　　　　　　　"I will put the flowers in whatever we drink water from."

　　　　　c.　Staviću cveće u šta (god) sipamo vodu.

　　　　　　　put-fut flowers in what-acc *god* pour-1Pl water

　　　　　　　"I will put the flowers in whatever we pour water (in)."

In (46b) the case of licensed by the preposition *from* genitive, while the case of the main clause PP would have been accusative, but there is no improvement even if the different PPs license the same case. This is illustrated by the ungrammaticality of (47), with the intended meaning indicated by the English translation.

(47)   *Stavić\u cveće za šta (god) imamo para.

         put-fut flowers for what-acc *god* have-1Pl money

         "I will put the flowers in whatever we have money for."

Although so far everything has indicated a very tight category matching constraint, which extends to the s-selection too, there are instances of the category mismatch. Returning to (46b), we may wonder whether this type of mismatch can occur if the case licensed by the preposition is matching the case licensed by the verb. This state of affairs is first illustrated in (48a) where the main clause verb selects an NP, while the embedded verb selects a PP, and the result is grammatical. Since both *buy* and *for* license accusative, the category mismatch is acceptable, or to put it differently, case matching can override the problem of non-selected PP. In (48b) the PP is not selected by the embedded verb, and this is acceptable too. What case matching cannot save is the occurrence of a non-selected NP (48c-d) in either of the clauses. The English 'translations' represent the intended reading.

(48)   a.   Kupić\u   za šta (god) si zainteresovan.

              buy-fut-1Sg for what-acc *god* are interested

              " I will buy whatever you are interested in."

b. Zaljubila se   u   koga   (god)   je   poljubila.

fall-in-love self   in   whom-acc   *god*   aux-3Sg kissed

"She fell in love with whomever she kissed."

c. *Kupiću   šta   (god)   si   zainteresovan.

buy-fut-1Sg what-acc *god*   are interested

" I will buy whatever you are interested in."

d. *Zaljubila se   koga   (god)   je   poljubila.[6]

fall-in-love self   whom-acc   *god*   aux-3Sg kissed

"She fell in love with whomever she kissed."

Although it is possible to override the category mismatch under the conditions shown above, this does not obligatorily happen. In (49a) we see that dative case matching obtains if the category matching does too, but if there is no category match, even the case matching 'across categories' exemplified in (48a) cannot help, as shown in (49b).

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[6] Again it should be noted that the intended reading the one that involves co-referentiality between the object of the main and the object.

(49)   a.   Odgovoriću   kome   (god) se obradujem.

           reply   wh-dat   *god* self make-happy-1Sg

           "I will reply to whoever makes me happy."

         b.   ?*Odgovoriću   ka   kome   (god) osetim   naklonost.

            reply-1.Sg   for who-dat *god* feel-1.Sg   sympathy

            "I will reply to whomever I feel good about."

While the dative licensed by the preposition in the embedded clause matches the case requirements of the main verb, the grammaticality judgement is degraded or the sentence is ungrammatical. On the assumption that in Serbian, dative can be viewed (at least in some cases) as lexical, i.e. non-structural case, we may conclude that as such it doesn't require structural licensing, so the preposition *ka* does not mediate between the case-licensing properties of the higher verb and the inherent case features of the embedded wh-constituent.

The grammaticality judgment for (49a) shows that some speakers feel it might be mildely acceptable. This is probably so, because for those speakers, another possible interpretation of (49a) was accessible – the one on which there is no co-reference between the objects of the embedded and the main verb. Namely, in a context that would allow the ellipsis of the main clause object, the FR would not be in an argument, but an adjunct position. For example, if it was an answer to the question "*Will you reply to the*

reporter's questions, even if it hurts the feelings of the listeners who call in?", the FR would be a felicitous adjunct.

(50) [ODGOVORIĆU *e*], [FR ka kojem   god slušaocu osetim   naklonost.]

      reply-1.Sg   for who-dat *god* listener   feel-1.Sg   sympathy

    "I WILL reply regardless of the sympathy I may have for any of the listeners."

As can be see from the translation provided for (50), the interpretation of the adjunct FR is that of a concessive free relative clause.

On basis of all of the above we can conclude that the category matching in Srebian default singular FRs is not obligatory in the strict sense and the generalization regarding the data above should be reformulated in the following fashion:

(51)   In a complex clause stucture CP with two asymmetrical finite predicates X and Y, the following symmetric category-matching condition holds:

        if X selects for PP_1, Y selects for PP_2, so that P_1 and P_2 are identical, or Y selects for an NP, so that P_1 and X license the same structural case

Turning to the Serbian FRs featuring $+\varphi$ wh-words, we notice that the generalization in (51) still holds. This is shown in (52), i.e. only when the main and embedded predicate select for identical prepositions (42c), the FR can be successfully constructed.

(52) a.   *Stavić́u cveć́e iz   koje   god č̌aše   pijemo vodu.

        put-fut flowers from   which-gen-fem-Sg *god* glass-gen-fem-Sg drink-1Pl water

        "I will put the flowers in whichever glass we drink water from."

     b.   *Stavić́u cveć́e u koju   god č̌ašu   pijemo vodu.

        put-fut flowers in which-acc-fem-Sg -Sg *god* glass-acc-fem-Sg drink-1Pl water

        "I will put the flowers in whichever glass we drink water from."

     c.   *Stavić́u cveć́e za koju   god č̌ašu   imamo   para.

        put-fut flowers for what-acc-fem-Sg   *god* glass-acc-fem-Sg have-1Pl money

        "I will put the flowers in whichever glass we have the money for."

     d.   Stavić́u cveć́e u   koju   god č̌ašu   sipamo vodu.

        put-fut flowers in which-acc-fem-Sg   *god* glass-acc-fem-Sg pour-1Pl water

        "I will put the flowers in whatever we pour water (in)."

Also, as stated in (51), only if we don't control for the type of case that a preposition licenses, there can be no category mismatch.

(52)   a.   Kupić́u   koju   god knjigu   ti   preporuč̌iš.

         buy-fut-1Sg which-acc-fem-Sg   god book-acc-fem   you recommend

         "I will buy whichever book you recommend."

b.   *Kupiću   s kojim   god alatom   imaš iskustva.

buy-fut-1Sg with which-inst   *god* tool   have-2Sg experience

"I will buy whichever tool you are experienced with."

According to (51), a category mismatch can occur if the verb and the preposition in either of the two clauses license the same structural case. Thus, (53a-b) are grammatical, since both *buy* and *for* in one case, and *in* and *kiss* in the other, license accusative. (53c-d) are ungrammatical since case matching cannot override the selection of a PP, and the predicates *fall in love* and *interested* select for a PP that licences accusative.

(53) a.   Kupiću   za koju   (god) knjigu   si zainteresovan.

buy-fut-1Sg for which-acc-fem-Sg *god* book-acc-fem-Sg are interested

"I will buy whichever book you have the money for."

b.   Zaljubila se   u   kojeg   god dečka   je   poljubila.

fall-in-love self   in   which-acc-msc-Sg *god* boy-acc-msc-Sg aux-3Sg kissed

"She fell in love with whichever boy she kissed."

c.   *Kupiću   koju   (god) knjigu   si zainteresovan.

buy-fut-1Sg which-acc-fem-Sg *god* book-acc-fem-Sg are interested

" I will buy whichever book you are interested in."

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d. Zaljubila se   kojeg   god dečka   je   poljubila.

fall-in-love self   which-acc-msc-Sg *god* boy-acc-msc-Sg aux-3Sg kissed

"She fell in love with whichever boy she kissed."

Finally, (54) shows that the matching case within non-matching categories has to be structural with the +φ FRs too.

(54) ?*Odgovoriću   ka kojem   god slušaocu osetim   naklonost.

reply-1.Sg   for who-dat *god* listener feel-1.Sg   sympathy

"I will reply to whichever listener I feel good about."

5.1.2.2 The CMC on object FRs

As we have seen above the categorial matching condition when applied to NPs is itself conditioned by the case-matching considerations. Furthermore, once the NP category matching is in place, the CMC has to be met, as mentioned earlier and shown by (55). These examples involve default singular wh-words related to the main clause object position.

(55) a. * Kupiću   šta   (god)   se obradovao.

buy-fut-1Sg what-acc   *god*   self made-happy

"I will buy whatever he got excited about."

67

b. *Prihvatiću   koga   (god)   joj   treba.

accept-fut-1Sg   whom-acc   *god*   her-dat needs

"I will accept whoever she needs."

c. *Prihvatiću   ko   (god)   joj   treba.

accept-fut-1Sg   who-nom   *god*   her-dat needs

"I will accept whoever she needs."

Although in (55a and b) the default singular relative pronoun has the case required by the main verbs – accusative, it does not match the case requirements of the embedded verbs. In (55c) the situation is reversed, and it is the requirement of the main verb that fails to be met. In each instance the result is ungrammatical.

Gramatical sentences seem to be possible to construct only if the wh-word matches the case requirements of both the main verb and the verb inside the FR. In (56a) the verbs in both clauses take dative objects and the wh-word matches this requirement simoultaneously. In (56b) it is the accusative case that is licensed by both verbs, whereas in (56c), both verbs take instrumental objects.

(56)   a. Osmehnuo se   kome   (god)   se obradovao.

smiled self   whom-dat   *god*   self made-happy

"He smiled at whoever made him happy."

b. Prihvatiću   koga   (god)   preporučiš.

accept-fut-1Sg   whom-acc   *god*   recommend-2Sg

"I will accept whomever you recommend."

c. Upravljamo kime   (god)   smo   zadovoljni.

manage-1Pl who-inst *god*   are   satisfied

"We manage whoever we are happy with."

Some exceptions to the otherwise robust evidence/grammaticality judgement supporting the CMC in the object position, is shown in (57).

(57)   ? Kupiću   čemu   (god)   se obradovao.

buy-fut-1Sg what-dat   *god*   self made-happy

"I will buy whatever he got happy about."

For some speakers this sentence is grammatical, while many find it degraded. In any case, there is a difference between the degree of acceptability of (57) and the parallel (55a). Recall that in (55a), the accusative case failed to match the requirements of the dative licensing embedded verb. When we reverse this type of mismatch, what we get is (57), where the dative wh-word doesn't match the requirements of the main accusative licensing verb. In other words, it seems that accusative cannot override the dative case

requirements while the reverse is possible. However, if we compare it to (58), this conclusion does not seem to hold.

(58)   *Unajmiću kome   (god)   si   poslao pozivnicu.

hire-fut-1Sg who-dat *god*   aux-2Sg sent   invitation

"I will hire whoever you sent the invitation to."

The difference between (57) and (58) is that in the latter case, the dative NP is in the argument position, while in (57) this is plausibly not so. Since non-argument positions are inherently theta marked and bare lexical case, it is possible that this weakens the effect of the violation in (57), which is clear in (58).

The distribution of the $+\varphi$ relative pronouns is constrained in the same fashion.

(59)   a   *Kupiću   kojoj   god knjizi   se obradovao.

buy-fut-1Sg which-dat   *god* book-dat   self made-happy

"I will buy whichever book he got excited about."

b.   * Kupiću   koju   god knjigu   se obradovao.

buy-fut-1Sg which-acc   *god* book-acc   self made-happy

"I will buy whatever book he got excited about."

c. *Prihvatiću   koja   god osoba   joj   treba.

accept-fut-1Sg   which-nom *god* preson-nom her-dat needs

"I will accept whichever person she needs."

d. *Prihvatiću   koju   god osobu   joj   treba.

accept-fut-1Sg   which-acc *god* person-acc her-dat needs

"I will accept whichever person she needs."

It should also be noted here that occasional violations of the CMC still seem to occur in Serbian FRs, which is illustrated below.

(60)   a. Neću   kupiti   čega   (god)   nema.

neg-aux-fut buy   what-gen *god*   not-has

" I will not buy what isn't there"

b. Zaposliću   koga   (god)   đaci   budu   željni.

employ-fut-1Sg who-gen *god*   students aux-3Pl desire

"I will employ whomever the students wish for."

c. Verujemo   kojim   god ljudima   upravljamo.

trust-1Pl   which-inst-pl   *god* people-inst-pl   manipulate-1Pl

"We trust whichever people we manipulate."

While the verbs inside the FRs in (60a and b) require genitive objects, the main clause verbs require accusative ones. In (60c) the embedded verb requires instrumental while the higher verb licenses dative. What we are dealing here, however, are instances of case syncretism. As can be confirmed from the table in (30), animate default singular wh-words in genitive and accusative are morpho-phonologically equivalent. Also, dative and instrumental plural forms of the $+\varphi$ wh-word share the same form.

Case syncretism allows violations of the CMC in other languages too. Consider the following illustration from German, provided by Van Riemsdijk (2006), which nicely shows that no construction specific or exceptional lexical or case-assigning properties of a verb can be 'blamed' for such violations.

(61) a. Was im Kühlschrank liegt ist schimmlig.

    what-nom in-the refrigerator lies is moldy

    "What is in the refrigerator is moldy."

  b. Ich esse was du gekocht hast.

   I eat what-acc you cooked have

   "I eat what you cooked."

The predicates in (61a) both require a nominative subject, which in this case is the wh-word *was*. In (61b), both the matrix and the embedded verb license accusative case on

their object, which again is the wh-word *was*. When we reverse the FRs in the examples above the result is again grammatical, which is shown below.

(62)   a.   Was   du gekocht hast ist schimmlig

                what-acc   you cooked have is moldy

                "What you cooked is moldy."

        b.   Ich esse was im Kühlschrank liegt

                I   eat what-acc in-the refrigerator lies

                "I eat what lies in the refrigerator."

Instead of saying that in (62) the same four predicates have different syntactic requirements, what we must conclude is that the fact nominative and accusative wh-word *was* share the same form leads to an 'accidental' match.

In the Serbian example given in (60a), in addition to selecting for an NP in accusative, the verb *buy* can select a quantificial expression (presumably a QP) which licenses genitive case, just like the embedded existential construction does (cf. Milićević and Hartmann 2008).

In order to include the effect of case syncretism in a syntactic account of FRs, certain assumptions about the relationship of morphological and abstract case must be refined. In this respect I adopt the conclusion drawn by Citko (2005) that the relationship abstract case features and their overt exponents in syntax is not one to one, and that this necessarily has repercussions for our view of lexical feature specification and lexical

insertion. If we adopt the view that lexical insertion follows syntactic derivation, and that case-syncretism is not represented in the lexicon by multiple occurrence of the same form with different case specifications, we can account for the effect illustrated above. Namely, if the lexicon contains one lexical item underspecified for the relevant case features, it can satisfy different abstract feature values of the relevant syntactic node at spell-out.

5.1.3 Summary of the data

To summarize the data presented, FRs in Serbian are derived using two types of FR pronouns: the default singular wh-words and the $+\varphi$ wh-words. The former type distinguishes between animate and inanimate pronominal elements, but they are not marked for φ-features. The latter type is marked for φ-features and, in terms of their FR internal distribution, they are similar to the so-called d-linked wh-words in English (*which*).

Semantically, Serbian FRs, just like their English counterparts, at first sight seem to be three-way ambiguous between universal quantifiers definite descriptions and free choice expressions. Given their interchangeabilty with free-choice items in Serbian, in this thesis I will adopt the view that they are free choice items, or variables that can receive free choice singular reading, on which an individual satisfying the restriction provided by the predication inside the relative clause varies across possible worlds. Particle *god*, obligatory only in $+\varphi$ FRs, reinforces the group reading of the free choice variable.

In syntactic terms, the descriptive generalization regarding the extent to which Serbian FRs in object position obey category matching can be stated as in (51), repeated below.

(63)   In a complex clause stucture CP with two asymmetrical finite predicates X and Y, the following symmetric category-matching condition holds:

if X selects for PP_1, Y selects for PP_2, so that P_1 and P_2 are identical, or Y selects for an NP, so that P_1 and X license the same structural case

Having established that category matching cannot be stated independetly of structural case licensing and the case licensed by PPs, we can conclude that an account of Serbian FRs should also shed some light on the status of categories P and N in Serbian.

As far as the CMC is concerned we can conclude that both types of FRs in the object position observe this constraint, modulo case-syncretism. In what follows, I will outline a proposal that can account for the data presented.

5.2 Proposal

It is obvious that an adequate analysis of Serbian FRs has to address several aspects of the issue. One is the internal structure of FRs in this language, and the other is the issue of the non-headedness of FRs, which directly affects their distribution. We will start by tackling the former, arguing for the bare CP analysis of Serbian FRs.

Chapter 2 of this thesis provided a summary of the two general approaches to the analysis of FRs - the head-account and the comp-account. The main point of division between the two is the syntactic status of the FR pronoun. On both approaches however, the assumption is that we are dealing with a type of relative clause. In this proposal the FR clause in Serbian is to be treated as a distinct type of wh-clauses.

I propose that the internal structure of Serbian FRs should be analyzed as represented by the tree-structures in (64). Example (60a) represents the analysis of an FR with a default singular wh-pronoun and an optional particle *god*, while (64b) represents the derivation of the +φ FR.

(64) a   …[FR   šta   god ti   preporučiš]

     what-acc   *god* you recommend

    "…what(ever) you recommend"
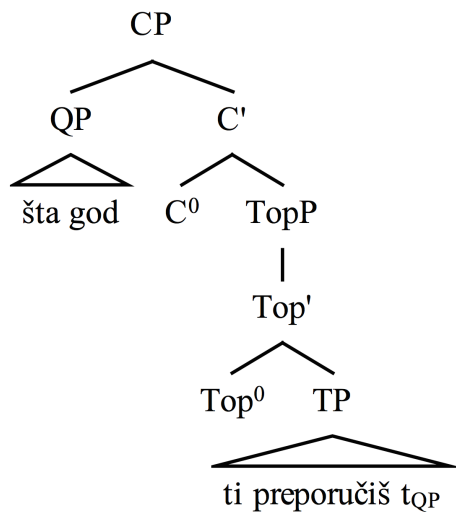
b. …[FR koju   god knjigu   ti   preporučiš]

 which-acc   *god* book-acc   you recommend

"…whichever book you recommend"

```
                    CP
            ┌───────┴───────┐
           QP               C'
         ┌──┴──┐          ┌──┴──┐
    koju god tNP         C⁰    ToP
                              ┌──┴──┐
                             NP     Top'
                            ┌─┘   ┌──┴──┐
                         knjigu Top⁰   TP
                                     ┌──┴──┐
                                 ti preporučiš t_QP
```
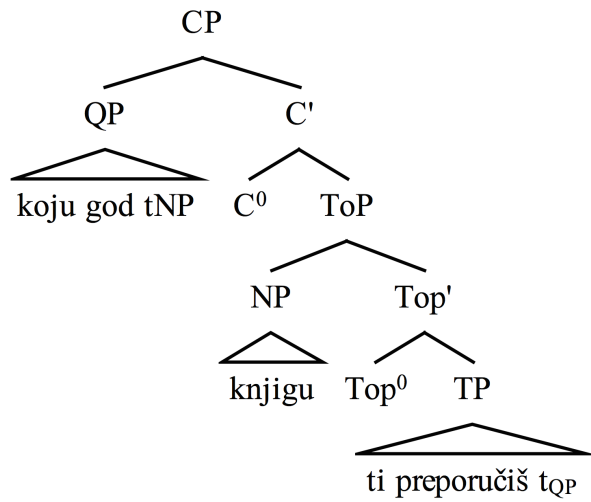
The grafting of the FR into the main clause is represented below.

(65) a.

```
        TP
      ┌──┴──┐
    pro    T'
         ┌──┴──┐
        T⁰    vP
            ┌──┴──┐
        < pro >   v'
                ┌──┴──┐
               v⁰    VP
                   ┌──┴──┐
                  QP    V'           CP
                        │         ┌──┴──┐
                        V⁰       QP     C'
                              ┌──┴──┐ ┌──┴──┐
                           šta god C⁰  TP
                                       ┌──┴──┐
                                   ti preporučiš t_QP
```
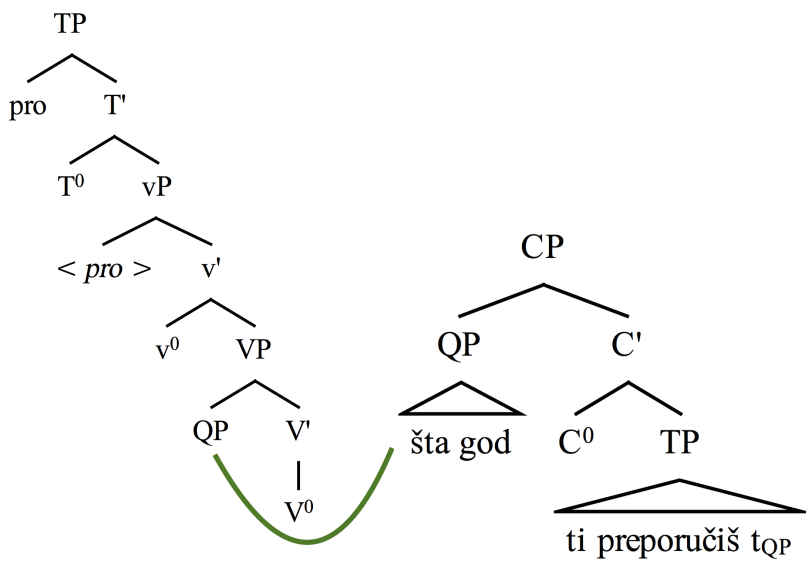
b.
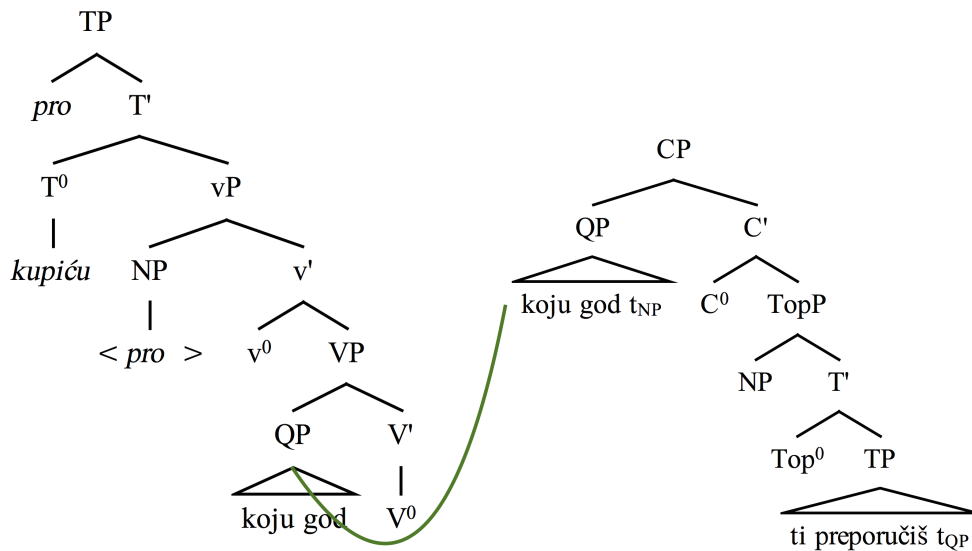
The FR is derived by movement of the wh-constituent into the Spec CP to satisfy the FR feature of the C-head. The C-head is a null FR complementizer. The $+\varphi$ wh-constituent undergoes the same type of movement as the default singular wh-item. In the following sections, I will support these claims by addressing the syntax of the anaphoric possessive in Serbian, and offer an account of the wh-god constituent considering the data which involve the clitic placment in this construction.

5.2.1 The Anaphoric Possesive in Serbian/Croatian

Let us first address the proposed movement of the wh-constituent into an A-bar position. One piece of evidence comes from Gračanin-Yuksek (2008) regarding the Croatian data.

As can be expected, the conclusion the author draws regarding Croatian extends to Serbian too. The evidence involves what I have referred to as $+\varphi$ FRs and the distribution of a subject oriented anaphora *svoj* (possessive *self*) in these clauses. Namely, this kind of anaphora must be bound by a subject antecedent within its clause (66a). The non-anaphoric possessive pronoun is bound outside its domain (66b).

(66) a. Roditelji$_i$ vole   svoju$_i$ decu.

parents   love   self-poss   children.

  "Parents love their children."

  b. Roditelji$_i$ vole   njihovu$_{*i/k}$ decu.

parents   love   their   children

"Parents love their children."

<div align="right">(Gračanin-Yuksek 2008: 278)</div>

As shown in (67a), in FRs, the moved wh-constituent is bound by the embedded subject, i.e. the wh-phrase reconstructs into its base position. In contrast, the non-anaphoric possessive cannot be bound by the embedded subject (67b).

(67) a. Vid$_i$ će   nagraditi koje   god svoje$_{k/*i}$ dete   Dan$_k$ preporuči.

Vid aux-fut reward which   *god* self-poss   child   Dan   recommends

"Vid will recommend whichever of his (Dan's) children Dan recommends."

b. Vid$_i$ će   nagraditi   koje   god   njegovo$_{i/j/*k}$ dete   Dan$_k$ preporuči.

   Vid aux reward   which *god*   his   child   Dan recommends

"Vid will recommend whichever of his children Dan recommends."

Both examples in (67) lead to the conclusion that the moved constituent is raised to the A-bar position and obligatorily reconstructs.

The binding pattern of the anaphoric possessive is reverse in the externally headed relative clauses. Example (68) shows that the anaphoric element is bound by the main clause subject, *Vid*.

(68) Vid$_i$ će   nagraditi ono svoje$_{i/*k}$ dijete   koje   Dan$_k$ preporuči.
    Vid aux-fut   reward   that self-poss   child   which   Dan   recommends
    "Vid will reward that child of his which Dan recommends."

This is to be expected since the NP constituent (*ono svoje dete*) here is external to the relative clause, and there is no reconstruction. We therefore must conclude that FR wh-constituent is moved to an A-bar position of the FR clause. For Gračanin-Yuksek the entire string (*koje god svoje dete*) is the relevant phrasal constituent that undergoes raising, which I concur with, although I disagree with her assumptions about the internal structure of the FR wh-constituent. I intend to address the syntactic structure of this phrase in more detail below.

5.2.2 The structure of wh-*god*

In Milićević (2011) I proposed an analysis on which particle *god* is in fact a complementiser that identifies an FR as a distinct clause type. In this thesis, however, I will argue that viewing this element as a nominal constituent provides a better account of the internal structure of Serbian FRs.

The morpho-syntactic status of this item is puzzling for several reasons. There is no standard assumption about the status of this item that I am aware of, but its prescribed spelling treats it both as an independent word and a bound morpheme, which probably stems from its peculiar distribution. Gračanin-Yuksek (2008) points out that the boundaries of a prosodic word do not necessarily coincide with those of a morphological word, and treats *god* as a separate morphological unit that can form a prosodic word with the wh-word. However, the vagueness of such formulation does not settle the issue of whether we are dealing with a phrase or a single, morphologically complex lexical item. The latter would be flawed from the perspective of the prosodic properties of lexical items in Serbian. Namely, the particle in question carries stress, which is a good reason not perceive it as a bound morpheme or even a clitic, but a separate syntactic unit.

In Serbian multisyllabic lexical words, the stress can never fall on the last syllable (cf. Lehiste and Ivić 1986). Hence, treating wh-word+*god* string as a lexical unit, a syntactically atomic item, would force us to treat *god* as its final syllable. It is not expected, then, that it is ever prosodically prominent. Contrary to expectations, this

particle is, without exception the stressed element in a given string, which indicates that we are dealing with a syntactically complex constituent.

Also, clitics are by definition prosodically weak, unstressed elements, which need a prosodic host, and in that sense distinct from *god*, which may indicate that this particle is not involved in the clitic clustering at all. Indeed, clitics in Serbian group together preserving a specific order (*li* > plural auxiliary clitic / 1st or 2nd person singular auxiliary clitic > dative clitic > accusative clitic > 3rd person singular auxiliary/self clitic) as shown in (69). Inside the FRs, however, they all cluster either preceding or following the particle (70).

(69)   a.   Poslala   sam   mu   ga   juče.

            sent   aux-1Sg cl-dat   cl-acc   yesterday

            "I sent it to him yesterday.

       b.   Ko mi ga je dao?

           who-cl-dat cl-acc aux-3Sg

           "Who gave it to me?"

(70)   a.   Naručiću   šta   *mi*   *se*   **god** svidi.

            order-fut-1Sg   what   cl-dat   cl-self   *god* like

            "I will buy whatever I like."

b. Naručiću   šta   **god** *mi*   *se*   svidi.

order-fut-1Sg   what   *god* cl-dat   cl-self   like

"I will buy whatever I like."

This indicates that the particle doesn't belong to the standard clitic hierarchy, and since its phonetic properties and semantic contribution remains the same in both cases in (70), the simplest hypothesis would be that it has a fixed syntactic position, either inside a wh-constituent or in the functional domain of the clause while the clitics cluster around it.

Another rather obvious possibility is to treat this item as an optional affix, an element that behaves both as a bound morpheme and an independent syntactic constituent. This, however, is unlikely, because it actually can have the status of a suffix, but in a separate wh-paradigm. Although this distinct type of *wh-god* items (illustrated in (71)) is not traditionally distinguished by standard Serbian grammars, it does exist and has a distinct phonetic realization as well as syntactic distribution.

(71)   a.   Ako   štagod   vidiš   zovi   me.

         if   what-*god*   see-2sg   call   me

         'If you see something call me.'

     b.   Hoćeš   kadgod   doći?

         will.2.sg when-*god*   come

         "Will you drop by some time?"

In the cases given above, *god* is part of the indefinite nominal expression. In this environment, it has all the properties of a bound morpheme, i.e. it is unstressed and inseparable from the *wh*-component of the expression. In addition, this type of pronoun has an indefinite interpretation (as indicated in the English translation). On top of that, the licensing conditions for this pronoun are quite distinct as well. We find it in the scope of a conditional, or a question operator as shown in (71), but not in FRs.

With all this in mind, it is clear that there should be a way to distinguish the two guises of *god*. Returning to the FR *god*, we can procede by comparing it with *ever* in English. First of all, unlike *ever* in English, Serbian *god* can never be modifed with an adverb, or have low clausal position, which can either mean that it is a constituent of a nominal category which regulary ends up high in the clausal domain (such as wh-NP) or a type of the complementizer in a given clause.

(72)　　a.　What did he hardly ever see?

　　　　b.　*Šta　je　　skoro　god video?

　　　　　　what　aux　　hardly　*god* see

　　　　　　"What did he hardly ever see?"

(73)　　a.　This feeling is growing ever stronger.

　　　　b.　*Ovo　osećanje postaje　god jače

　　　　　　this　feeling　becomes ever stronger

　　　　　　"This feeling is growing ever stronger."

It might also be that the syntactic status of *god* is similar to that of the complementizer *li* (also referred to as the focus particle)[7], which shows up in one type of interrogative clauses illustrated below.

(74)　　a.　Koju　　li　knjigu　želi?

　　　　　　which　C　book　　wants

　　　　　　"Which book, I wonder, does she want?"

As (75) shows, neither *li* nor *god* can be separated from a wh-word by an intervening phrase.

(75)　　a.　*Koju　knjigu　li　želi?

　　　　　　which　book　　C　wants

　　　　b.　*Koju　sad li　knjigu　želi?

　　　　　　which　nowC　book　　wants

　　　　　　"Which book, I wonder, does she want now?"

---

[7] This particle shows up as an affix in Bulgarian or a complementizer in Serbian (cf. Bošković 2001)

c. *Koju   on   li   knjigu   želi?

which   he   C   book   wants

"Which book, I wonder those he want?"

d. Koju   god knjigu želi...

which   *god* book   wants

'Whichever book she wants...'

e. *Koju   knjigu   god želi...

which   book   C   wants

f. *Kupiću   šta   ti   god preporučiš.

buy-fut-1sg   what-acc you*god* recommend

"I will buy whatever you recommend."

However, there is a difference between *li* and *god.* The former cannot be preceded by clitics (76), while the FR particle can, as shown in (77).

(76)   a. Šta   **li**   mu   je   poklonila?

what   C   cl-dat   cl-aux-3Sg   gave

"I wonder what she gave him as a present."

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b. *Šta   mu   **li** je   poklonila?

what   cl-dat   C   cl-aux-3Sg   gave

"I wonder what she gave him as a present."

c. *Šta   mu   je   **li**   poklonila?

what   cl-dat   cl-aux-3Sg   C   gave

"I wonder what she gave him as a present."

(77)   a.   Šta   **god** mu   je   poklonila..

what   C   cl-dat   cl-aux-3Sg   gave

"Whatever she gave him as a present…"

b.   Šta   mu   je   **god** poklonila…

what   cl-dat   cl-aux-3Sg   C   gave

"I wonder what she gave him as a present."

Finally, it should be also mentioned that *god* and *li* cannot co-occur in the same clause. This may mean that they are competitors for the same syntactic position, but such evidence cannot be conclusive since the syntactic environments (clauses embedded in the argument positions), which are tested in this research may induce a semantic restriction on their co-occurrence.

(78)   a.   *Kupiću   šta   god li   ti   preporučiš.

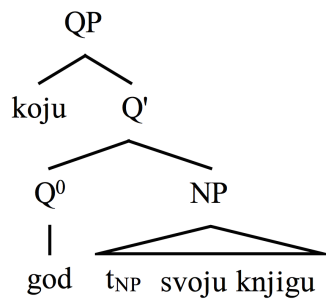   buy-fut-1sg what-acc   *god li*   you recommend

              "I will buy what(ever) you recommend."

       b.   * Kupiću   šta   li   god ti   preporučiš.

              buy-fut-1sg what   *li*   *god* you recommend

              "I will buy what(ever) you recommend."

Sof far, from the distributional data above, we can draw several conclusions. One is that there is sufficient evidence that particle *god* is syntactically independent and that the string *wh-god* does not make a single syntactic head. It is either a phrasal constituent of a complex NP that occurs only in FRs in the left periphery of the clause, or it is a separate functional head. What I propose is that it is both, but despite its resemblance to *li*, *god* is the head of a functional projection in the nominal domain, a QP utilized in the derivation of the wh-constituents in FRs. The structure of both the default singular wh-constituent and and the $+ \varphi$ wh-phrase are given in (79).

(79)　a.　šta　　　god　　　　　　　b.　koju　　god svoju　　knjigu

　　　　　what　　ever　　　　　　　　　which　　Q　　self-possbook

```
        QP                              QP
       /  \                            /  \
     šta    Q'                       koju    Q'
           /  \                             /  \
          Q⁰   t_NP                        Q⁰     NP
          |                                |      /  \
         god                              god  t_NP svoju knjigu
```
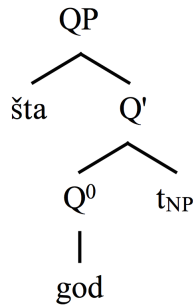
It will be shown in the following section the structures assumed above are necessary in providing the analysis for the apparently optional distribution clitics in FRs.

5.2.3　Clitic placement at the syntax-phonology interface

Before I turn to the analysis of the data presented in the previous section, I will try to describe how clitic placement in Serbian is currently viewed in the syntactic literature, though it has been widely acknowledged that a coherent account of the intricate ways of Serbian clitics requires a better understanding of how syntax and phonology interact, since the conditions on their occurrence are to a great extent phonological. I must emphasize that the amount of research done on this topic cannot receive the attention it deserves in this work, and that my perspective on the issue is primarily syntactic, although the matter seems to be as phonological as it is syntactic.

Since the issue lies in the domain of syntax-phonology interface, let me briefly present the underlying assumptions about how phonology interprets syntactic structure.

Returning for a moment to the Minimalist Y-model of grammar presented in section 1.2.2, recall that in this model the computational component of grammar (or narrow syntax) builds a phrasal structure, which at certain points (the points of spell-out) is transferred to the interfaces with the semantic (LF) and phonological (PF) components for interpretation. The transfer operation happens cyclically and each time the output of this process is a set of pairs, where one member of a pair is a semantic representation of the input string, and the other its phonological representation. To focus on the PF component, it is assumed this is where the process of lexical insertion happens, by which feature bundles at the syntactic nodes get the matching lexical output from the lexicon, and where the linearization of lexical items is determined. In other words, this is where a phrase structure with its feature bundles is translated into a phonological representation and mapped onto a flat, prosodic structure.

In order for this to happen, as is standardly assumed, the PF has to have access to syntactic information regarding the constituency structure and the category information of the phrase structure chunk that it maps onto a prosodic structure. In this way it is able to systematically apply the rules of the syntax-to-phonology transfer.

Selkirk (1984) proposes a comprehensive approach to the type of mapping from syntax to prosody, which will be adopted here.[8] In this theory, the phonological representation of a syntactic input has its own hierarchy of prosodic categories, listed below.

---

[8] For the relevant extended literature, see the list of references in Selkirk (1984), and for more details on the alignment rules reinterpret the syntactic parsing see also Selkirk (1986), McCarthy and Prince (1993) and Truckenbrodt (1995; 1999).

(80)   utterance

         intonational phrase (IP)

         phonological phrase (PhP)

         prosodic word (Wd)

         foot (Ft)

         syllable (Syl)

The highest unit/constituent in the hierarchy in (80) is the utterance, and going down the list, each category contains the following one. Unlike syntactic phrasal categories, prosodic categories are non-recursive, which means that the containment relation is unidirectional and exhaustive– a prosodic unit cannot contain a hierarchically higher one. This rule is referred to as *the strict layer hypothesis*.

Each of the categories in (80) represents a domain where specific prosodic rules apply. The crucial interface mechanism is the category mapping procedure, by which a syntactic representation is turned into a phonological one. Since the syntactic and phonological phrasing is isomorphic, the challenge for the interface theory is to establish a mapping procedure, which, by assumption, can be language specific. The phonological phrasing is thus determined via alignment rules, which can vary cross linguistically. The alignment rule provides a linear phonological representation of a syntactic phrasal constituent by matching its left or right edge with the corresponding phonological constituent.

For example, since Serbian is a left-aligning language it would align the left edge of the maximal projection of any category with the edge of a PhP. Thus, the phonological representation of a syntactic structure in (81a) would be mapped onto a string of

constituents in (81a'). When it comes to IP, or I-phrasing, an embedded clause structure

in (81b) would be mapped onto the phonological representation in (81b')

(81)   a.   [$_{VP}$ [$_{NP}$ N] V [$_{NP}$ N]]

        a'.   (NP V) (NP)

        b.   [$_{CP}$ C [$_{TP}$ [NP] T [$_{VP}$ V [$_{CP}$ C [$_{TP}$ [NP] T [$_{VP}$ V]]]]]

        b' $_{IP}$ (NP T V) $_{IP}$ $_{IP}$ (NP T V) $_{IP}$

I will focus on the IP constituent, which is the domain relevant for the purposes of the

current analysis. Selkirk characterizes the IP constituent as the one "larger than a word

and variable in extent" (cf. Selkirk 1984: 27), and the vagueness of this definition makes

it hard to establish what the 'variability in extent' relates to in syntactic terms. In his

account of the clitic placement in South-Slavic languages Bošković (2004: 3) states that

"unless interrupted by a special element that forms a separate intonational domain, each

clause is mapped to a single IP domain'. As far as I can understand this position, the CP

to IP mapping is the default case, while 'special cases' are treated as exceptions. Vague

as it is, this rough correspondance between an IP and a CP will be taken as a starting

point in this thesis as well.

Let us, therefore return to the clitic placement in Serbian. It is a standard assumption that

clitics in this language take the second position in the clause. Radanović-Kocić (1988)

phonologically defines it as the second position within the clitics' Intonational Phrase

(IP), where the IP is a prosodic unit that, as already mentioned above, generally corresponds to the syntactic notion of a clause. The issue of how this position should be defined divides the existing accounts in two different approaches: the strictly phonological ones and the syntactic ones. In the former (Halpern 1995; Radanović-Kocić 1988, 1996), clitics attach to the first phonologically independent unit – a word, and it is the operation of prosodic inversion (Halpern 1995) that provides the host for the clitic(s), when necessary. Thus, it is prosodic inversion that derives (82a-c).

(81)   a. Marko **je** juče stigao.

        Marco cl-aux yesterday came

        "Marco arrived yesterday."

    b. Juče **je** stigao.

        yesterday cl-aux came

        "He arrived yesterday."

    c. Stigao **je** juče.

        came **aux** yesterday

        " He arrived yesterday."

The second position of the clitic, therefore, is always the result of the PF movement. Syntactic approaches, on the other hand, reject the PF movement on conceptual grounds, since movement is a syntactic operation, but also on the basis of the abundant evidence

that the second position rule cannot be defined in purely phonological terms. The crucial argument for this position is the fact that the host for a clitic is not a word, a lexical item, but a syntactic phrase. More precisely, syntactic heads that do not undergo movement cannot serve as appropriate hosts in the sentence-initial position (cf. Bošković 2001, 2004; Progovac 1996; Ćavar&Wilder 1994). One illustration of this is given in (82), and it shows that prepositions can never be hosts for clitics in Serbian (82b), though they can take the first position in a sentence (82a) in linear terms.

(82)   a.   Prema tebi   sam   krenula.

             towards you-dat cl-aux-1Sg   started

             "I moved towards you"

    b.   *PREMA   sam   tebi   krenula, ne OD   tebe.

             Towards   cl-aux-1Sg you-dat started not from   you-gen

             "I moved TOWARDS you, not FROM you."

This also means, that all of the first positions in (81) are first derived independently of any phonological requirement concerning the clitic. The PF component can only be said to affect the objects already derived in syntax in the linearization process. Therefore, if an element is not a phrasal constituent that reaches the relevant position outside the VP it cannot be a host for the clitic. A preposition (even when stressed, and therefore phonologically strong) cannot be moved to support the clitic in (82), regardless of the fact that it is a phonologically adequate host.

The notion of the IP (as argued by Bošković 2001, 2004) is necessary in accounting for the second position effect because it represents the domain in which it is determined. In his theory of the clitic placement, the second position rule is a constraint on phonological representations. The other crucial ingredient of this theory is the copy theory of movement, which views the displacement of a syntactic constituent as the copying of that constituent on its way to its final landing site. The movement operation conceived in this way creates a chain of copies, and in PF the highest member of the chain is pronounced if it satisfies the requirements of the PF.

Therefore the pronounciation of a single clitic-copy, among plausibly many, but at least two, is determined at PF, where the second postion cliticization rule applies. Since the Serbian clitics encliticise, they need a host on their left, and if they happen to be in the highest position of the clause, without an appropriate host to their left, the lower copy in the chain is pronounced. To use (81c) as a good illustration, the way PF affects its derivation is given below.

(83)   [je [PartP stigao] < je> [VP <stigao> juče]]

That the IP is indeed the relevant domain for clitic placement is confirmed by the fact that clitics can occur in the delayed position when preceded by constituents that, arguably, project their own IP, independently of the root clause, and are set off by pauses (cf. Selkirk 1984, 1986). These constituents include: parentheticals, appositives, appositive relative clauses, heavy constituents, and certain preposed elements. The apparent clitic

delay in these circumstances is illustrated by (84), where an appositive causes a redefinition of the prosodic properties of the root clause, and the IP boundaries within it.

(84)   Džon Lenon, muzičar   i   pesnik, imao   **je**   pravi   talenat.

Džon Lenon musician   and poet   had   cl-aux-3Sg   real   talent

'John Lenon, a musician and poet, had a real talent.'

The relevant prosodic domain of the clitic *je* in (84), or, in other words, its IP, does not coincide with the boundaries of the entire root clause, but a smaller syntactic domain within it (85).

(85)   Džon Lenon, ($_{IP}$ muzičar   i   pesnik), ($_{IP}$ imao   **je**   talenta).

Džon Lenon   musician   and poet   had   cl-aus-3Sg   talent

"John Lenon, a musician and poet, had talent."

The division of labor, between syntax and phonology, such that syntax always determines the position of the clitic, while PF filters out phonologically illegitimate syntactic derivations is essentially generally adopted in syntactic accounts by now (see for example Franks 1998), and will also be assumed in this work.

However, the exact position of clitics is Serbian is a matter of some debate, as well as the type of movement involved. The two different assumptions about the position of Serbian clitics can are:

(i) clitics are always derived in the highest position in the clause due to some syntactic requirement (feature) related to the their structural deficiency (Franks 2000a, Franks and King 2000, Caink 1999)

(ii) clitics are derived in different functional projections (agreement phrases), the highest of them being designated to the auxiliary clitics (Bošković 2001, 2004)

In what follows we will see how the internal syntax of the FRs and the proposed structure of the wh-god constituent can be related to the apparent optionality of the clitic placement, and what consequences it has for the two assumptions about the landing site for the clitic movement given above.

5.2.4 The distribution of clitics in FRs

The problem with the optionality of clitic placement in FRs, to which we now return (86), is that it allows several patterns of distribution, all apparently involving the split of a complex NP which is presumably located in the highest CP domain, since it involves wh-movement.

(86)   a. Kupiću šta   god **mi**   ti   preporučiš.

           buy-fut what   *god* me-dat you recommend

           "I will buy whatever you recommend to me."

b. Kupiću šta **mi** god ti preporučiš.

buy-fut what me-dat *god* you recommend

"I will buy whatever you recommend to me."

c. Šta **god** mu je poklonila…

what *god* cl-dat cl-aux-3Sg gave

"Whatever she gave him as a present."

d. Šta mu je **god** poklonila…

what cl-dat cl-aux-3Sg C gave

"Whatever she gave him as a present."

The other set of examples given in (87), shows that + *φ* wh-phrases allow several options for clitic clustering as well, and only (87d) is grammatical.

(87) a. Koju mi je god svoju knjigu preporučio..

which cl-dat cl-aux *god* self-poss book recommended

"Whichever of his books he recommended to me…"

b. Koju god mi je svoju knjigu preporučio…

which *god* cl-dat cl-aux self-poss book recommended

"Whichever of his books he recommended to me…"

c. Koju god svoju knjigu mi je preporučio…

which *god* self-poss book cl-dat cl-aux recommended

"Whichever of his books he recommended to me…"

d. *Kupila sam   koju god svoju mi je knjigu preporučio…

bought cl-aux   which *god* self-poss cl-dat cl-aux book recommended

The fact that clitics can split nominal constituents in Serbian has been noted and such instances are said to involve the left branch extraction (LBE), which is possible in Serbian (Progovac 1996, Bošković 200x). Thus we often encounter a situation where a clitic follows the leftmost constiuent of the complex NP. In (88) we can see that only the leftmost AP can precede the clitic.

(88)   a.   Svoju   mi   je   lepu   knjigu   preporučio

self-poss   cl-dat   cl-aux   book   recommended

"He recommended his beautiful book to me."

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b. Lepu   mi   je   knjigu   preporučio.

beautifulcl-dat   cl-aux   book   recommended

"He recommended a beautiful book to me."

c. *Svoju lepu   mi   je   knjigu   preporučio.

self-poss beautiful   cl-dat   cl-aux   book   recommended

"He recommended his beautiful book to me."[9]

The contrast between (87b) and (88c), indicates that the extraction options in the two complex nominal expressions must be different, and that in addition to LBE another type of movement is available in the former case. I argue that this naturally follows from the QP internal structure proposed here, and that the derivation of the patterns in (87) employs also the remnant movement as illustrated in the tree structures below.

(89)   a   Koju mi je god svoju knjigu preporučio..

which cl-dat cl-aux *god* self-poss book recommended

"Whichever of his books he recommended to me…"

---

[9] The intended reading does not involve focus interpretation.
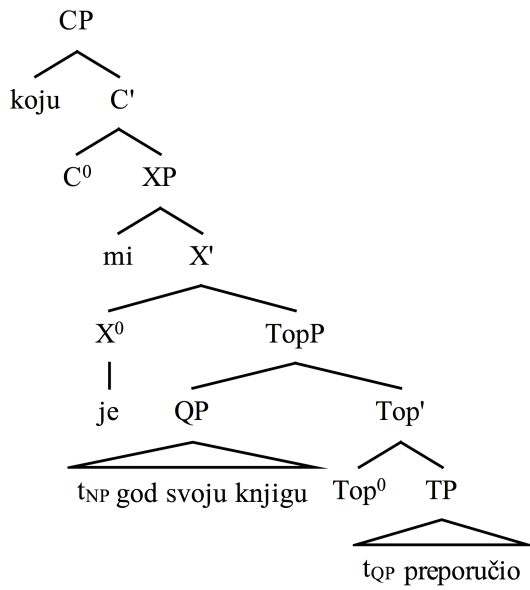
CP
├── koju
└── C'
    ├── C⁰
    └── XP
        ├── mi
        └── X'
            ├── X⁰
            │   └── je
            └── TopP
                ├── QP
                │   └── t_NP god svoju knjigu
                └── Top'
                    ├── Top⁰
                    └── TP
                        └── t_QP preporučio

b. Koju god mi je svoju knjigu preporučio…

which *god* cl-dat cl-aux self-poss book recommended

"Whichever of his books he recommended to me…"

CP
├── QP
│   └── koju god t_NP
└── C'
    ├── C⁰
    └── XP
        ├── mi
        └── X'
            ├── X⁰
            │   └── je
            └── TopP
                ├── NP
                │   └── svoju knjigu
                └── Top'
                    ├── Top⁰
                    └── TP
   └── t_QP preporučio
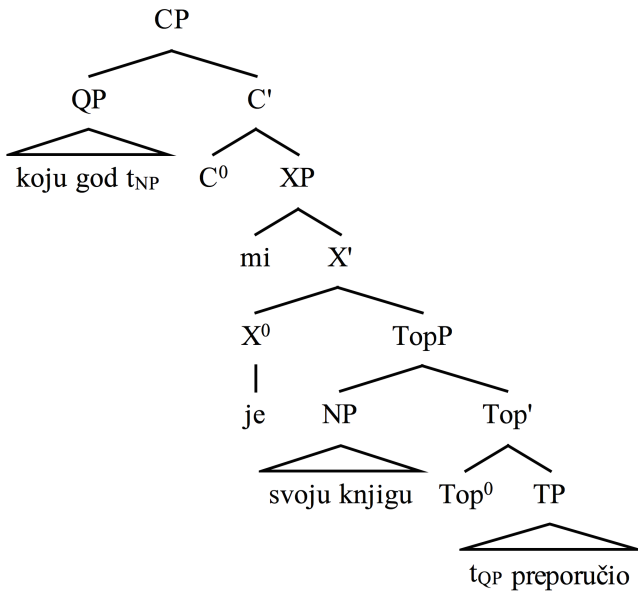
As seen above, the derivation of the FR involves movement through a higher position in the functional domain. I assume that the plausible candidate is a topic phrase. This position has to be filled, and it can be done either by moving the NP complement of Q or the whole QP. Depending on the first step of the derivation, either the evacuated QP moves to CP, or the LBE takes place from the topic position, but the position of the clitics is fixed.

Though the wh-expression in FRs has the same formal features as adjectives in (88) do, and presumably the same categorial, adjectival status, the internal structures of the two types of nominal expressions is different, which has consequences for the extraction.

This is in line with Bošković's (2005) account for the impossibility of (88c). In this paper he convincingly argues that remnant movement is impossible out of the NPs of the type illustrated in (88c). He motivates this by apealing to the notion of phase, claiming that complex NPs created by adunction do not allow sub-extraction, since they represent a phase in non-DP languages, such as Serbian. The difference between the sturctures that would and would not allow such movement is illustrated below.

(90) a.   b.

102
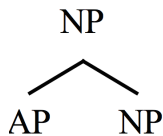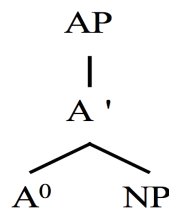
While the NP segment in (90a) cannot be moved, the complement NP in (90b) can. Since complex NPs in (88) involve AP adjunction of the former type, movement of the NP is impossible. On the other hand, the QP of the FR complex nominals obviously provides an escape hatch for the embedded NP.

To account for the order illustrated in (87c). I assume that this the case of the clitic delay that occurs when a heavy constituent disrupts the 'defualt' phonological parsing by projecting its own IP phrase. Admittedly, 'heaviness' is diffucult to assess, but I hypothesise that a complex QP illustrated above is a good canidate. One of the ways to support this would be to search for the intonational break in cases of object FR clauses, since that is usually the sign of the new IP phrase (91b). My intuition is that this can be detected in the case under discussion, but this requires further research.

Finally, the analysis of the internal derivation of Serbian FRs that I argue for has consequences for the assumed syntactic position of clitics. Recall that the two competing views, mentioned in section 3.2.3 are the following:

(i) clitics are always derived in the highest position in the clause due to some syntactic requirement (feature) related to the their structural deficiency

(ii) clitics are derived in different functional projections (agreement phrases), the highest of them being designated to the auxiliary clitics

As can be seen in the tree-structure in (89), in this account the clitics occur in a separate functional projection below CP. This is in some respects compatible with both (i) and (ii) above. Although I do conclude that do not take the highest position in the clause, there is strong evidence that they cluster together, within the same high functional projection

(XP), which is not in accordance with (ii). Since the details of clitic placement is not central to the major issues of this thesis, I would leave the matter to further research.

5.2.5 Grafting of PPs and "the missing P"

In the previous section I have reached the conclusion that the constiuent which is the candidate for grafting can vary in size. The question that immediately arises is what categories can be grafted to fully satisfy the requirements of the main verb.

This is, therefore, the point at which I will turn to the issue of how grafting can account for the descriptive generalization in (51) regarding Serbian, and what the consequences are for the category matching condition in English.

What (51) says is that the PP category matching has to involve identical exponents of category P. The question is, then, how a single constituent can satisfy the selectional properties of both verbs in (91).

(91)   Staviću cveće u šta (god) sipamo vodu.

           put-fut flowers in what-acc *god* pour-1Pl water

           "I will put the flowers in whatever we pour water (in)."

This puzzle is in fact very similar to the well-known issue of 'the missing P' in English FRs - the case of optional stranded preposition, exemplified below.

(92)   a.   I will move to whichever city you go (to).

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b.   I will talk to whoever you talk (to).

Its optional occurrence is only possible if the two prepositions are identical, as shown (93), and just like with (91), the question of what satisfies the categorial selection of one of the verbs in (92) remains.

(93)   a.   I will move to whatever city you talk about.

       b.   *I will move to whatever city you talk__

On the head-account by Bresnan and Grimshaw (1978), an FR in (92) can be either a DP or a PP containing the clause and in the latter case the preposition is not stranded.[10]

(94)   a.   [DP whichever city [TP/CP you go to]]

       b.   [PP to whichever city [TP/CP you go]]

Larson (1987) argues that both FRs are DPs, and (92b) is derived from the underlying structure in (90), where the FR is inside the PP and it contains an empty PP.

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[10] In their representation clausal contituents are labeled as S, which could be related to either TP or CP, considering further development of clausal structure analysis.

(95)   [PP to [DP whichever city [TP/CP you go [PP e]]]

For him, the structure with the missing P is an instance of *antecedent contained deletion*, so (92b) is comparable to the cases of the antecedent contained VP deletion given in (91), which arguably contains an empty VP.

(96)   a.   I want to talk to the same person you do [VP e].

        b.   She suspected every person that he did [VP e].

May (1985) proposed that the proper recovery of the null VP constituent in these examples involves LF-raising of the relative clause so that the VP content can be properly supplied at level of interpretation. This avoids the problem of infinite regress, which arises in the account of VP deletion under identity. [11] Similarly, Larson argues that the recovery of the PP involves the raising of the relative clause to serve as the source of reconstruction. This is where copying of the main clause PP takes place, to identify the content of the empty PP. Thus, (92) has the structure of (97) at LF.

(97)   a.   [S [NP whichever city you go [PP e][S I will move [PP to t_{NP}]].

        b.   [S [NP whichever city you go [PP to e][S I will move [PP to t_{NP}]]

---

[11] This approach to avoids the problem of infinite regress that would surface under a deletion-under-identity approach. The reader is refered to the relevant work for the details of this account, since they are not directly relevant for the main claims of this thesis.

Cruicially, Larson's analysis relies on the underlying assumption that the FR is headed by a wh-pronoun, and the idea that FRs are universally quantified NPs. The difference between his approach and Bresnan and Grimshaw's is only in the assumed category that serves as a head of an FR.[12]

As pointed out in section 2, later development of the GB framework and the study of FRs within it have provided plenty of evidence for the CP analysis of FRs, on which the relative pronoun takes the CP internal position, and by now the comp-account has become a standard. Recall that in this type of analysis, an FR is headed by a phonologically null pronoun. If this is so, the antecedent contained deletion account of *the missing p* phenomenon becomes untenable. For one thing, neither *pro* nor *PRO* can be viewed as pronouns with quantifying force.

Grosu (1996) offers an alternative elaborate comp-account in which the whole prepositional phrase embedding an FR is embedded is a null PP. Thus, the structure of the FR in (87) is (93), where the whole PP is represented by two null pronominal elements – *p*, a null preposition, and *pro*, a null pronoun.

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[12] See also Grosu (1996) for the extensive criticism on the empirical coverage of Larson's account. One of the crucial points he makes is illustrated in (i) and (ii), showing that quantifying interpretation is not absent in cases where the missing preposition is ungrammatical (i), just as non-quantifying reading is not forced by *ever* (ii), contrary to the prediction of Larson's analysis.

    (i)   I will sleep on what you sleep *(on).

    (ii)   I will move now to whatever town you went last year.

(98)   [PP [PP *p pro*] [CP to whichever town you go]]

As we can see, Grosu's analysis can be viewed as a reinterpretation of the Bresnan and Grimshaw's structure in (94). In both of them the FR is a PP adjunct, only Grosu proposes that the external PP is a null category. It seems then, that traditional comp-accounts have to resort not only to the postulation of null nominal categories in the unexpected (object) positions but also to a significant extension of our understanding of the null pronominal's category. As Grosu himself notes, referring also to Cinque (1990:chap 3), a PP cannot be *pro*, and this is what leads him to assume a null P too in (98). However, we can try to take a different route and avoid further stipulations regarding the properties of null elements.

The approach argued for in this thesis is such an attempt. Crucially, to avoid the proliferation of null elements in the syntax of FRs, we might take things at face value and consider the matching effects described above as a sign of shared structure. Going back to the Serbian example in (91), its structure is given in (99), and the constituent given in bold is shared.

(99)   [TP Staviću [vP t$_v$ cveće   **[PP u šta**

                                    [CP **[PP u šta]** (god) [TP sipamo vodu]]]]

The structure in (99) is also assigned to the example in (100). More precisely, when the shared constituent does not match the selectional properties of the main clause the PP wh-phrase is grafted into the relevant argument position.

(100)   Kupiću   [**za šta**] (god) si zainteresovan.

         buy-fut-1Sg for what-acc *god* are interested

         " I will buy whatever you are interested in."

When the PP doesn't match the selectional properties of the FR (101), the grafted constituent is the NP and the targeted position is the complement of P.

(101)   Zaljubila se   [PP u   [NP **koga**]]   (god)   je   poljubila.

         fall-in-love self   in   whom-acc   *god*   aux-3Sg kissed

         "She fell in love with whomever she kissed."

The same approach can be applied to the case of a missing P in English described above. Both grafting of PPs and NPs can satisfy the selectional properties of verbs and prepositions, and no additional assumptions are necessary to account for the data in (92). The optional occurrence of a stranded preposition in (92) becomes trivial, and follows from the fact that preposition stranding in English is possible and optional in other types of related constructions. So, the two structures of (92a), which underly the apparent opitonality are given below.

(102)   a.   [TP I will [vP move   [**PP to whichever**

                          [CP [**PP to whichever city**] you go]]]]

         b.   [TP I will [vP move   [PP to   [NP whichever

                          [CP [NP **whichever city**] you go [PP to t$_{NP}$]]]]]

With the minimal number of assumptions, the grafting analysis unifies the phenomenon of missing PPs in the languages discussed. Grafting of wh-phrases in FRs can target the complement position of a verb or a preposition to provide them with an appropriate category feature.

The answer to a remaining larger question of why category P can satisfy the selectional properties of the main verb in (100) depends on our understanding of this category in Serbian. One possible answer to this question could be that this category is not an independent lexical category, but an exponent of a functional domain of the nominal projection. Chomsky (1986) addresses the non-existence of preposition stranding in many languages, claiming that in these languages stranding would violate the ECP, since P is not a governing lexical head for the trace of the NP, but a syntactic head with a function of an affix. This view has been argued for by many researchers (see for example Webelhuth 1992, Grosu 1994, Botwinik-Rotem 2004), and as Horvath (2006) notes, in

many other accounts of the syntax of PPs (Van Riemsdijk 1978, Kayne 1994, Koopman 2000) the functional (or semi-functional status) of the preposition is implied.[13]

If we adopt Chomsky's idea that non-stranding prepositions are affixal, the exponents of case in a higher nominal domain, we can account for the difference between the English and Serbian data discussed above. Since Serbian is a non-P-stranding language, it can be viewed as a nominal functional category and the apparent category mismatch we observe in (100) can be explained as another version of a category match.

5.3 Concluding Remarks

In this chapter I have first proposed that Serbian FRs are CPs without the external nominal head. The main arguments for this analysis rely on the binding facts, which indicate that wh-expressions are in the A-bar position of the FR. The FR wh-phrase is analyzed as the specifier of the CP, which allows us to treat them as a type of wh-clauses more generally.

The internal structure of the FR is identified as a complex QP, and it has been shown it can account for the non-affixal properties of the particle *god* and that it can capture the derivation of the FR in a way that can account for the apparently optional placement of cltics. To this end, I have also analyzed the derivation of FRs as involving both LBE and remnant movement of QP through an intermediate A-bar position.

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[13] In these accounts the NP moves through the specifier position of the PP.

Rergarding the properties of the object FRs related to the main clause environment, we have esatablished the matching constraints typical of this construction to a large deegre hold in Serbian too, although category matching is conditioned by case-matching. This has been taken as an indication that category P does not have the status of a lexical category in Serbian.

It has also been shown that a grafting account of the missing PPs in both Serbian and English in FRs provides a simple explanation for an otherwise puzzling phenomenon.

Regarding the CMC, I have argued that a shared-structure account of it, has many theoretical advantages over the accounts that treat an FR as externally headed by a null pronominal element, in that it involves fewer stipulations.

In the following chapter I will address the distribution and properties of Serbian FRs in the subject position, and the variation we find in this type of data across languages.

6 The Distribution of Free Relatives Revisited

6.1 Subject FRs in Serbian

6.1.1 The Data

In section 2.2 we said that in some languages, Serbian being one of them, FRs seem to have different properties in the subject position, since the matching constraints do not hold. We can now take a closer look at the relevant data.

An FR with a +*φ* wh-word can be accosicated with the main clause subject in both preverbal and postverbal position. As illustrated in (103), the category matching is observed in the latter case.

(103) a. *Tu   će   ostati s   kojim   god alatom imaš   iskustva.

there   aux-fut-3Sg stay with which-inst *god* tool-inst have-2Sg   experience

"Whatever tool you are experienced with will stay there."

   b. * Tu   će   ostati koji   god alat   imaš   iskustva.

there   aux-fut-3Sg   which-nom *god* tool-nom   have-2Sg experience

"Whatever tool you are experienced with will sell."

   c. *Obradovaće   se   ka kojem   god slušaocu izrazim   naklonost.

be-happy-3Sg   self for who-dat *god* listener   express-1.Sg sympathy

"Whatever listener gets my sympathy will be happy."

   d. *Obradovaće   se koji   god   slušalac   izrazim   naklonost.

be-happy-3Sg   self who-nom *god*   listener-nom express-1.Sg sympathy

"Whatever listener gets my sympathy will be happy."

In the above examples we see cases when the embedded verb selects for a PP, while the main clause verb selects an NP. We can conclude that satisfying only the selectional properties of the embedded verb (103a and c), or only those of the main clause verb (103b and d) cannot yield a grammatical result.

If, on the other hand, the FR precedes the verb, it is only the selectional properties of the embedded verb that need to be obeyed. Thus, (104b and d) are ungrammatical because the wh-constituents are not PPs, which are selected for by the embedded verbs.

(104)   a.   S   kojim   god alatom   imaš   iskustva   ostaće   tu.

             with what-inst   *god* tool   have-2Sg experience   stay-fut-3Sg   there

             "Whatever tool you are experienced with will sell."

         b.   *Koji   god alat   imaš   iskustva   ostaće   tu.

             which-nom   *god* tool-nom   have-2Sg experience stay-fut-3Sg   there

             "Whatever tool you are experienced with will sell."

         c.   Ka   kojem   god slušaocu izrazim   naklonost   obradovaće   se

             for   who-dat *god* listener   express-1Sg   sympathy   be-happy-3Sg   self

             "Whatever listener gets my sympathy will be happy."

     d.   *Koji   god   slušalac   izrazim   naklonost obradovaće   se

         who-nom *god*   listener-nom izrazim-1.Sg sympathy be-happy-3Sg   self

         "Whatever listener gets my sympathy will be happy."

The observance of the CMC follows the same pattern, as illustrated below. In (105) we see that only a matching case gives a grammatical result. If the case satisfies the requirements of only the embedded verb as in (105b and d), or only those of the main verb as in (105c and e), the sentence is ungrammatical.

(105) a. Tu   će ostati   koja   god knjiga   stoji   na polici.

there   aux-fut-3Sg stay which-nom *god* book-nom   stands   on shelf

"Whichever book stands on the shelf will stay there."

b. * Tu će ostati   kojoj   god knjizi   se   obradovao.

there stay-fut-3Sg   which-dat   *god* book-dat   self made-happy

"Whichever book he got happy about will stay there."

c. * Tu će ostati   koja   god knjiga   se   obradovao.

there stay-fut-3Sg   which-nom *god* book-nom   self made-happy

"Whichever book he got happy about will stay there."

d. *Dobiće   poklon kojim   god zaposlenima si   upravljao.

get-fut-3Pl   present which.inst   god employees aux-2Sg   managed

"Whichever employees you managed will get a present."

e. *Dobiće   poklon koje   god   zaposlene   si   upravljao.

get-fut-3Pl   present which-nom god   employees-nom   aux-2Sg managed

"Whichever employees you managed will buy a present."

Again, in the preverbal position only the case requirements of the embedded verb must be observed.

(106)   a.   Koja   god knjiga   stoji   na polici   ostaće   tu.

which-nom *god* book-nom   stands   on shelf   stay-fut-3Sg there

"Whichever stands on the shelf will stay there."

b.   Kojoj   god knjizi   se   obradovao ostaće   tu.

which-dat   *god* book-dat   self was-happy stay-fut-3Sg   there

"Whichever book he got happy about will stay there."

c.   * Koja   god knjiga   se   obradovao ostaće.

which-nom *god* book-nom   self was-happy stay-fut-3Sg

"Whichever book he got happy about will stay there."

d. Kojim   god zaposlenima   si   upravljao   dobiće   poklon.

which.inst   god employees-inst   aux-2Sg managed get-fut-3Pl   present

"Whichever employees you managed will get a present."

e. * Koje   god   zaposlene   si   upravljao dobiće   poklon.

which-nom   god employees-nom   aux-2Sg managed get-fut-3Pl   present

"Whichever employees you managed will get a present."

What we can conclude from the data above is that +*φ* FRs associated with the subject position of the main clause must match its nominative case in the postverbal position while there is no CMC effect when they occur preverbally.

Turning to the default singular FRs, we find that the pattern is quite different. In the postverbal subject position there is no categroy matching, and the default singular wh-constituent is always selected by the embedded verb, which is exemplified in (107), by the contrasts between the grammatical (107a and c), and (107b and d), which are ungrammatical.

(107)   a. Tu   će   ostati   s   čime   (god)   imaš   iskustva.

there   aux-fut-3Sg   stay with what-inst   *god*   have-2Sg experience

"Whatever you are experienced with will stay there."

b. * Tu   će   ostati   šta   (god) imaš   iskustva.

   there   aux-fut-3Sg   what-nom *god*   have-2Sg experience

   "Whatever you are experienced with will sell."

c. Obradovaće   se ka kome   (god) izrazim   naklonost.

   be-happy-3Sg   self for who-dat *god* express-1.Sg   sympathy

   "Whoever gets my sympathy will be happy."

d. *Obradovaće   se ko god   izrazim   naklonost.

   be-happy-3Sg   self who-nom   listener-nom express-1.Sg sympathy

   "Whoever gets my sympathy will be happy."

Preverbal singular default FRs follow the same pattern. The category selected by the embedded verb always wins, as shown below.

(108) a. S   čime   (god) imaš   iskustva   ostaće   tu.

   withwhat-inst *god*   have-2Sg experience stay-fut-3Sg there

   "Whatever you are experienced with will stay there."

b. * Šta god imaš iskustva ostaće tu.

what-nom *god* have-2Sg experience stay-fut-3Sg there

"Whatever you are experienced with will sell."

c. Ka kome god izrazim naklonost obradovaće se.

for who-dat *god* express-1.Sg sympathy be-happy-3Sg self

"Whoever gets my sympathy will be happy."

d. * Ko god izrazim naklonost obradovaće se.

who-nom *god* express-1.Sg sympathy be-happy-3Sg self

"Whoever gets my sympathy will be happy."

Also, the case-matching constraint never holds with this type of FRs, associated with the main clause subject, either in the post verbal position as in (109) or the preverbal position (110). The case of the wh-constituent is always licensed by the embedded verb.

(109) a. Tu će ostati šta god stoji na polici.

there aux-fut-3Sg stay what-nom *god* stands on shelf

"Whatever stands on the shelf will stay there."

b.   Tu će ostati   čemu   god   se   obradovao.

there stay-fut-3Sg   which-dat   *god*   self be-happy

"Whatever made him happy will stay there."

c.   * Tu će ostati   šta   god se   obradovao.

there stay-fut-3Sg   what-nom   *god* self made-happy

"Whatever made him happy will stay there."

d.   Dobiće   poklon   kime   god si   upravljao.

get-fut-3Pl   present   who-inst   *god* aux-2Sg managed

"Whoever you managed will get a present."

e.   *Dobiće   poklon ko   god   si   upravljao.

get-fut-3Sg   present who-nom *god*   aux-2Sg managed

"Whoever you managed will buy a present."

(110)   a.   Šta   god stoji   na polici ostaće   tu.

what-nom   *god* stands   on shelf stay-fut-3Sg there

"Whatever stands on the shelf will stay there."

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b. Čemu   god   se obradovao   ostaće   tu.

which-dat   *god*   self be-happy   stay-fut-3Sg there

"Whatever made him happy will stay there."

c. * Šta   god se obradovao   ostaće   tu.

what-nom   *god* self made-happy stay-fut-3Sg there

"Whatever made him happy will stay there."

d. Kime   god si   upravljao dobiće   poklon.

who-inst   *god* aux-2Sg managed get-fut-3Sg present

"Whoever you managed will get a present."

e. *Ko   god   si   upravljao dobiće   poklon.

who-nom   *god*   aux-2Sg managed get-fut-3Sg present

"Whoever you managed will buy a present."

6.1.2 Summary of the Data

From the data presented above we can conclude that when associated with the main clause subject, the two types of Serbian FRs have different distribution. While $+\varphi$ wh-FRs have to be matched both categorially and in case with the requirements of the main verb only in the postverbal position, the default singular wh-FRs never seem to obey any

matching constraints, either preverbally or postverbally. They behave as entirely integrated into the main clause observing only the selectional and case properties inside the FR.

This is in stark contrast with the facts related to the FRs in the object position, presented in chapter 3. As we saw there, as objects, both types of FRs had to observe all the matching constraints.

6.2 Proposal

I will now outline a unifying account for the data presented above. Recall that all the previous accounts of the asymmetry in distribution of FRs had to resort to different analyses of FRs depending on which argument position they occupy. In section 2.2, we saw that those accounts vary in what kind of stipulation they rely on. Either they propose that FRs are formally different even when there is no overt evidence FR-internally (by introducing two different null pronominals, *pro* or *PRO* in the external-head-of-the-FR position), or by cancelling the CMC in the subject position. The proposal presented here, however, is based on the following claims:

- All FRs in Serbian are grafts.

- All FRs in Serbian are base-generated in various syntactic positions.

- The presence/absence of the matching effects follows from the syntactic position in which FR grafting takes place without additional stipulations.

- There is no CMC as an independent constraint on the derivations.

It will also be argued here that the difference in the distribution of the two types of FRs, or more precisely, in the degree to which matching obtains in these two types is related to the properties of the two types of FR wh-proforms. The $+\varphi$ wh-words cannot be grafted into an NP, while a default singular wh-word can.

This being said, I can present the analysis of the external syntax of the $+\varphi$ wh-FRs and default singular wh-FRs below.

6.2.1 The syntax of $+\varphi$ Wh-FRs

As a starting point, let us briefly return to the properties of the φ wh-words. In section 3.1.1, it was pointed out that they have a full-fledged paradigm, overtly expressing case and φ features, which can be seen in (30). They are also the regular relative pronouns in properly embedded relative clauses, which was illustrated in (36), repeated for convenience in (111a). They share the φ features of their antecedent noun, but not their case features (111b).

(111)   a.   Kupiću   [NP knjigu   [CP koju   ti   preporučiš]].

buy-fut-1Sg book-acc-fem   which-acc-fem   you recommend

"I will buy the book that/which you recommend."

b. Kupiću   [NP knjigu   [CP kojom   si zadovoljan]].

buy-fut-1Sg book-acc-fem   which-inst-fem   are pleased

"I will buy the book you are pleased with."

As we have witnessed throughout the previous chapters, when the $+\varphi$ wh-phrase occurs in FRs as complement the Q-head *god*, the wh-word shares the features of the NP whose it is associated with in an adjunct position and whose case and φ features it agrees with. As we can see from (112), $+\varphi$ wh-FRs cannot be externally headed by any nominal, or even pronominal expression.

(112)   *Tu će ostati **ta**   kojoj   god knjizi   se   obradovao.

there stay-fut-3Sg dem-pron-nom which-dat *god* book-dat   self made-happy

"Whichever book he got happy about will stay there."

This is why I propose that this type of FR always enters the derivation as a bare CP. The derivation of the postverbal subject $+\varphi$ wh-FR is given in (113).

(113)
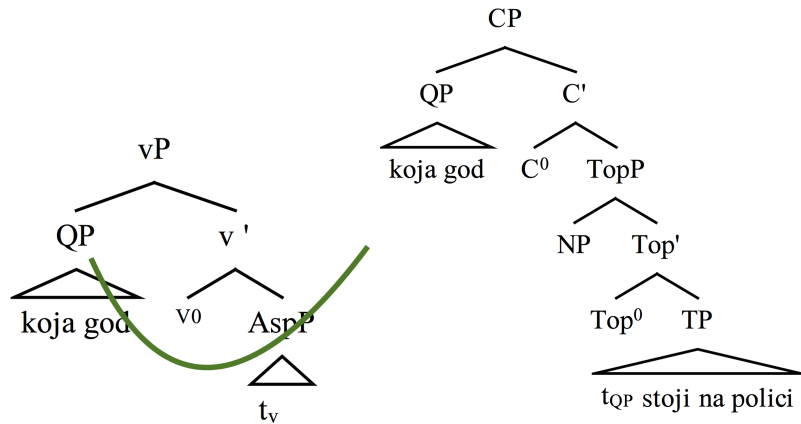
Inside the FR clause the wh-constituent comes with a set of φ features that do not need valuation (they are interpretable on the nominal phrase). It gets its nominative feature valued by the local T^0, and undergoes further movement up to the specifier of CP where its F-rel feature values the relevant feature in C^0. From the edge of the CP domain, wh-word can undergo grafting into the higher vP. Since the multiple feature valuation is possible in a given domain, the wh-consituent can value the matching features on T^0 in the main clause. When compared to the grafting of the object as in (114), the only difference is that in the latter case the functional projection whose features require valuation is AspP.

(114)   a. grafted subject

[TP T^0 $_{(u\ \varphi)}$ [vP **koja** $_{(\varphi)}$ [AspP [VP t_V]]]

       [CP **koja** god knjiga [TP $T^0_{(u\varphi)}$[vP <koja knjiga>$_{(\varphi,\ u\text{-}nom)}$ [AspP[VP]]]]
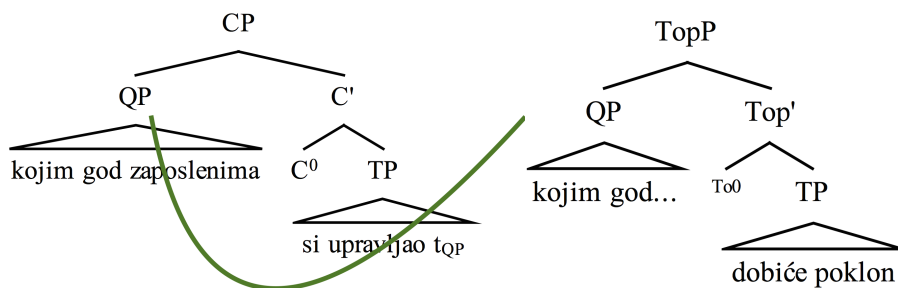
b. grafted object

[TP T^0 [vP [AspP Asp^0 $_{(u)}$ [VP **koju** knjigu]]]]

[CP **koju** god [TP [vP [AspP Asp^0 <koju knjigu>]]]]

Regarding the preverbal +φ FRs associated with the main clause subject position, I propose that the FR is grafted into the left dislocated (LD) topic position. Since it is base-generated in the A' position, no matching is expected.

(115)

To support the analysis of FRs in the preverbal 'subject' position, as LD-ed nominal expressions, I will draw on the work of Alexiadou and Anagnostopoulou (1998) regarding the subject position in Greek, Spanish, English, Arabic, Celtic and Icelandic. What the authors show is that the distribution of the subject is cross-linguistically more diverse than previously thought. Namely, in adition to the two subject positions, which are local to T^0, spec vP and SpecTP, in some languages the preverbal subject is LLD-

ed.[14] The distributional tests they use include the preverbal adverb placement, preverbal if-clauses, and the co-occurrence with clictics. I will use these tests as diagnostics for the claim put forward here that preverbal FRs are are indeed LD-ed.

Since adverbs and PP adjuncts can intervene between the (C)LLD-ed subject and the verb, (116) indicates that the FR is indeed in the topic position.

(116) a. Koja   god knjiga   stoji   na polici, danas, posle mnogo napora,

which-nom *god* book-nom   stands   on shelf   today after much effort

ostaće   tu.

stay-fut-3Sg there

" Today, after a lot of effort, whichever book stands on the shelf will stay there."

  b. Kojoj   god knjizi   se   obradovao, danas posle mnogo napora,

which-dat   *god* book-dat   self was-happy today after much effort

ostaće   tu.

stay-fut-3Sg there

"Today after a lot of effort, whichever book he got happy about will stay there."

---

[14] The author refer to this clitic left dislocation (CLLD), regardless of whether the subject clitic occurs in the lower position or not, which seems to depend on whether the subject clitic exists in a given language. I refer to this position as left-dislocated topic position since Serbian does not have subject clitics.

Another, similar test shows that, since an if-clause can intervene between the subject and the verb, the subject FR in (117) is not within the same phrase as the verb.

(117)a. Kojim   god zaposlenima   si   upravljao, ako bude para,

which.inst   god employees-inst   aux-2Sg managed if be money-gen-Sg

dobiće   poklon.

get-fut-3Pl   present

"Whichever employees you managed will get a present if there is money."

   b. Koja   god knjiga   stoji   na polici, ako   treba,

which-nom   *god* book-nom   stands   on shelf if   needs

ostaće   tu.

stay-fut-3Sg there

"Whichever book stands on the shelf will stay there if there is money."

Finally, these subjects can co-occur with clitics, and the clitics take the canonical subject position. As (118) illustrates, in Serbian, which does not have subject clitics, the FR associated with the preverbal subject position can co-occur with the pronoun taj (that one).

(118) a. Koja   god knjiga stoji   na polici **ta**   će   ostati   tu.

       which-nom *god* book-nom stands on shelf that-nom-fem-Sg aux-fut stay there

       "Whichever stands on the shelf will stay there."

    b. Kojim   god zaposlenima   si   upravljao **ti**   će dobiti poklon

       which.instgod employees-inst   aux-2Sg managed those   aux-fut get present

       "Whichever employees you managed will get a present."

One may wonder if the demonstrative prononoun *taj* plays has the functional role similar to that of the clitics in languages that do have them. Although it doesn't seem to belong to the canonical clitic class in Serbian, phonologically or syntactically, this type of pronoun does exhibit distinct syntactic behaviour. For one thing, in the context given in (118) it cannot have a demonstrative function of an NP intenal element, which is shown in (119).

(119) a. #Koja   god knjiga   stoji   na polici, **ta**   knjiga

       which-nom *god* book-nom stands   on shelf that-nom-fem-Sg book

       će   ostati   tu.

       aux-fut   stay   there

       "Whichever book it is that stands on the shelf, that book will stay there."

b.# Kojim god zaposlenima si upravljao **ti** ljudi

which.inst god employees-inst aux-2Sg managed those people

će dobiti poklon.

aux-fut get present

"Whichever employees you managed will get a present."

It is also not replacable with a personal pronoun, as shown below.

(120) a.# Koja god knjiga stoji na polici, **ona** će ostati tu.

which-nom *god* book-nom stands on shelf she aux-fut stay there

"Whichever book it is that stands on the shelf, it will stay there."

b.# Kojim god zaposlenima si upravljao **oni**

which.inst god employees-inst aux-2Sg managed they

će dobiti poklon.

aux-fut get present

"Whichever employees you managed, they will get a present."

Personal pronouns are infelicitious in the constructions above in the sense that the intended co-referentiality is not easily established. In other words, they can be bound only if they are focused, which is not the case with the pronouns in (119).

Finally, it is important to note that the structure in (118) cannot be analyzed as the external head the + φ FR, neither preverbally, nor postverballly which further means that the preverbal 'subject' FRs of this type are indeed base-generated in the topic position.

(121) a. * Tim/   * Ti   kojim god   zaposlenima   si   upravljao

those-inst those-nom which.inst   *god* employees-inst   aux-2Sg managed

dobiće   poklon.

get-fut   present

"Whichever employees you managed, those will get a present."

b. Dobiće poklon (* tim/ * ti)   kojim   god zaposlenima   si

get-fut present those-inst those-nom which.inst   *god*   employees-inst   aux-2Sg

upravljao.

managed

"Whichever employees you managed, those will get a present."

As we can see from all of the above, the pronoun *taj* is distinct in its syntactic properties, it is a nominative pro-form which, unlike personal pronouns can be bound/co-referential with the FR wh-constituent.

In the end we may conclude that the preverbal +φ FRs is not in the local relation with the main clause verb and that it is indeed associated with the main clause subject position via left dislocation.

6.2.2 The syntax of default singular FRs

6.2.2.1 *Default singular wh-words and light-headed relative clauses*

We can take a closer look at the default singular FRs. Default singular wh-words that we find in this type of Serbian FRs are marked only for animacy and case (cf. table 30). If you recall from section 3.1.1, they cannot be used in the formation of regular relative clauses. This was illustrated by (36c and d), repeated below.

(122)   a.   *Kupiću   knjigu   šta   ti   preporučiš.

             buy-fut-1Sg   book-acc   what-acc   you recommend

             'I will buy the book you recommend.'

        d.   *Prihvatiću   kandidatkinju   koga   ti   preporučiš.

             accept-fut-1Sg   candidate-acc-fem   whom-acc   you recommend

             'I will accept the candidate you recommend.'

However, they can occur in the so-called light-headed relative clauses Citko (2004), in which they have a pronominal antecedent.[15] The antecedent is restricted to the following: a singular demonstrative *taj* (that one) *onaj* (that one)*, ovaj (*this one), a singular

---

[15] Citko accounts for the Polish data, and points out that this type of relative clauses can be found in Slavic and Romance languages.

masculine case-marked form of numeral *one* (a type of indefinite pronominal), a range of

indefinites *neko* (someone), *nešto* (something), *niko* (nobody), *ništa* (nothing), *iko*

(anybody), *išta* (anything), and universals *svako* (everybody), *sve* (everything).

(123)   a.   Videli smo   tog   kome   treba pomoć.

                saw aux/1Pl that-acc who-dat needs help

                "We saw the one who needed help."

    b.   Stigao je   taj   kome   treba pomoć.

                arrived aux-3Sg that-nom who-dat   needs help

                "The one who needs help arrived."

The light heads of relative clauses share default agreement features of the wh-pronoun,

which means they are always singular, masculine.

The pronoun *taj* in the examples above belongs to the same set of pronouns we discussed

in section 4.2.1, which can regularly co-occur with LD-ed + *φ* FRs. As has been noted

already, although I refer to them as demonstratives due to their morphological shape, they

are pronouns, and can be viewed as forming a separate class of d-elements.

In light-headed relatives, only a subset of these pronouns occurs, which does not include

feminine or plural forms (124a), and where the neuter form is used as a carrier of

inanimacy feature rather than grammatical gender as exemplifed in (124b). In other

words, though as a true demonstrative *to* can regularly co-occur with an animate neuter

NP, as in *to dete* (*that child*), or as separate neuter pronoun in LD-ed + *φ* FRs, expressing

proper grammatical neuter gender feature, in the context described here this is not the

case.

(124)   a.   *Videli smo tu   / te   kome   treba pomoć.

             saw aux/1Pl that-acc-fem-sg   those   who-dat needs help

             "We saw the one who needed help."

        b.   Videli smo   to   čime/   *kime   se ponosiš.

             saw aux/1Pl that-neut what-inst who-inst   self take-pride-2Sg

             "We saw the thing you are pride of."

All of the above indicates that this type of relative clauses indeed requires a separate

consideration. Citko (2004) proposes that we are dealing with a structure in which a d-

element described above selects for a special relative clause. Thus, the analysis of (123b)

would be as shown in (125).

(125)   [DP taj [CP kome   treba pomoć]]

As Citko points out, although both light-headed relatives and FRs in Polish share the type

of the wh-word involved in the derivation, they still seem to have incompatible

properties. The same is true of Serbian. On the syntactic side, this is reflected in the incompatiblity of the pronoun and *god*.

(126)   a.   *Videli smo tog   kome   god treba pomoć.

        saw aux/1Pl that-acc who-dat C   needs help

        "*We saw the one whoever who needed help."

        b.   *Stigao je   taj   kome   god treba pomoć.

        arrived aux-3Sg   that-nom who-dat   C   needs help

        "*The one whoever needs help arrived."

The syntactic incompatibilty of the two elements is related to the semantic one. The interpretation of light-headed relatives involves reference to specific individuals. As we saw in section 3.1.2, an FR is non-referential and non-specific, and it plausibly involves a quantificational force of the type discussed in chapter 2, or the type of modality which leads to an interpretation on which an individual introduced by a wh-variable varies across situations. Thus, when we compare the interpretations of the examples below, we see that the light-headed relative clause in (127a) denotes a unique individual (a specific person who needed help), whereas the FR in (127b) denotes at least one (one or more individuals) who satisfy a certain property (they needed help).

(127)   a.   Stigao je   taj   kome   treba pomoć.

arrived aux-3Sg   that-nom who-dat needs help

"The one who needed help arrived."

b.   Stigao je   kome   god je   trebala pomoć.

arrived aux-3Sg   that-nom   Q   aux-3Sg needed help

"Whoever needed help arrived."

The question is, however, whether the structure in (125) is adequate to account for the difference between light-headed relative clauses and FRs. Though it captures the peculiar special status of the light pronominal antecedent, which seems to be semi-functional, the crucial idea that a d-element selects for a CP is unexpected.

Furthermore, referential pronouns (like personal pronouns) usually do not select for a restrictive relative clause of any type, since they exhaustively identify individuals as unique. The relative clauses we find attached to them are typically non-restrictive. They are appositive relative clauses set off by comma intonation (128).

(128)   a.   Stigao je   on,   kome je   trebala pomoć.

arrived aux-3Sg   he,   who-dat aux-3Sg needed help

"He, who needed help, arrived."

What I propose is that the head of a light-headed relative clause should be analyzed as a nominal lexical item (which could be of a semi-functional type) that selects for category N, with the matching feature content. In the case of light-headed relative clauses the default singular constituent is the NP grafted into the relevant position (129).

(129)

NP
├── N⁰
└── NP
      kome   je trebala pomoć
        | ╲╱
               C'
              ╲╱
              CP
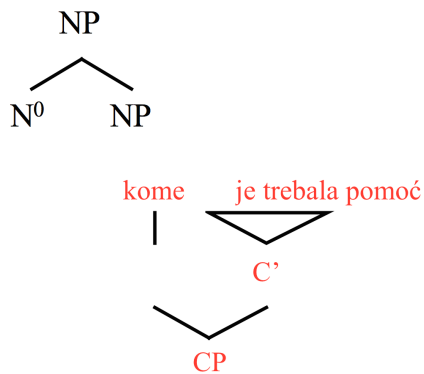
This analysis would avoid the problem of selection, namely, rather than saying that the d-element selects a wh-clause, the simpler hypothesis would be that the default singular wh-clauses can be grafted into NPs as well as VPs and PPs.

6.2.2.2 Default singular FRs as postverbal subjects

Bearing in mind that the singular default wh-clauses can occur in light-headed relative clauses, we can return to the data in section 4.1.1, illustrated again briefly in (130), and try to account for the fact that default singular wh-FRs in subject position do not match

the selectional or case requirements of the main verb, even when they follow it. In (130a) the categorial matching is absent, and in (130b) the CMC does not hold.

(130)   a.   Tu   će   ostati   s   čime   (god)   imaš   iskustva.

            there   aux-fut-3Sg stay with what-inst   *god*   have-2Sg   experience

            "Whatever you are experienced with will stay there."

       b.   Tu će ostati   čemu   (god)   se   obradovao.

            there stay-fut-3Sg   which-dat   *god*   self be-happy

            "Whatever made him happy will stay there."

I suggest that in these cases we are dealing with the light-headed relative clauses. This is not immediately obvious, because Serbian is a null-subject language, which means that pronominal elements in the subject position can be phonologically null. This pheonomenon is often refered to as pro-drop.

Thus, the constructions above are related to those given below, and the missing pronoun is the result of pro-drop.

(131)   a.   Tu   će   ostati   (to)   s   čime   imaš   iskustva.

            there   aux-fut-3Sg stay that-neut with what-inst   have-2Sg   experience

            "Whatever you are experienced with will stay there."

b. Tu   će ostati   (to)   čemu   se obradovao.

there   aux-fut-3Sg that-neut what-dat   self be-happy

"Whatever made him happy will stay there."

Partial tree structure, focusing on the locus of grafting is given in (132).

(132)
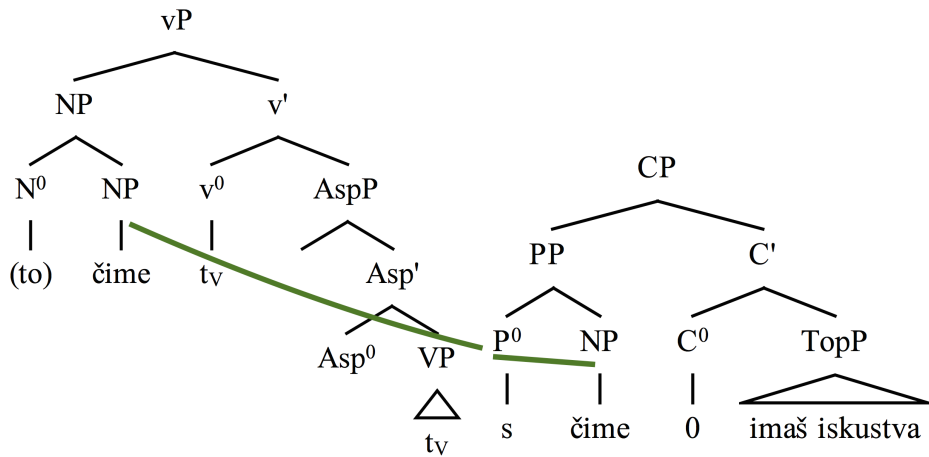
The tree illustrates that the embedded preposition and the d-pronoun in the main clause share the wh-constituent.

When the default singular FR is in the preverbal subject position, the derived structure is analogous to (115). To put it differently, I propose that all preverbal subject FRs are CLLD-ed. Since the default singular FRs exhibit parallel syntactic behaviour as $+\varphi$ FRs in the preverbal 'subject' position, the null hypothesis would be that they are derived in the same way, which can be confirmed by the tests applied in 4.2.1.

As shown below, an adverb or a PP adjunct can intervene between the default singular FR and the verb (133), and the same goes for if-clauses (134).

(133) a. Šta   (god) stoji   na polici, danas, nakon svega, ostaće   tu.

　　　　what-nom   *god* stands   on shelf today after all   stay-fut-3Sg there

　　　　"Today, after all, whatever stands on the shelf will stay there."

　　b. Ka kome   (god) izrazim   naklonost, danas, nakon svega,

　　　　for who-dat *god* express-1.Sg sympathy today   after   all

　　　　obradovaće   se.
　　　　be-happy-fut-3Sg self

　　　　"Today, after all, whoever gets my sympathy will be happy."

(134) S   čime   (god)   imaš   iskustva   ako treba   ostaće   tu.

　　　withwhat-inst *god*   have-2Sg experience if needs   stay-fut-3Sg there

　　　"If it is necessary, whatever you are experienced with will stay there."

Also, the preverbal default singular FR can be accompanied by a demonstrative pronoun in the subject position.

(135) a. Čemu   (god)   se obradovao (**to**)   će   ostati tu.

　　　　which-dat   *god*   self be-happy   that-neutaux-fut-3Sg stay there

　　　　"Whatever it is that made him happy will stay there."

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b. Ka kome   (god)   izrazim   naklonost   (**taj**)

for who-dat *god*   express-1.Sg sympathy   that-nom-msc-Sg

će   se obradovati.

aux-fut self be-happy

"Whoever it is that gets my sympathy will be happy."

6.2.3   Left-dislocation and null subjects

The investigation of FRs in Serbian has led us to a coherent picture of the syntactic strategies involved in their derivation. Both types of FRs, when associated with the subject, in the preverbal position are LD-ed, located in the topic position, which is also in line with the conclusion drawn regarding the preverbal subject FRs in Bulgarian by Izvorski (1996).

The natural question emerges whether all FRs in Serbian are instances of LD. As we can see in the example below the answer to that question is affirmative. Only in case of the fronted object FRs we are dealing with a clear case of clitic-left-dislocation.

(136)   a.   Kome   (god)   se obradovao, osmehnuo *(mu)   se.

whom-dat   *god*   self made-happy smiled   cl-dat   self

"He smiled at whoever made him happy."

b. Koga   (god)   preporučiš   prihvatiću   *(**ga**).   .

whom-acc   *god*   recommend-2Sg accept-fut-1Sg cl-acc

"I will accept whomever you recommend."

We see from (136) that when the object FR occurs in the preverbal position, this coincides with the obligatory occurrence of the object clitic, which is a situation similar to the one in (135). The difference, however, is that CLLD involves obligatory occurrence of an object clitic.

Since they do not have to match the features of the wh-pronoun, as shown in (133), and the FR is not in the argument position, I conclude that these constructions should indeed be viewed as instances of CLLD and not clitic doubling. Adopting the view by Cinque (1990), Iatridou (1994), Anagnostopoulou (1994), I treat the FRs in these construction as uniformly base generated.

(137)   a. Kome   (god)   se   obradovao prihvatiću *(ga).

whom-dat   *god*   self made-happy accept-fut-1Sg cl-acc

" I will accept whoever you smile at."

b. Koga   (god)   preporučiš   osmehnuo *(mu)   se.

whom-acc   *god*   recommend-2Sg smiled   cl-dat   self

"He smiled at whoever you recommend."

The difference regarding the optionality of demonstrative pronouns vs. mandatory occurrence of the object clitics naturally follows from the properties of the pronouns in question and, directly related to it, the fact that Serbian is a null-subject language.

The cross-linguistic observation that null subject languages allow the case mismatch with subject FRs gets a plausible interpetation in the proposal put forward here. It should be noted that there is a cruicial difference between this type of an account and an account that assumes there is a *pro*, externally heading the FR, even in the way cases like (131) are handled. In this example, the default singular FR shows up as postverbal subject. The external head is a specific pronominal item, which, just like personal pronouns, can be unpronounced. More importantly, the FR is grafted into the NP as shown in (129), which again gives us a clue as to how come this position is available for pro-drop.

To answer this we should again turn to the PF interface and consider the type of syntactic object that is transferred to PF for interpretation. This is illustrated below.

(138)   [CP Tu   će ostati   to   **čemu**

                                   [CP **čemu**   se   obradovao]]

(139)   a.   IP (Tu će ostati   ~~to~~)   IP(**čemu**   se   obradovao)

        b.   IP (Tu će ostati   to **čemu**)   IP(se   obradovao)

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Since the wh-word is the phrase shared between the two clauses in (138), there are two possible phonological interpretations for the parallel constructions given in (139a) and (139b). As we can see in (139a), on one of the possible phonological parsings, the main clause subject pronominal is independent within its intonational phrase. This is the enviroment that allows for deletion.

Obviously, the analysis proposed here is the one of deletion in PF and avoids the postulation of *pro*. In GB model *pro* was an independent pronominal item specified as phonologically empty but identifiable by T^0. As noted by Barbosa (2013) among others, in MP, this approach to null subjects is not tenable, because T^0 carries unvalued φ features, and cannot identify *pro*. This is why Perlmutter's proposal, that null subjects are deleted pronouns has been revived within several current approaches to null subject licensing (cf. Holmberg 2005, Barbosa 2013, Neleeman and Szendroi 2007). The explanation for the absence of pronominal subject put forward here is in accordance with this general idea.

6.3 Concluding remarks

In this chapter, I have analyzed the FRs in the subject position. I have shown that the two types of FR clauses have distinct distributional properties, in that only the singular default FRs can occur both as preverbal and postverbal subjects of the main clause, while $+\varphi$ FRs can occur only preverbally.

I have argued that this so because only default singular FRs can occur in light-headed relative clauses, and as such be introduced in the subject position in the VP domain. The true FRs which do not occur light-head relatives can never be true subjects. Furthermore, all occurrences of the preverbal FRs regardless of the type are (CL)LD-ed topics, base generated in the non-argument position. Therefore, the apparent freedom in the distribution of FRs in Serbian is essentially a misconception. True FRs always have to meet the selectional constraints of the main clause verb when they are arguments. Left-dislocation is only an available strategy in Serbian for associating the FR with the true subject of the main clause. This has been obscured due to the fact that Serbian is a null-subject (or pro-drop) language.

7 On pseudoclefts

7.1 Pseudoclefts and FRs

Pseudoclefts owe their name to the more familiar class of cleft-constructions, which they resemble, at least semantically. [16] They both combine a constituent wich bears some kind of empahasis/focus on one hand, with a clause that provides the context of that emphasis on the other.

(140)   a.   It is **candies** that I like.   *(cleft-sentence)*

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[16] Jespersen (1909) calls them 'cleft-sentences'.

b.   What I like is **candies**.   (*pseudocleft*)

A cleft in (136a) combines the NP *candies* with a *that*-clause, which semantically does not provide a restriction for the denotation of the NP, the way a restrictive relative clause would, but a property that the NP exhaustively satisfies. The same relation holds between the NP and the wh-clause in (136b). Therefore, in terms of interpretation, neither of the clefts in (136) is related to the relative clause construction headed by the relevant NP (*candies*), but to an NP, which is in a predicational relation with it (137).

(141)   [NP The **thing** that I like] are/is **candies.**

Formally, a pseudocleft can be defined as a copular clause where at least one is a wh-clause – *a cleft wh-clause*. The other constituent can be represented by various categories as shown in (142), and I will refer to it as *the pivot.*

(142)   a.   [What they said] was [that they stole a car].   (CP *cleft-wh* CP *pivot*)

        b.   [What they did] was [they stole a car].   (CP *cleft-wh* TP *pivot*)

        c.   [What they did] was [steal a car].   (CP *cleft-wh* VP *pivot*)

        d.   [What John bought] were [books].   (CP *cleft-wh* NP *pivot*)

e. [What John is] is [smart].   (CP *cleft-wh* AP *pivot*)

f. [Where Tom is staying] is [in a nice hotel].   (CP *cleft-wh* PP *pivot*)

g. [How I like to do it] is [carefully]   (CP *cleft-wh* AdvP *pivot*)

In terms of their semantic properties they can be classified in several ways (cf. Den Dikken 2006 for an overview of the existing classifications), but the crucial distinction, which is in one way or the other involved in all of the classicfications, is the distinction between specificational and predicational pseudoclefts (cf. Akmajian 1970, 1979, Higgins 1979).

(143) a. What he's drinking is very tasty.

   b. What he hopes for is freedom.

   c. What he loves is history.

Example (143a) is a clear case of predicational pseudocleft (PPC), while (143b) is a specificational one (SPC). In the former case a property (*very tasty*) is assigned to the variable in the wh-clause (*the thing he's drinking*). In the latter, *freedom* is specified as exhaustively providing the value for the wh-varible (*the thing that he likes is freedom*).
In (143c) the pseudocleft is ambiguous between the two readings. On its predicational interpretation it can be paraphrased as *that the thing he loves is behind him, part of*

history. On its specificational reading, the parahrase would be that *the field he loves is history* (144).

(144)   What he loves is history.

      a.   what he loves has the property of being history (*predicational*)

      b.   history is the field the he loves (*specificational*)

This distinction is important for the syntactic analysis of the sentences above. One question might be whether the wh-clauses in pseudoclefts are indeed free relatives. Indeed, it has been suggested in Den Dikken et al (2000) that this is not the case, and that what appears to be an FR in specificational pseudoclefts is in fact a wh-question. One indication that this could be true is given in (145).

(145)   a. Whatever he loves is history. (PPC)

      b. *Whatever he loves is freedom. (SPC)

The contrast above is related to the occurrence of *ever*, which overtly distinguishes a wh-pronoun from a question wh-word. Although in the argument positions of uncontroversally lexical verbs, FRs with *ever* in English are optional, they can never occur in SPCs, as shown in (145b).

Apart from this, there are other peculiar properties of SPCs that bring into question the way we should analyze them, which we will consider in the following sections. As will be shown below, the perspective we gain from the consideration of Serbian SPCs will contribute to the general understanding of SPC construction and provide independent support for the conclusions we have already drawn about the syntax of Serbain FRs.

7.2 Properties of SPCs

The SPCs in English exhibit the so-called connectivity effects. The term itself is a cover term for a range of phenomena which are unexpected under the assumption that the wh-clause is a subordinate clause inside a copular clause, therefore excluding the pivot, which is the main clause constituent. The phenomena in question seem to indicate clause-union, since the properties of the pivot suggest it is structurally integrated into the wh-clause.

One such effect is related to binding principle A, or the binding of the anaphor. As the example taken from Higgins (1979) shows, a SPC allows the binding of the reflexive which is not c-commanded by the relevant binder.

(146)   a.   What Brian$_i$ is is important to him$_i$. [PPC]

predicational reading: whatever property Brian has (e.g. being honest), this property is important to Brian.

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b.   What Brian$_i$ is is important to himself$_i$.   [SPC]

specificational: important to himself specifies a value for the variable in the

wh-clause: Brian is important to himself.

Another sign of connectivity is the binding of the variable we see below. The quantifier

inside the cleft wh-clause binds the variable provided by the pivot in the main clause,

although the c-command relation does not obtain between the two.

(147)   What every man$_i$ wants is his$_i$ peace of mind.

In addition, English exhibits other types of connectivity effects, related to various

constraints of syntactic operation. One such example is the semantic selection.   As

exemplified in (148), the selectional matching of this type obtains between the main and

the embedded clause (the example is taken from Den Dikken 2006), (cf. Heggie 1988).

(148)   a.   What John counted was the pigeons/*the pigeon.

b.   What John wondered was whether/*that it was raining.

Since the verb *count* selects for a plural object, the pivot has to be plural though the

copula in (148a) is singular. Also, in (148b) the CP pivot is introduced into the structure

with a complementizer selected by the verb in the cleft clause.

Negative polarity item (NPI) connectivity is also characteristic of English SPCs. NPIs are known to be licensed in the scope of sentential negation and polarity operators, which is exmplefied in (149a-b). However, in (149c-d) we see the negation in the cleft-wh can license the NPI pivot, whithout the proper scopal relation being established syntactically.

(149)   a.   I ordered some chocolate/*any chocolate for the cake.

        b.   I didn't order any chocolate for the cake.

        c.   What I didn't order was *any* chocolate cake. (SPC)

        d.   What Sam didn't expect was *ever* to be poor. (SPC)

Apart from the connectivity effects above, the agreement patterns of the two types of pseudoclefts differ. Plural agreement in (150a) has a semantic effect, and the pivot is interpreted as a property. The informal paraphrase of this sentence would be: *the things she made* can be characterized as *cookies*. In (150b), however, we are dealing with the specificational reading, i.e. *the things she made* can be exhaustively identified as *cookies*.

(150)   a.   What she made were cookies. (PPC)

        b.   What she made was cookies. (SPC)

Finally, unlike PPCs, SPCs are reversible. This is shown below.

(151)   a.   What he loves is history. (SPC or PPC)

        b.   History is what he loves. (SPC)

        c   What John described was interesting. (PPC)

        d.   *Interesting was what John described. (PPC)

As (151a-b) show, a pseudocleft that can be interpreted either as predicational or specificational gets disambiguated once we reverse the two constituents of the copular clause. In PPCs, the order of the constituents is fixed. Reversibility is the property of the specificational copular clauses in general, and that is what reinforces the view that specificational pseudoclefts are a subclass of specificational copular constructions in general. Comparing the examples in (151) to the examples in (152) we see that, as far as reversibility is concerned, the pattern is exactly the same.

(152)   a.   His love is history. (specificational or predicational)

        b.   History is his love. (specificational)

        c.   John's description was interesting. (predicational)

d.   *Interesting was John's description. (predicational)

However, not all SPCs are reversible. Consider the following examples.

(153)   a.   What they did was they stole a car.

b.   What they stole was they stole a car.

b.   They stole a car was what they did.

c.   *They stole a car was what they stole.

When the pivot is a TP and the verb in the cleft-wh-clause after the copula is substantive (153c) (cf. Den Dikken 2006), the reversal is not possible. Still, by and large the SPCs are reversible.

Considering the special properties of SPCs it seems that they are not only semantically, but also syntactically different from the PPCs. In other words, what leads to the connectivity in SPCs can be a distinct syntactic derivation, which can even be a derivation of question, as mentioned above. The arguments for treating SPCs as regular instances of specificational copular constructions, or questions will be considered in more detail in the following section.

7.3 Approaches to SPCs

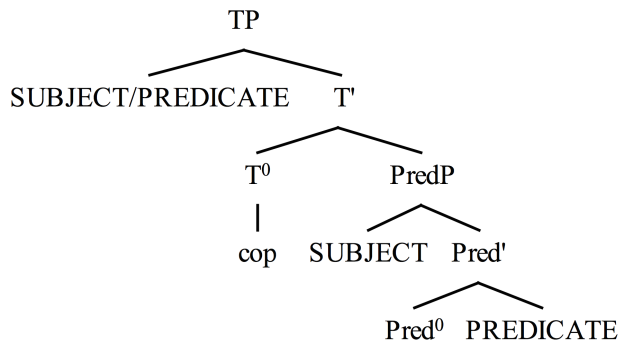### 7.3.1 SPCs as specificational copular clauses

In search of the analysis that would account for the special properties of SPCs several approaches have been pursued. One major route that can be taken is to treat this construction on a par with other copular clauses of the same semantic type. The other would be to treat the wh-clause as an embedded question. In the former case the semantic ambiguity can be ascribed to different derivational processes (two options for movement), or to the ambiguity of the copula that relates the two constituents of the copular construction without any syntactic variation. Since taking the latter route would imply invariable, base-generation, approach for the different orders of the constituents, which would fail to explain the agreement facts in SPCs as well as the connectivity effects, for the sake of brevity and in accordance with the goals of this thesis, I will focus on the former, derivational approach in the sections below.[17]

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[17] The reader is reffered to the discussion of the base-generation approaches in Den Dikken (2006). I will also not discuss the movement approaches in which the pivot is moved from or into the cleft-RC, as these require a range of additional theoretical assumptions, but the reader is refered to Bošković (1997) for covert movement of the pivot into the gap, and Heycock & Kroch (2002) for an LF reconstruction approach. To my understanding, these accounts also run into problems when it comes to the variability of connectivity effects.

7.3.1.1 Inversion/ Raising analysis

One way to tackle the structure of SPCs is to view it as inverted predication. This analysis takes as the starting point the assumption that all copular clauses can be derived from a single predicational configuration (154) (Williams 1983, 1994, 1997, Partee 1986). In other words, both the semantic predicate and the semantic subject can be the derived subject of a clause (raised to the spec of TP).

(154)

```
                          TP
                        /    \
        SUBJECT/PREDICATE      T'
                              /  \
                            T⁰    PredP
                            |     /   \
                           cop  SUBJECT  Pred'
                                        /    \
                                     Pred⁰   PREDICATE
```
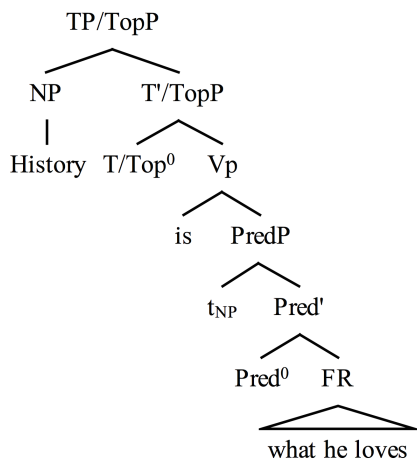
Any DP-copula-DP structure with a predicational reading is derived by movement of the subject of PredP to the clausal subject position (TP), and every DP-copula-DP with a specificational reading involves movement of the predicate to the clausal subject position. The ambiguity is resolved syntactically, while the copula is an unambiguous functional element, whose sole purpose is to be the tense marker.
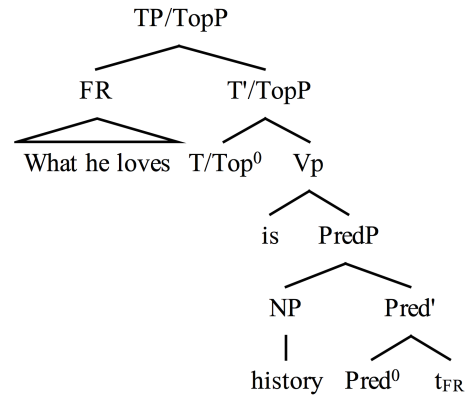
Williams (1983) applies the same analysis to pseudoclefts. In this case, the cleft-wh-clause and the pivot are base-generated as separate constituents in a predicational relation (inside PredP), and the pivot is the underlying subject of that predication, while the cleft-wh-clause is the predicate. The order in which they surface in the copular construction,

and the type of reading they receive depend on which of the two constituents is raised to the higher, TP domain. Taking (153) as an example, the derivation of the SPC can proceed in either of the two ways shown in (155), but only in the case of (155b) the SPC is unbiguously specificational.

(155) a.   b.

```
        TP/TopP
        /     \
      NP      T'/TopP
      |        /   \
   History  T/Top⁰  Vp
               is   /  \
                  tNP  Pred'
                       /   \
                    Pred⁰   FR
                          /    \
                      what he loves
```

```
              TP/TopP
              /     \
            FR      T'/TopP
           /   \      /   \
   What he loves T/Top⁰  Vp
                    is   /  \
                       NP   Pred'
                       |     /  \
                   history Pred⁰ tFR
```

.

The inversion (or predicate-rasing analysis) for specificational copular clauses has been proposed by a number of authors (Heggie 1988; Mikkelsen 2005; den Dikken 2006; Heycock 2012), and the SPCs have been analyzed along the same lines (see Williams 1983; the reversible SPCs -Type B in den Dikken et al. 2000, Hartmann et al. 2013). The underlying assumption in all these propsals is that the cleft-wh-clause is indeed a predicative free relative clause.

The issue of connectivity with respect to binding, scope binding and NPI licensing is also claimed to be independent of the SPCs structure itself, and not reducable to the c-comand

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relation. This is supported by examples in (156) taken from Mikkelsen (p.), which show

that the same binding puzzle exists in other specificational copular clauses.

(156)   a.   The thing he$_i$ did next is wash himself$_i$ / him$_{*i}$ / Harvey$_{*i}$.

   b.   His$_i$ biggest worry is himself$_i$, / him$_{*i}$ / Harvey$_{*i}$.

   c.   The thing we didn't find was **any** photos from his childhood.

In the examples above there is no free relative clause, and binders are buried inside the

NP (i.e. they don not c-command the relevant bindees). In (156c) the NPI *any* is not in

the scope of negation. It follows then that this type of connectivity should be accounted

for in semantic terms. Such semantic approaches can be found in Jacobson (1995),

Sharvit (1999), Cecchetto (2001). Without going into these accounts, suffice it to say

that, as seen above, the violations of the syntactic constraints on binding are not specific

to pseudoclefts, and in particular to FRs.

The proponents of this approach differ in their position on what the landing site for the

raised constituent is. What is relevant in this respect is the variation in agreement

mentioned above, illustrated in (150). Thus, assuming that the spec-head relation is where

agreement takes place, the rasing can be motivated by agreement, while the landing

position of the moved constituent is SpecTP as argued for by Den Dikken (1995) in his

analysis of DP-copula-DP construcions. The pattern illustrated in (150) is also

substantially supported by the Italian data discussed by Moro (1997). They additionally support this approach with the facts from the embedded small clause construction (157).

(157)   a. I consider John the best candidate.

         b. *I consider the best candidate John.

         c. I consider the best candidate to be John.

Example (157b) shows that it is impossible to reverse the order of constituents within the small clause (embedded predicative phrase). This comes out as expected under the analysis which assumes that the reversed order of constutents is the result of raising one of the small clause predicate to an A-position (subject position). Since the small clause does not provide this position the raising is impossible. However, if we expand the structure in (157) by adding the copula as in (157c), we provide an argument position for the raising and the result is grammatical.

Alternatively, there are proposals that view the information structure of the specificational copular clauses as motivation for the movement of the predicate. As mentioned in section 5.1, in SPCs, the interpretation of the pivot is such that it exhaustively satisfies the denotation of the cleft clause. In the example repeated below *candies* fully identifies the things *I like*.

(158)   What I like is candies.

According to some authors (cf. Den Dikken 2006, Valduvi 1992), the exhaustivity, or exclusiveness, of this kind is an implicature and as such, cancelable, as shown below (cf. Den Dikken 2006).

(159)   What I like is *mostly/ not only* candies.

In the domain of information structure, exhaustivity is tightly related to the notion of focus, or more precisely, the identificational focus as defined by Kiss (1998). She distinguishes it from the new information focus (the non-presuppositional, discourse-new information) as the one providing exhaustive identification, or contrast among some set of alternatives. Paraphrasing Kiss, identificational focus denotes a subset of a set of contextually given or presupposed alternatives, for which the predicate phrase can potentially hold. This is compatible with the implicature related to the interpretation of the pivot discussed above. The wh-clause in (158) carries the presupposition of the existence of some set of entities for which the predicate may hold (*the things I like*), and the pivot (*candies*) represents the subset of these entities for which the predicate actually holds.

However, as Kiss herself notes, in many accounts identificational focus is subsumed under the notion of information focus, and the exhaustivity discussed here is taken to be something that information focus may or may not carry, given that it is essentially understood as a type of pragmatic inference. In languages where identificational focus doesn't seem to correlate with movement to a specific position, such as English, the difference between information focus and identificational focus is often neglected.

Indeed, while a number of authors note that the specificational copular clauses have a fixed information structure (see for example Haliday 1967, Higgins 1979, Declerck 1988, Den Dikken 2006) the postcopular constituent is viewed as new information focus, while the precopular constituent is the topic, or discourse old information. This extends to the SPCs too. As shown in (160), in an answer to a question, it is the pivot (the non-clausal constituent of the copular construction) that provides the value for the question wh-phrase (new information), and it also carries the focal stress.

(160)   a.   Q: What do you like?

A1: What I like is CANDIES.

A2: CANDIES is what I like.

b.   Q: What do you like?

A1: #What I LIKE is candies.

A2: # Candies are what I LIKE.

The cleft wh-clause, however, can provide new information only in the PPCs, as shown below.

(161)   a.   Q: What are candies?

A1: Candies are what I LIKE.

A2: # What I like/ # What I LIKE is candies.

What we can conclude from the examples above is that the pre-copular cleft clause in SPCs cannot be focal, or provide new information in an answer to a question, while in the non-inverted postcopular position of the PPC it can. Thus, in order to draw the distinction between the new information focus in the PPCs on one hand and the same type of focus in the SPCs, the notion of identificational focus seems to be necessary. In fact, Kiss treats the pivot of the SPCs in English, as well as the non-clausal cleft constituent in the cleft-constructions of the type illustrated in (162), as identificational focus.

(162)   It is CANDIES that I like.

Though different proponents of the A-bar rasing in specificational copular clauses offer different understandings of the notions of topic and focus in these constructions, which may differ from the understanding presented here, there is general agreement that in SPCs the cleft clause is the topic, while the pivot is focus. Also, despite the various views in the literature on what topichood can stand for, it would be safe to say that, in the broadest sense, it is a link to the preceding discourse, or, in other words, a phrase containing some kind of presupposed material.

On the syntactic side, Higgins (1979; p. 300-302) observes that the focal item, or the pivot in an SPC cannot be deleted (163b) or moved (164b), while deletion is possible in a PPC (163c), as well as movement (164d).

(163) a. Mary is tall, and Bill is ___ too.

　　　 b. *What Mary is is tall, and what Bill is is___ too.

　　　 c. What Mary is is important, and what Bill is is ___ too. (PPC)

(164) a. What you don't like about John is his tie.

　　　 b. *What/ *Which tie is what you don't like about John?

　　　 c. What you are looking at is a kangaroo.

　　　 d. What is what you are looking at?　　　(predicational reading only)

In addition to blocking the wh-movement, the SPC blocks the formation of yes/no questions (165), while PPC does not (166).

(165) a. What John is is proud.

　　　 b. *Is what John is proud?

　　　 c. What Mary did was wash herself.

d. * Was what Mary did wash herself?

(166)　　a. What Mary is important.

　　　　b. Is what Mary is important?

Due to all or some of the above, it has been suggested that the raised predicate lands in the topic position (A-bar position) in a clause (see for example Heggie 1988, Gueron 1992,1993, Mikkelsen 2005).

7.3.1.2 Question-plus-deletion analysis

Another approach to the analysis of SPCs follows the basic idea that the copular construction in this case does not combine a free relative clause with another constituent that varies in category and size, but that it combines a question with its answer (see Faraci 1971; Akmajian 1979; Ross 1972, 2000; den Dikken et al. 2000; Schlenker 2003; for Slavic see Blaszczak & Geist 2000), hence the term question-plus-deletion (QPD). This is bassed on the parallelism between (167a) and (167b).

(167)　　a.　　What John does for a living is write novels.

　　　　b.　　What does John do for a living? Write novels.

c.   [what John does for a living] = [John writes novels]

The copular construction is an equative copular construcion. The copula *be* combines two clauses, equating the question (with a word order of an embedded question) with its full answer (167c). Once the two constituents are linked, ellipsis is applied to the latter. Thus, (167a) is derived by deleting from the pivot all the material above VP.

(168)   [What John does for a living] is [~~John -s~~ write novels].

The deletion can be applied to any portion of the post-copular clause, and all of the examples in (138) can be derived varying the portion of the pivot that gets elided.

The advantage of this approach would be the ease with which it resolves the connectivity problem. The binding of the anaphor, scope-connectivity, NPI - licensing, semantic and categorical selection, as well as agreement, are settled inside the pivot prior to deletion. This is illustrated below.

(169)   a.   [What Brian is] is [~~he$_i$ is~~ important to himself$_i$]

b.   [What every man$_i$ wants] is [~~he wants~~ his$_i$ peace of mind]

c.   [What John counted] was [~~he counted~~ the pigeons]

d.   [What John wondered] was [~~he wondered~~ whether it was raining]

e.   [What I didn't order] was [~~I didn't order~~ *any* chocolate cake]

f.   [What she made] was [~~she made~~ cookies]

In addition to salvaging the view of structural licensing of anaphoric elements and NPIs (at least in SPCs), the QPD approach can account for the fact some pseudoclefts cannot be inverted. The relevant example is repeated below.

(170)   a.   They stole a car was what they did.

b.   *They stole a car was what they stole/did.

Note, that the pivots that cannot be inverted are systematically TPs. Thus, it seems that if we want to treat SPCs that behave like other specificational copular constructions in the same way, we could adopt the QPD analysis only for the cases illustrated by (170), and treat the (apparent) SPC with TP-pivot as a different type of constructions altogether.

Turning to the As Den Dikken himself notes, although, the absence of *ever* in SPCs (cf. 141), might be an indication that the cleft wh-clause is not an FR but a question, there are problems for this assumption too. One of them is the impossibility of equating a yes/no question with its answer. Namely, although the question-answer pair of the type in (171) is legitimate, the copular construction in (172) is not possible.

(171)   a.   Q: Did he buy a new coat?

        A: (Yes), he did.

        b.   Q: I wonder whether he bought a new coat?

        A: (Yes), he did.

(172)   *Whether he bought a new coat is yes/ he did.

Den Dikken also observes that predicational predicational cleft is possible with the embedded question, which illustrated in (173). The DP constituent denotes a property ascribed to the issue represented by the embedded question.

(173)   Whether he bought a new coat is a mistery.

However, the following examples are possible as well, and their reading involves identification.

(174)   a. Whether (or not) he bought a new coat is the real mistery.

        b. The real mistery is whether (or not) he bought a new coat.

(175)   The issue of whether he bought a new coat is a mistery/the real mistery.

This brings up the question of whether the link between the two constituents in (169) is truly equative and the kind of semantics assumed for the copula in this case, given that

the only difference between (169) and (173) is that the former set comprises constituent questions. In addition, there seem to be some restrictions on the kind of answer that can be linked to the embedded constituent question too. For example, in question-answer pairs the existential presupposition of the question does not affect the answer in any way. Consider the following example.

(175)   Q: What did he buy?

        A: (He bought) nothing.

Although the question in (175) presupposes the existence of a thing bought, the set of possible answers contains the answer given here, which cancels it. In the copular clause, however, this is not the case. The only reading (176) can have is predicational, where the existential presupposition contained in the question is non-cancelable. In other words, (176) says that there *is* a thing *he* bought and it is worth litlle or is of no significance.

(176)   What he bought was nothing.

To put it differently, since *nothing* in this example has no quantificational force, it must be that the derivations in (177a and b) are for some reason excluded.

(177)   a.   *What he bought was he bought nothing.

        b.   *What he bought was ~~he bought~~ nothing.

It is also worth noting that not all constituent questions are available in SPCs. The D-linked wh-words are not allowed (178a), and as noted by Den Dikken (2006), *who* is unacceptable for most speakers, while *why* or *how* are rare in the precopular position.

(178)   a. *Which man you met is John.

       b.   *? Who you met is Bill.

7.3.2 Summary

In the previous section we have examined what motivates the two major approaches to SPCs. The predicational approach is based on two assumptions. One is that the clausal constituent of the copular construction is its underlying predicate, and the other is that this constituent is a free relative clause. Both of these identify SPCs as memebers of a larger class of specificational copular clauses.

The proponents of the predicate raising analyses aim to account for the reversibility of the two constituents in SPCs by proposing one of the two types of momevement – A-movement, or A'-movement. Both approaches to movement are motivated by the fact that the variability in agreement we find in SPCs contribute to the disambiguation of pseudoclefts in a systematic way. On the latter approach, however, the motivation for movement and consequently the landing site for the moved predicate resides in the information-structural properties of the SPC. The moved constituent is viewed as a topic, which in unambiguous SPCs takes the position above TP.

The proponents of the QPD approaches assume that specificational copular clauses cannot receive a unifying account, and that SPCs themselves do not make a homogenous class. On this view the precopular wh-clauses in SPCs are questions, and con-commitantly cannot be viewed as predicates at all, while the information-structural properties of these constructions are not derived.

In accounting for the connectivity effects in the unambiguous SPCs, the QPD approach is more successful, and especially so when accounting for languages in which the SPCs can have TPs as pivots. However, this type of account cannot be extended to the same type of connectivity effects found in other specificational copular clauses even in English. It therefore seems that this type of analysis is more language specific and construction specific than desirable in theoretical sense.

As far as the restricitions on the precopular wh-cleft is concerned, it seems that both the predicational approach and the QPD analysis face the same challenge. More precisely, whether the clause at issue is the FR or the embedded question, the type of wh-word word that introduces it is not just *any* FR or *any* embedded question.

The matter is not resolved, and one thing that sheds some doubt on the validity of QPD could be a cross-linguistic outlook on SPCs. So far (cf. Iatridou and Varlacosta 1999), it seems that the connectivity effects in SPCs vary to a great extent, and the cleft-wh-clause is indeed in many languages a kind of relative clause, rather than a question. Therefore, we will consider what the relevant data in Serbian can reveal.

7.4 SPCs in Serbian

7.4.1   What counts as SPC

In this section I will draw on the conclusions by Hartmann & Milićević (2015) regarding the proper analysis of Serbian SPCs, and in addition try to provide a more accurate account of type of cleft clause that features in these constructions. To put it differently, the two basic questions I will try to answer are: which of the two approaches presented in the previous section is better suited for the analysis of the Serbian data, and whether it is possible to relate the type of cleft found in Serbian to the one we find in English.

Starting from the type of pivot that an SPC can have, we can say that the options in Serbian are far more constrained. Unlike in English, in Serbian only NPs and CPs can serve as pivots in SPCs. This is shown below.

(179) a. Ono/To što   su   uradili je da   su   ukrali auto

that   what aux-3Pl done   is that aux-3Pl   stolen car

'What happened is that they stole a car.'

(*CP pivot*)

b. *Ono/To   što   su   uradili je ukrali (su)   auto.

that   what   aux-3Pl done   is stolen aux-3Pl car

'What they did is stole a car.'   (*TP/VP pivot*)

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c. Ono/To što je kupio su knjige.

that what   aux.3.Sg   bought   are books

'What he bought were books.'   (*NP   pivot*)

d. *Ono/To   što   je Petar je pametan.

that   what   is Peter is smart

'What Peter is is smart.'   (**AP pivot*)

e. *Ono/To   gde   Petar živi je u kući[18]

that   where   Peter lives is in house

"Where Peter lives is in a house."   (*PP pivot*)

Serbian SPCs are externally overtly headed by *to*, or *ono*, lexical items from the
demonstrative pronoun paradigm, discussed in section 4.2.2.1. When considered within
the paradigm presented in chapter 4, they are neuter, singular, nominative items within it.
However, they are the only items that can occur in the in SPCs, as shown in (179). This
constraint on the type of the pronominal form that shows up in Serbian is comparable to
the situation in English, where the wh-pronoun in the cleft-clause is in the vast majority
of cases *what.*

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[18] The example is ungrammatical under the intended, specificational reading. The only
meaning it can have is the locative one.

The relative clause is also of a distinct type. Namely, in SPCs neither default singular nor +φ wh-word is possible in the relative clause. The default singular FRs are excluded entirely in both SPCs and PPCs. This means that the examples in (180) are ungrammatical on both the specificational and the predicational reading.

(180)   a.   *Šta   (god) stoji   na polici   je knjiga.

             what-nom   *god* stands   on shelf   is book

             "What(ever) stands on the shelf is a book."

        b.   * Koga   (god)   Petar voli   je Marija.

              who-acc   *god*   Peter loves   is Maria

             "The one, whoever it is that Peter loves, is Maria."

On the other hand, +φFRs are excluded only from SPCs, while they can occur in predicational copular clauses, i.e PPCs.

(181)   Koja   god stvar   stoji   na polici   je knjiga.

            which   god thing   stands   on shelf   is book

            "What(ever) thing stands on the shelf happens to be a book."

(182)   Koju   (god)   osobu   Petar voli   je Marija.

            which-acc   *god*   person   Peter loves   is Maria

            "Whatever person Peter happens to be called Maria."

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Fully headed relative clauses can, of course, occur in specificational copular clauses, but they are representatives of the NP-copula-NP constructions (183a), and light-headed relative clauses do not exhibit any of the properties of SPCs. As illustrated by the contrast between (183b) and (183c), only the latter allows the reflexive to be bound outside its domain.

(183)   a.   Knjige   koje   si   preporučio   su *Lolita* i *Ada*.

books   which   aux-2Sg   recommended   are *Lolita*   and *Ada*

'The books which you recommended were *Lolita* and *Ada*.'

b.   *Taj   koga   Petar   ceni   je   sebe.

that-nom-msc   whom   Peter   respects   is   self

'The one whom Peter respects is himself.'

c.   To   što   Petar   ceni   je   sebe.

that-nom-neut   what   Peter   respects   is   self

'What Peter respects is himself'

So, what counts as the SPC in Serbian is a *to-što* relative clause featuring a pronominal element stripped of φ features, and a special type relative clause with a caselles *wh*-element *što*, which is arguably a complementizer (see Goodluck & Stojanović 1996).[19]

7.4.2 Properties of SPCs in Serbian

We can now consider Serbian SPCs more closely. To begin with, they exhibit connectivity effects only to some extent. Regarding principle A, it has already been shown that reflexive binding is possible (see 183c).

Variable-binding connectivity is also present, which is shown in (184).

(184) To/Ono što svaki čovek želi je njegov (sopstveni) mir.

That what every man wants is his own peace

'What every man wants is his peace.'

As far as the licensing of NPIs is concerned, it is safe to say that Serbian does not exhibit any NPI- connectivity. Serbian has two types of items licensed by negation. As shown in (185a and b), the first type, *i*-words, are licensed only non-locally in the scope of

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[19] Note that *to* in Serbian SPCs is not a kind of agreement marker/copula/coordinate conjunction as we find it? in Polish (see Blaszczak & Geist 2000; Citko 2008). It is also different from *eto* in Russian *eto*-clefts (see Junghanns 1997; Reeve 2012), since it forms a special type of nominal constituent with the adjacent relative clause.

negation (see Progovac 2005, Milićević 2005). That the example below is ungrammatical is no surprise given the fact that the pivot is not c-commanded by the sentential negation.

(185)   a.   *Petar   ne voli   ijednog kolegu.

                Peter   not likes   any   colleague

                "Peter doesn't like any of his work-mates."

    b.   Petar   ne kaže   da voli   ijednog kolega.

                Peter   not says   that likes   any   colleague

                "Peter doesn't like any of his work-mates."

    c.   *To/Ono što   Petar   ne kaže   da voli   je   *ijedan* kolega.

                that   what   Peter   not says   that likes   is   any colleague

                'What Peter does not say he likes is any colleague.'

The second kind of NPIs, the n-words, have to be licensed locally by sentential negation. Since n-words cannot be pivots of the SPC, we can conclude that this type of connectivity is indeed absent.

(186)   *To/Ono što   se Petru ne sviđa u kancelariji je   nijedan kolega.

          that   what   *se* Peter not likes in office   is   no   colleague.nom

          "What Peter does not like in the office is any of his office-mates"

In addition to the limited connectivity effects, Serbian SPCs allow the inversion of the two constituetns, and the semantic effect in this respect is the same as in English. The pivot in the pre-copular position anihilates the predicational reading (187).

(187) a. To što   on voli je istorija.   (SPC or PPC)

         that what   he likes is history-nom

         'What he likes is history.'

       b. Istorija   je   to što   on voli.   (SPC)

         history-nom is   that what   he likes is

         'History is what he likes.'

Also the pivot determines the agreement regardless of its position with respect to the copula.

(188) a. To/Ono što   je   Jovan   kupio   su/ *je knjige.

         that   what   aux-3Sg John   bought are/ is   books-nom

         'What John bought were/was books.'

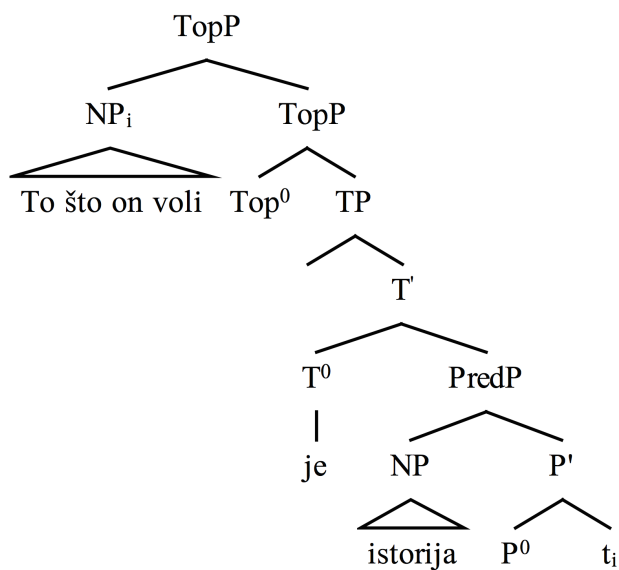   b. Knjige   su/ *je to/ono što   je   Jovan   kupio.

         books-nom   are/ is   that   what   aux-3Sg John   bought

         'What John bought was books.'

7.4.3 The analysis

Hartmann & Milićević (2015) argue for the rasing analysis of the Serbian SPCs. In it, the cleft-RC is base-generated in the complement to $Pred^0$ (see Bowers 1993, 2001), while the pivot is the subject of this PredP. The cleft-RC is raised to the topic position.

(189)

```
                    TopP
             ┌───────┴────────┐
           NPᵢ              TopP
       ┌─────┴─────┐     ┌────┴────┐
   To što on voli  Top⁰  TP
                        ┌──┴──┐
                            T'
                       ┌────┴────┐
                      T⁰        PredP
                       │      ┌───┴───┐
                      je     NP       P'
                          ┌──┴──┐  ┌──┴──┐
                        istorija  P⁰   tᵢ
```

Agreement pattern illustrated in (190) support the analysis of the pivot as the underlying subject. The agreement matches that of a classic example the agreement in specificational copular construction given below, where the specifying constituent determines the agreement.

(190) a. Upaljene sveće   su   bile   uzrok   požara.

          lit   candles.nom-pl-fem aux-3Pl been-pl-f cause-nom fire-gen

          'Lit candles were the cause of the fire'

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b. Uzrok   požara   su   bile   upaljene sveće.

cause.nom fire-gen   aux-3Pl been-pl-fem lit   candles-nom-pl-fem

'The cause of the fire were lit candles.'

The fact that the case of the pivot is always nominative further supports our analysis. For the same reason the QPD analysis is inadequate, since it predicts that the pivot should match the gap in the relative clause, in terms of semantic and categorical selection, and crucially, case.

(191)a. To/Ono   što svaka žena   voli   su njeni prijatelji/   je *njene prijatelje.

that   what everywoman   loves are her friends-nom-pl-msc is her friends.acc.pl

'What every woman loves is/are her friends'

b. *To što   on voli   je istoriju.

that what   he likes is history-acc

'What he likes is history.'[20]

Another thing that would be wrongly predicted by QPD approach is the licensing of n-words (see 185). First of all, they are, as we already said licensed locally, in the same

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[20] The SPCs we are discussing here do not require a colon intonation. In fact, colon intonation often makes otherwise ungrammatical analyses possible, independent of SPCs. As the analysis of colon intonation in general and in SPCs is way beyond the scope of this paper, we put these cases aside, leaving them to future in-depth research.

clause as the sentential negation. In addition, n-words, unlike i-words can be used as fragment answers (192). Under any account of deletion, the n-word would be a possible pivot constituent in a SPC, while this is not the case as shown in (185).

(192)   Q: Šta/Ko   u kancelariji se Petru ne sviđa ?

            what/who   in office   *se* Peter not likes

            'Whom does Peter not like?'

        A: Ništa. / Nijedan kolega

            nothing / no colleague.nom

            'Noone.' / 'No colleague'.

Finally, Serbian in contrast to English (cf. 169), does not allow the full answer in the pivot, since it does not allow the TP pivot, as seen in (193a and b), even though this is possible in question-answer pairs, as in (194). Therefore, the parallelism between SPCs and question-answer pairs does not hold, and a QPD-analysis seems implausible.

(193)   a.   *[To/Ono   što   su   uradili] je [oni su   ukrali auto].

                that   what aux.3.pl done   is   they aux.3.pl stolen car

                'What they did was they stole a car.'

b. *[To/Ono   što   su   uradili] je [ukrali su   auto].

that   what aux.3.pl done   is stolen aux.3.pl   car

'What they did was they stole a car.'

(194)   Q: Šta   su   uradili?

what   aux.3.pl   done

'What did they do?'

A: Oni su   ukrali   auto.   /   Ukrali   su   auto.

they aux.3.pl stolen   car   stolen   aux.3.pl car

'What did they do?' 'They stole a car.'

While QPD analysis may account for SPCs in a language exhibiting a wide range of the connectivity effects, and looser restriction on the category of the pivot, it seems as an implausible analysis for languages such as Serbian. This is why the predicate raising analysis is a more viable option.

The motivation for proposing that the raised predicate undergoes A'-movement partially comes from the agreement facts shown above. The fact that in Serbian the pivot consistently agrees with the copula, regardless of the constituents' order, suggests that the cleft clause is never raised to TP. The raising to the topic position is supported by the facts related to the information-structure that Serbian SPCs exhibit. Namely, the pivot in carries the same type of focus as the pivot in English SPCs. As discussed in section

5.3.1.1, this type of focus is the identificational focus in the sense of Kiss (1998), which, just like in English does not seem to be distinguished from the new information focus by movement of the focused constituent. That the pivot is the focal constituent providing new information is shown by the question-answer pairs below.

(195)   Q: Šta   on   voli?

            what   he   likes

            "What does he like?"

       A1: To što   on voli je   ISTORIJA.

            that what   he likes is   history-nom

            'What he likes is history.'

       A2: ISTORIJA   je   to   što   on voli.

            history-nom is   that what   he likes is

            'History is what he likes.'

       A3: #   Istorija   je   to   što   on VOLI[21].

            history-nom is   that what   he likes is

            'History is what he likes.'

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[21] Here the default, nuclear stress in the clausal constituent is marked as prosodically prominent over the pivot.

A4: #　To　što　　　on VOLI　je　istorija.

　　　that what　　he likes　is　history-nom

　　　'What he likes is history.'

An SPC in can serve as an answer to the question in (195) and the new information focus is prosodically marked on the pivot. The answer with no prosodic prominence of the pivot (A3 and A4 in 195) would not be a felicitous answer to the question. Also, the question-answer pairs in (196) show what the prosodic features of the constituents are when the predicate carries new information. In the felicitous answer to the question (A1), the focus is contained within the predicative element of the PPC, i.e. the clausal constituent, and the SPC (A2 and A3) cannot be a felicitous answer to a question about the predicate.

(196)　Q:　Šta je istorija?

　　　A1: Istorija　　je　to što　　　on VOLI.

　　　　history-nom　is　that what　　he likes is

　　　　'History is what he likes.'

　　　A2: #　To　što　　　on VOLI　je　istorija.

　　　　that what　　he likes　is　history-nom

　　　　'What he likes is history.'

A3: # To što on voli je ISTORIJA.

that what he likes is history-nom

'What he likes is history.'

The observed difference between the focus carried by the pivot and the focus carried by the predicate supports an approach that would treat the pivot as carrying identificational focus, in the sense described in section 5.3.1.1. Following, Valduvi (1972) who suggests that it is the dislocation of the topic (the presuppositional, background component of the information package) that marks the focused constituent as such, it is proposed here that the *to-što* clause undergoes movement to the topic position.

7.4.4 On the (non)-referentiality of the light-headed relatives in SPCs

In the analysis of Serbian SPCs presented here, the light-headed relative clause is the predicate of the underlying predicational structure. This opens the question of what the semantic type of this predicate is. It will be argued here that it denotes a property, and as such is non-referential.[22] In this section I will tackle its non-referentiality in more detail, following the strategy by Mikkelsen (2005) of using pronominalisation as a way of determining the semantic type of the precopular constituent in the specificational copular clauses. As will also be shown, the inability of the light-headed relative clause in the

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[22] In Hartmann & Milićević (2015), we suggest that we do not necessarily comit to the position that this constituent denotes a property, and we allow the possiblity that it denotes a concealed question as argued for in Romero (2005). In the current proposal I would stick to the simplest assumption about the property-denoting nature of the light-headed relative clause.

Serbian SPC to refer to individuals is also reflected in the properties of its head, a neuter singular demonstrative pronoun *to*/*ono*.

Following the insight provided by Jespersen (1927) and Kuno (1972) that there is a link between the form of the anaphoric pronoun and the semantic type of its antecedent, Mikkelsen formulates this link as a condition on the distribution of anaphoric pronouns which says that the form of a pronoun reflects its semantic type and that its semantic type has to match the semantic type of its antecedent. Thus, animate personal pronouns (*I*, *you*, *he*, *she*, *they*, *we*) denote human individuals and must have a human individual antecedent, while inanimate pronouns *it* and *that* can be associated with inanimate entities, propositions, abstract objects, and properties, but not human individuals. What is crucial for our purposes is the fact that they can be anaphorically related to properties as shown below.

(197)   a.   I was told Mary was [smart] and she is **that**.

          b.   He [runs very fast] and **that**'s good. **It** is excellent, actually.

          c.   Mark is [a detective] and **that** / **it** is a good job.

To determine the semantic type of the subject in the specificational copular clauses, Mikkelsen controls for the environments in which the pronoun occurs, making sure that the anaphoric reference is established with the subject of the clause. She identifies three types of environments where this is exclusively obtained: tag-questions (198), left-dislocated subjects with resumptive pronouns (199), and the question-answer pairs (200).

(198)　　a.　The funniest clown in the world is sad, isn't **he** / *it? (predicational)

　　　　b.　The funniest clown in the world is John, isn't **it** / *he? (specificational)

Tag-questions in English always involve reference to the subject using a pronoun that matches its person, gender and number features. As we see above, they also need to match the semantic type of the subject, which in (198b) is the property.

(199)　　a.　As for the funniest clown in the world, **he** / {*that / *it} is sad.

　　　　　　　　　　　　　　　　　　　　　　　　(predicational)

　　　　b.　As for the funniest clown in the world, *he / {**that** / **it**}is John.

　　　　　　　　　　　　　　　　　　　　　　　　(specificational)

With the left-dislocated subject of specificiational clause the resumptive pronoun again has to be property denoting as shown in (199b).

Finally, in question-answer pairs below, if the answer contains a pronoun and its antecedent is the non-wh phrase, it also has to match the semantic type of that constituent (200).

(200)　　a　Q: What nationality is the funniest clown in the world?

　　　　　　A: **He**/ {*It /*That} is German.

　　　　b.　Q: Who is the funniest clown in the world?

　　　　　　A: *He / **That** / **It** is John.

Actually, it seems that the set of examples in (200) overcomplicates the matter, since the reference to the non-wh constituent is not forced by the context itself. The answer to these questions can contain reference to the wh-constituents, and in that case *it* is not excluded (though the interpretation of the answer would not be specificational).

With this in mind, we can replicate the first two pronominalisation tests for SPCs, in the examples below.

(201)   What John considers funny is himself, isn't *he/ **it**?

(202)   As for what John likes, {**it / that**} / *she is Mary.

As the pronominal distribution in tag-questions and subject left-dislocation shows the clausal constituents of the SPCs in English are indeed predicative, i.e. property denoting.

Turning to Serbian SPCs, we can now check to what extent one could use the same strategy for determining the (non)-referentiality status of the light-headed relative featured in this construction. For one thing, the obligatory reference to subjects does not apply to Serbian tag-questions, which makes this environment inadequate for the testing. However, there are contexts in which the match between to the light-headed relative clause and an anaphoric pronoun must be established.

First we have to show, that the Serbian demonstrative pronoun *to* can denote a property (just like English *that*) (203). The same pronominal form is also the resumptive pronoun that follows the left-dislocation of a predicate (204).

(203) a. Rečeno je   da je Marija [pametna]   i   ona **to** jeste.

said   is   that is Maria smart   and she that is

"It was said that Mary was smart and she is that."

b. On [brzo   trči] i   **to**   je dobro.

he   fast   runs and that is good

"He runs fast] and that's good."

c. Marko je   [detektiv]   i   **to**   je dobar posao.

Marco is   detective   and that is good job

"Marco is a detective and that / it is a good job.

(204)   Pametan,   **to**/*on je   Petar.

smart   that/ he is   Peter

"Smart, that's what Peter is."

Once we have established that *to* can denote a property and that a property can be its antecedent, we can check its distribution in SPCs. As shown in (205), when the light-headed relative clause of the SPC is left-dislocated, it can only be associated with a demonstrative resumptive pronoun, but not with a regular 3rd person personal pronoun.

(205)　To　　što　　Petar　　voli,　　to/ *on je　Marko.

　　　　that　　what　　Peter　　loves　　that/*he is　Marco

　　　　"As for what Peter loves, that's Marco."

Since the demonstrative *to* denotes a property and functions as the associate of a left-dislocated predicative phrase, see (204), but not as the associate of referential phrases, as illustrated in (206), we can take this to be is an important piece of evidence that the relative clause in (205) denotes a property.

(206)　Onaj　(čovek) koga　　Petar　　zavoli, taj/ ?on　je　pametan.

　　　　that　　man　　whom　Peter　　loves, that/ he　is　smart.

　　　　"The one who Peter loves, he is smart."

In addition, although *što* relative clauses headed by a noun, or a demonstrative that refers to indviduals require a resumptive clitic pronoun (207), the light-headed *što* relatives we find in SPCs do not allow them (208).

(207)　Te　(devojke) što　si *(ih) preporučio su na　vratima.

　　　　those girls what　aux.2.sg them　recommended are on　door

　　　　'Those (girls) you recommended are at the door.'

(208)   To što si (*ih)   preporučio   su Ana i Marija.

that what aux.2.sg cl-acc-pl   recommended   are Ana and Maria

'What you recommended is Ana and Maria.'

The interpretation of the contrast above does not crucially depend on our understanding of what the resumptive clitic is. Whether we view them as case markers, or the pronunciation of a moved element's trace, or just phonologically deficient pronominal forms, they refer to indiviuals and must match the properties of the external head of the relative clause. In (207), we see that the demonstrative pronominal *te* is marked for gender and number features, which are matched by the agreement (number) features of the clitic, and they are both capable of referring to individuals. As this is not the case with the pronoun *to*, and there is no property denoting clitic in Serbian, (208) is ungrammatical.

In the discussion so far, I have been focused on the anaphoric pronominal *to*, using it to show that the relative clause in SPCs denotes a property. However, the antecedent of the *što*-relative clause itself is also *to* or, alternatively *ono* (a distal version of the same 'demonstrative' item). The formal properties of these items were briefly mentioned in section 5.4.1. There I established that the items in question are underspecified for φ features. In the light of the facts presented in this section, I conclude, that as antecedents of a relative clause contained in a SPC they are underspecified for anymacy too, and therefore cannot denote individuals.

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7.5 Free Relatives in SPCs

Having established what counts as an SPC in Serbian all its syntactic properties, we can now return to the two basic questions of this thesis, which would help us complete the puzzle. These questions are concerned with the link between FRs and SPCs, and the first one, related to the form of the FR clauses that occur in SPC is: why is *ever* ungrammatical in SPCs. This issue has been mentioned before, as a plausible argument for analyzing the wh-cleft clause in this construction as a question rather than an FR, and I repeat the illustration below.

(209)　　a　What(*ever) John is is proud.

　　　　　b.　Whatever John is is important.

The second important question was brought up in the introduction to this thesis and is related to different type of clauses that occur in SPCs in English as opposed to Serbian. If both languages have FRs why is it the strategy of Serbian is to use a light to-što relative clause in SPCs and not an FR, as shown below.

(210)　　a.　To što　　　on voli　je istorija.

　　　　　　that what　　he likes　is history-nom

　　　　　　'What he likes is history.'

b. Šta (god) on voli je važno.   (predicational reading only)

what *god* he likes is important

"Whatever he likes is important."

Given the conclusions of this thesis it is not surprising that I believe the answer to the

first question is semantic. Iatridou and Varlocosta (1998), who are also proponents of the

predicational analysis of SPCs, argue that the answer is to be found in the inability of

universal quantifiers to act as predicates[23]. This is illustrated below for both English and

Serbian.

(211)   a   History   is   what(*ever) he likes.

b.   *Istorija   je   šta god   on voli.
history-nom is   what god   he likes.

c.   *History is every thing (he likes). (ungrammatical on predicational reading)

d.   *John is every man.

This explanation rests on the assumption that wh-ever expressions are universal

quantifiers and that *ever* contributes the universal quantificational force to the pronominal

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[23] The reader is referred to Barwise and Cooper (1981) and Partee (1986) for a semantic account of why this is so.

item. However, as discussed in chapter 3, whether this is so or not is a matter of an ongoing debate. One illustration that would remind us of the issue is given below, and it shows that wh-expressions, unlike universal quantifiers cannot be modified with *almost* or *nearly*.

(212)   a.   I will share almost / nearly everything you send me.

           b.   I will share *almost / *nearly whatever you send me.

Iatridou and Varlocosta point to the inconclusiveness of the syntactic tests in these cases and maintain that universal quantification is the key to why *ever* is excluded from predicational structures. They point out the only instance when wh-*ever* can be a predicate of the copular clause is the same instance when the standard universal quantifier can.

(213)   a.   They are whatever you want them to be.

           b.   He is whatever you are.

(214)   a.   They are everything/anything you want them to be.

           b.   They are everything/anything you are.

As noted by Partee a universal quantifier is a legitimate quantifier only when it quantifies over properties. Informally, what the predicate in (214) denotes is a set of all properties that the subjects of the two copular constituents share. And again the key word is the reference to properties and not individuals.

It is worth noting here, that the parallelism above is again not complete. As can be seen in (2014), Iatridou and Varlocosta assume that *everything*, *anything* and *whatever* all express the same kind of universal quantification. This, however does not seem to be quite the case, which I show below.

(215)　　a.　Whatever you are he is too.

　　　　　b.　?? Everything you are he is too.

　　　　　c.　Anything you are he is too.

To the extent that (2015) is grammatical, the shared property meaning in (215b) seems to be lost in the construction involving gapping, which is another indication that *whatever* and anything pattern together. In the same example the free choice reading is more prominently available. When we combine this insight with the earlier observation that wh-god items in Serbian pattern more readily with the free choice items than with uncontroversial quantifiers, it seems that the semantics of the wh-*ever* expressions is that of a free-choice free relative..

The answer to the second question regarding the different strategies for constructing SPCs in Serbian and English is related to the formal features of the wh-constituents that

introduce the FR into a predicational structure. To put it simply, I believe that the key to the matter is animacy.

As we have seen throughout this chapter the relative clause that occurs in SPCs is the one headed by the most undrespecified pronominal item in the demonstrative paradigm, followed by the complementizer. This pronoun is a neuter singular form underspecified for case, number, gender and, crucially, anymacy features. As such it is only adequate for denoting a property or, as we have also seen in the pronominalization tests in 5.4.4 for the reference to a property. At the same time, in the relative pronoun paradigm there are no items underspecified enough for the same role.

That this conclusion might be on the right track is indicated by an observation that is regularly mentioned in the literatrue on English SPC – by and large the FRs we find in SPCs are *what* clauses. Compared to the who-clefts, the disproportion is striking, which was also pointed by DenDikken (2006:305):

"In his corpus-based study, Collins (1991) found not a single example of a *who-* cleft, while of all the tokens of pseudoclefts with *wh*-words other than *what*, only one had the order illustrated in the examples above (with the *wh*-clause preceding the copula – see also Geluykens's 1984 corpus-based study for the rarity of this type, attested just once in his corpus as well.)"

It seems then that in English *what* is the item in the relative clause paradigm, which is similarly to *that*, or Serbian *to* underspecified for animacy and can introduce a predicate of the appropriate type into the underlying predicational structure.

8 Conclusion

In this thesis I have investigated the syntactic strategies behind a range of phenomena related to the syntax of free relative clauses and specificational pseudoclefts in English and Serbian. I have offered a unifying analysis for of free relative clauses in these languages, arguing for the shared-structure, or multi-dominance approach, as it provides a more parsimonious account of the categorial matching and case matching properties of these clauses in both languages. The approach adopted in this analysis assumes the existence of a particular type of displacement in syntax, which following Van Riemsdijk (2006), I refer to as *grafting*. Thus, this work aimed to provide empirical support for the existence of this operation, and also to investigate what type of constituents must be assumed to undergo this operation in the derivation of free relatives.

As far as Serbian data is concerned, this work has established the degree to which the matching constraints hold in Serbian, and formulated the right descriptive generalization regarding the type of match we find in this language. It has been shown that the categorial matching of PPs depends on the case licensed by the preposition, which indicates that the prepositions in Serbian represent a functional category in the nominal domain, rather than a separate lexical category.

It has also been shown, that at least for Serbian, the observation regarding the lack of matching constraints with subject free relative clauses is wrong. It is not the case that the English exhibits stricter matching constraints than Serbian, and what superficially seems to be unconstrained distribution of free relative clauses stems from the fact that they are

not generated in the subject position at all. They are clauses base generated in the A-bar position – instances of left-dislocation. Therefore I have defended a stand which comprises the following:

- All FRs in Serbian are grafts.

- All FRs in Serbian are base-generated in various syntactic positions.

- The presence/absence of the matching effects follows from the syntactic position in which FR grafting takes place without additional stipulations.

- There is no CMC as an independent constraint on the derivations.

One advantage of this account is that it dismisses with the matching constraint as an independent condition on legitimate syntactic objects. The other is, that it more successfully relates the apparent free distribution of free relative clauses to the licensing of null subjects.

Regarding the internal structure of free relative clauses in Serbian, I have proposed how the two types of these clauses are derived. My claim was that they are a type of embedded wh-clauses without the external nominal head, which are derived via movement through a topic position to the highest position in the CP domain, both employing the left-branch-extraction and/or remnant movement. This account has consequences for how we should view the syntax of the clitics Serbian.

Next, this thesis provides an account of specificational pseudoclefts in Serbian – determining what counts as this type of construction and to what degree it matches the properties of English specificiational pseudoclefts. It has been argued that the best way to

to analyze them is as the underlying predicates of copular clauses. By defining the semantic and syntactic type of the relative clause in question I have reached the conclusion that different syntactic strategies for providing the predicate-clause in copular constructions, crucially revolve around the type of and overt markedness of the pronominal paradigms in the two languages. More precisely, whether a language will utilize a headless or light-headed relative clause in these copular clauses depends crucially on whether it has an appropriate functional item, a pro-form in our case, which would be able to denote properties and refer to properties. In the case of English and Serbian those items are *what* in English, and *to* in Serbian.

Finally, I have offered an insight in what the crucial property of those items may be in terms of their formal features – they are underspecified for animacy.

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