SYNTACTIC STRUCTURE OF SPECIFICATIONAL AND PREDICATIONAL COPULAR CLAUSES\textsuperscript{1,2}

\textbf{ABSTRACT:} The main aim of this paper will be the analysis of specificational copular clauses in Serbian and their syntactic behavior in comparison to predicational copular clauses and predicate topicalized structures. Specificational copular clauses consist of the copula \textit{be} and a non-referential expression in the clause initial and a referential DP in the clause final position (\textit{Winner is Peter}). The main question is whether we can apply predicate inversion to Serbian specificational copular clauses. One of the most important arguments will be the subject-verb agreement as well as the case distribution in Serbian. Tests that Mikkelsen (2004) used for the distinction of Danish specificational clauses and predicate topicalized structures were used in Serbian. It will be argued that in Serbian DPref, in predicational clauses moves to the subject position in the TP layer, satisfying case and agreement features, while DPpred in specificational clauses moves to the subject position in the SpecTP, satisfying [top], thus leaving DPref in situ. It is assumed that these two types of copular clauses have similar syntactic structures in comparison to predicate topicalized structures.

\textit{Key words:} specificational, copular, predicational, small clause, agreement.

\textbf{1. Introduction}

Copular clauses are a type of clauses whose main constituent is the verb \textit{jesam} ‘be’ in Serbian or the verb \textit{be} in English. Copular clauses generally represent a sentence type in which predicate is not a verb, but some other functional category like AP, NP or PP. Their classification was described by Higgins (1973), who made the taxonomy of four types of copular clauses, which will be discussed in detail later on. He divided them into predicational, specificational, identificational copular

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clauses and equatives. This distinction is primarily based on their syntactic and semantic characteristics as well as their information structure. This paper will mostly focus on specificational clauses, which are a type of copular clauses and have the syntactic representation $NP1 \text{ be } NP2$.

In this paper, the syntactic structure of specificational clauses will be analyzed applying the predicate inversion approach by Moro (1997) concerning the movement in this type of copular clauses. He proposes that predicational and specificational copular sentences are derived from the same small clause structure. In Moro’s analysis, if the subject moves past the copula, the result is a predicational sentence (1a). If the predicate moves to the subject position, the result is a specificational sentence (1b).

\begin{enumerate}
  \item a) Subject be [SC <Subject> Predicate] **predicational sentence**
  \item b) Predicate be [SC Subject<Predicate>] **specificational sentence**
\end{enumerate}

The main aim of this paper is the analysis of specificational copular clauses in Serbian and their syntactic behavior in comparison to predicational copular clauses and predicate topicalized structures. The question is whether we can apply predicate inversion theory to Serbian specificational clauses. Tests that Mikkelsen (2004) used for the distinction of Danish specificational clauses and predicate topicalized structures is used in Serbian as well. They include negation, polar questions and extraction. These tests will tell us about the difference between these two types of clauses.

**2. Characteristics of Copular Clauses**

2.1 Higgins’ (1973) Taxonomy of Copular Clauses

As far as copular clauses are concerned, an important part of Higgins’ taxonomy (1973) is the notion of referentiality. It denotes the specific place, object or a thing. Based on this semantic criterion, he made a distinction among four types of copular clauses: predicational (2a), specificational (2b), identificational (2c) and equative (2d). Firstly, predicational clause has an individual-denoting subject Peter and a property-denoting complement gubitnik ‘loser’ (2a). NP1, or the syntactic subject, is referential, while NP2 is a non-referential, predicative complement. In a specificational clause the alignment is the inverse (2b). The property-denoting expression gubitnik ‘loser’ is the subject, and the individual-denoting expression
Petar is the complement. Also there is difference in the status of two constituents with respect to their referentiality; NP1 seems to be non-referential element, while NP2 is a post copular referential element. In equative constructions, in example (2c) both Petar and Petrović are referential. Finally, identificational clauses consist of nonreferential NP1 to (‘it’) and referential NP2 Petar (2d).

(2)  a) Petar je gubitnik.
Peter-NOM.SG be-3.SG.PRES loser-NOM.SG
‘Peter is loser.’

b) Gubitnik je Petar.
loser-NOM.SG be-3.SG.PRES Peter-NOM.SG
‘Loser is Peter.’

c) To je Petar.
that be-3.SG.PRES Peter-NOM.SG
‘That is Peter.’

d) Petar je Petrović.
Peter-NOM.SG be-3.SG.PRES Petrović-NOM.SG
‘Peter is Petrović’

2.2 Agreement and Case

We will now discuss the notion of agreement in specificational copular clauses in Serbian, whilst commenting agreement in English. Heycock (1994, 2012) and Chomsky (2000, 2001) show that in specificational clauses, some of the languages like English show consistent DP1 agreement, while other languages like Italian or Russian show DP2 agreement. Serbian also falls into the latter category, showing consistent DP2 agreement, which speaks in favor of the argument that in specificational clauses DP2 is a syntactic subject. Also, DP2 is always in nominative case, which is another argument in favor of treating DP2 as a syntactic subject. In English, there is consistent agreement of the copula with the initial noun phrase or DP1 (3). This can be taken as an indication that in English DP1 is treated as a syntactic subject in specificational clauses instead.
(3) The real problem is/*are your parents.

Picture 1. Structure of the clause (3).

There is a consistent DP2 agreement (4), which is why we treat it as the syntactic subject and it is an argument in favor of the predicate inversion analysis. In Serbian, syntactic subject is always in nominative, regardless of its clausal position, and in specificational clauses DP2 is always in nominative (4). In the examples (5a) and (5b) we can see that DP1 agreement is not possible in these constructions, and that it is always with the DP2.

(4) Pretnja su zatvaranje fabrika i uništavanje preduzeća.
 threat-\text{NOM.SG} \text{ be-3.PL.PRES} \text{ closing factories-\text{GEN.PL} and destruction companies-\text{NOM.PL}}

‘The treat is closing of the factories and the destructions of companies.’

(5) a) Problem su naši roditelji.
 problem-\text{NOM.SG} \text{ be-3.PL.PRES our parents-\text{NOM.PL}}
‘The problem is our parents.’

b) Problem je naši roditelji.
 problem-\text{NOM.SG. be-3.SG.PRES our parents-\text{NOM.PL}}
‘The problem is our parents.’

In predicational clauses, agreement is always with the DP1, which shows that in these clauses DP1 is considered to be the syntactic subject (6a). In addition, it is always in nominative.

(6) a) Petar i Marko su problem.
 Peter-\text{NOM.SG} and Marco-\text{NOM.SG} \text{ be-3.SG.PRES problem-\text{NOM.SG}}
‘The problem are Peter and Marco.’

b) *Petar su pobednici.

Peter-NOM.SG be-3.PL.PRES winners-NOM.PL

‘Peter are winners.’

2. Previous Analyses

In this section, I will present an overview of theories concerning predicate inversion in specificational clauses, as well as theories claiming that there is no movement or inversion in the derivation of specificational copular clauses. An important approach concerning movement in specificational clauses is the predicate inversion analysis by Moro (1997) and den Dikken (1997, 2006). Moro proposes that predicational and specificational copular sentences are derived from the same deep structure. In Moro’s analysis, the difference between predicational and specificational clauses is not whether movement takes place, but rather which element raises to the subject position. In a predicational clause, it is a referential DP (DPref) (7a), but in specificational clauses it is crucially DPpred (7b) that moves to SpecTP, and DPpred stays in its base-generated, VP-internal position.

(7) a) Subject be [SC <Subject> Predicate] **predicational sentence**

b) Predicate be [SC Subject<Predicate>] **specificational sentence**

![Diagram](image.png)

Picture 2. The representation of the small clause with two DPs.

The second analysis is by Heggie (1988), who proposes that specificational clauses are derived from predicational structures by topicalization of the predicate complement, also with the leftward movement of the copula. In a predicational copular clause, the subject of the small clause raises across the copula to the subject position of the main clause SpecTP, and the finite verb moves to T. The
specificational clause *The teacher is John* is derived from the same underlying structure, but in addition to the subject raising to SpecTP the predicate DP moves to SpecCP. As a result, the initial DP is in SpecCP, and the postcopular DP is outside of the VP in subject position of SpecTP.

Picture 3. Predicate topicalization in Danish.

The third type of analysis of specificational sentences involves fronting of DP1 into the subject position. Mikkelsen (2004) gives strong arguments for the case that DP1 is in the subject position in specificational sentences in Danish. Mikkelsen’s evidence from Danish shows that, at least in Danish, predicational and specificational copular clauses are two separate constructions with different surface structures. So, specificational sentences in Danish are not formed by predicate topicalization. DP1 is indeed the topic, but it is in the syntactic subject position, not in any higher left-periphery position.
4. Predicate Topicalization and Specificational Clauses

For the analysis of the derivation of Serbian specificational sentences we will use the predicate inversion approach because of the structure of the Serbian copular clauses. It is the predicate topicalization theory, which implies that predicative NP moves to the TopicP in the CP layer where the change in the information structure occurs. We, therefore, apply to Serbian the tests which Mikkelsen (2004) uses to distinguish Danish specificational clauses and topicalized structures. They include negation, polar questions, extraction, the antecedent of the conditional and sentential subject. I will focus on syntactic differences and syntactic behavior of specificational clauses in comparison to predicate topicalization, on the one hand, and predicational copular clauses, on the other. If the contrast between all of these constructions does not appear, that would be in favor of a theory where the predicate is fronted to the subject position, in SpecTP.

4.1 Negation

Negation is used as a syntactic test to determine the structural differences between predicate topicalized and specificational and predicational copular clauses. As Mikkelsen (2004) states, the position of the negative particle *ikke* is typically before the postcopular expression. The sentence (8a) is ambiguous between specificational and predicate topicalized reading, whether Mina is focus or Mina is
ascribed a property which is contrastive focus. However, the fact that in (8c) ikke is in the clause final position is an indication that the structure is topicalized. In specificational structures negation appears before the post-copular DP (8b), in predicate topicalization structures negation appears after that same DP (8c). The reason why negation appears before the final DP in a specificational structure is that negation is left-adjoined to VP, and the final DP is inside the VP.

(8) a) Den højeste spiller på holdet er Minna.
The tallest player on team-DEF is Minna
   ‘The tallest player on the team is Minna.’
   b) Den højeste spiller på holdet er ikke Minna.
The tallest player on team-DEF is not Minna
   ‘The tallest player on the team is not Minna.’

![Picture 4](image)

**Picture 4.** Specificational clause in Danish.

c) Den højeste spiller på holdet er Minna ikke. (predicate topicalization)
The tallest player on team-DEF is Minna not
   ‘The tallest player on the team is not Minna.’
As far as Serbian is concerned, negation is always combined with the auxiliary verb. Milićević (2007) states that in this context it can license n-words leads to conclusion that we are dealing with regular sentential negation which projects below TP. We can see that in cases (9a), (9b) the specificational and predicational copular clauses share the same characteristics, and do not display any difference with respect to negative auxiliary position. The example (9c) is only grammatical under a predicate topicalized reading, when the negative auxiliary is in the clause final position, which is not typical position for negation in Serbian, and this is the reason why this structure is on the border of acceptability. In this example there is the contrastive topic which has the meaning that the winner is not Peter but it is somebody else. We can see that even in Serbian there is a grammaticality contrast between specificational structures and predicate topicalized structures. Based on this we can conclude that specificational and predicational constructions when negation is concerned have the similar structure and that DP is placed in the TP domain which is different from topicalized structure where DP is in CP domain.

(9) a) Pobednik nikad nije Petar.
   winner-NOM.SG never be-3.SG.PRES not Peter-NOM.SG
   ‘Winner is never Peter.’
b) Petar nikad nije pobednik.  
`Peter never is winner.`

c) ?Pobednik nikad Petar nije.  
`Winner is never Peter.`

### 4.2 Polar Questions

Mikkelsen (2004) argues that specificational clauses differ from predicate topicalization structures with respect to the formation of polar questions. Specificational clauses allow polar question formation (11), while predicate topicalization structures do not (10). This prediction relies on the assumption that polar questions involve movement of a null question operator to SpecCP. This movement is accompanied by movement of the finite verb to C.

(10) *Er den spiller på holdet Minna ikke?  
`Is the player on the team not Minna?`

(11) *Er den spiller på holdet ikke Minna?  
`Is the player on the team not Minna?`

In contrast, we expect polar question formation to be possible in specificational structures since Spec-CP is free to be occupied by the question operator (12c).

(12) a) Da li je Petar najviši igrač u timu?  
`Is Peter the tallest player on the team?`

b) Da li je najviši igrač u timu Petar?  
`Is the tallest player on the team Peter?`

c)* Da li najviši igrač u timu Petar?  
`Is the tallest player on the team Peter?`
If there is a movement of the DP to SpecCP, we expect polar question formation to be impossible, according to the reasoning applied to predicate topicalization structures above. We can see that the results are similar to those achieved with other tests, and once again we get similar results like in Danish. In the case of predicational structures (12a), we can see that it is possible to formulate questions, and the verb here moves to the SpecTP. However, in the case of specificational clauses (12b), it is also grammatical which means that predicative NP1 does not move to the CP domain. We can see that example (12c), which is the predicate topicalized structure, is not grammatical in this case, due to the fact that it is impossible to topicalize it, just like in Danish.

4.3 Sentential Subjects

“Topicalization is also not allowed in sentential subjects, predicting correctly that predicate topicalization structures cannot occur as sentential subjects (13), while specificational clauses can (14)” (Mikkelsen 2004:46). In this test, we can see that we can form sentential subjects by using specificational clauses (16), as well as predicational alone (15). However, predicate topicalized structures are not grammatical (17).

(13) *At den bedste spiller er Minna ikke betyder ikke noget i denne sammenhæng.
   ‘That the best player isn’t Minna doesn’t mean anything in this connection.’

(14) At den bedste spiller ikke er Minna betyder ikke noget i denne sammenhæng.
   ‘That the best player isn’t Minna doesn’t mean anything in this connection.’

(15) To da Petar nije najbolji igrač, ništa ne znači.
   it-3.SG that Peter- NOM.SG be-3.SG.PRES not best player- NOM.SG nothing not mean-3.SG.PRES
   ‘That Peter is not the best player doesn’t mean anything.’

(16) To da nije najbolji igrač Petar ništa ne znači.
   it-3.SG that be-3.SG.PRES not best player- NOM.SG Peter- NOM.SG nothing not mean-3.SG.PRES
   ‘That the best player is not Peter doesn’t mean anything.’

(17)*To da najbolji igrač Petar nije ništa ne znači.
‘That the best player is not Peter doesn’t mean anything.’

4.4 Antecedent of Conditional

Finally, topicalization is impossible in the antecedent clause of a conditional construction. Thus we find that specificational clauses can function as the antecedent of a conditional (18), but predicate topicalization structures cannot (19). (Mikkelsen 2004) We can see that in Serbian this test is once again inapplicable because it lacks contrast between specificational and predicational copular clauses. Predicate topicalized structures are on the border of acceptability in the case of the antecedent of a conditional (22).

(18) Hvis den højeste spiller er Minna ikke s°a m°a kontrakten skrives.
    ‘If the tallest player isn’t Minna, then the contract must be rewritten.’
(19) *Hvis den højeste spiller ikke er Minna s°a m°a kontrakten skrives
    ‘If the tallest player isn’t Minna, then the contract must be rewritten.’
(20) Ako najviši igrač nije Petar, onda se ugovor mora promeniti.
    if tallest player- NOM.SG not be-3.SG Peter- NOM, than be-3.PL contract has to
declare-PL
    ‘If tallest player is not Peter, than contract has to change.’
(21) Ako Petar nije najviši igrač, onda se ugovor mora promeniti.
    if Peter- NOM tallest player- NOM.SG not be-3.SG, than be-3.PL contract has to
    declare-PL
    ‘If the tallest player is not Peter than contract has to be changed.’
(22) ?Ako najviši igrač Petar nije, onda se ugovor mora promeniti.
    if tallest player- NOM.SG not be-3.SG Peter- NOM, than be-3.PL contract has to
    declare-PL
    ‘If tallest player is not Peter, than contract has to change.’

4.5 Extraction

In specificational clauses in English, wh-extraction is impossible both from the first DP and the second DP. The fact that (23c) is ungrammatical is unexpected if a picture of which wall in (24b) is considered to be in the same position as the cause of which riot in (23c). While in predicational clause it is grammatical (23d)

(23) a) [The cause of the riot] was [a picture of the wall].
    b) *Which riot was [the cause of it] [a picture of the wall]?
    c) *Which wall was [the cause of the riot] [a picture of it]?
d) Which riot was [a picture of wall] [the cause of t]?

When we observe the data in Serbian, we can conclude that in the case of specificational constructions (25), the extraction of the subject is possible, while in the case of predicational constructions subject extraction is ungrammatical (26). A wh-phrase cannot be extracted from the subject DP, but it can be from the complement DP. This is because we cannot move DP which is in TP to ask the question, and out of DP which is not in SpecTP we can.

(24) a) Članak o predsedniku je bio uzrok pobuna.
   article-NOM.SG about president-LOC be-3.SG.PAST cause-NOM.SG of riot-GEN
   'The article about the president was the cause of the riot.'

b) Uzrok pobuna je bio članak o štrajku.
   cause-NOM.SG of riot-GEN be-3.SG.PAST article-NOM about president-LOC
   'The cause of the riot was article about president.'

(25) Čega je članak o štrajku bio uzrok?
   what be-3.SG.PAST article-NOM about president-LOC cause-NOM
   'What was the article about riot cause of?'

(26) *O čemu je uzrok pobuna bio članak?
   about what be-3.SG.PAST cause-NOM of riot-LOC article-NOM?
   *‘About what was the cause of the riot article t?’

5.1 Deriving Predicational Clauses

Taking all these facts into consideration we will describe the derivation of the predicational clauses. According to Bowers (1993) and Williams (1980), this construction contains PredP, which is a type of small clause. The crucial aspect of the analysis is that referential DP moves to the subject position in the SpecTP. TP is finite, so it bears an interpretable inflectional feature [Infl: ], an interpretable nominative case feature, [nom], and the standard EPP feature, expressed here as uD*. DPref and DPpred both bear the uninterpretable case [ucase: ] and EPP feature on TP needs to be eliminated. In principle, either DPref or DPpred could be licensed, but DPref is closer to T, since it asymmetrically c-commands DPpred.
The derivation of predicational clause.

TP therefore enters into an Agree relation with DPref, valuing the case feature on DPref as nominative. The EPP feature on T forces the specifier of T to be filled, and, as a result, DPref moves to SpecTP. In the present derivation nominative case is checked by DPref. DPred has case feature also valued nominative, which is considered to be the default case. Copula moves from v to T. The structure is spelled out as a predicational clause, the referential DP is in subject position, preceding the finite copula and the predicative DP is inside PredP, following the finite copula.
5.2 Deriving Specificational Clauses

The syntactic structure of specificational clauses is different. The main assumption is that predicative DP moves to the subject position in the TP domain, because of the strong *[top] feature of T. TP bears the interpretable nominative case feature [nom], EPP feature, interpretable [Infl:] feature and uninterpretable topic feature which is strong [utop]*. The presence of topic feature in this structure points to the need for postulating two different copulas *be*, one in specificational and another one in predicational structure. The TP in specificational clauses bears [utop] which is strong. In the derivations discussed above, when either DP is a possible goal for satisfying the uninterpretable features on T (when both DPs bear the features necessary to eliminate all relevant features on T), T always enters into an Agree relation with DPref. This is taken to be a locality effect; DPref is closer to T than DPpred, since DPref asymmetrically c-commands DPpred. DPpred is assigned nominative case long-distance by T. Crucially, DPpred bears an interpretable topic feature [top], and due to the fact that [utop] on T is strong the DPpred moves to the subject position in the SpecTP and its case feature is valued with default case.

![Diagram](image_url)

**Picture 9.** The derivation of the specificational clause.
6. Conclusion

In conclusion, I have argued that in Serbian, DPref in predicational clauses moves to the subject position in the TP layer, satisfying case and agreement features, while DPred in specificational clauses moves to the subject position in the SpecTP, satisfying [top], thus leaving DPref in situ, which is considered to be the syntactic subject. In predicate topicalized structures, the predicative element DPred moves to a left periphery position.

The tests that Mikkelsen (2004) used for the distinction between Danish specificational clauses and predicate topicalized structures were used in Serbian as well. They were used to check if the first NP in specificational and predicational copular clauses takes the same position in the structure. Based on the syntactic behavior of specificational and predicational copular clauses, it is concluded that these two types of copular clauses in Serbian have similar surface syntactic structure in that sense. Serbian specificational and predicational copular clauses do not show the same contrast which exists between Danish specificational and predicate topicalized structures. In Serbian in specificational clauses DPred moves to the subject position inside the TP domain due to the strong [top] feature of T. This feature does not exist in predicational clauses where DPref moves to the subject position to satisfy the EPP feature. This is the reason why specificational clauses have a fixed information structure with topic always being in the sentence initial and focus in the sentence final position, contrary to the predicational clauses which can have a focus in the sentence initial position.
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**SINTAKSIČKA STRUKTURA SPECIFIKAČIJSKIH I PREDIKATIVNIH KOPULATIVNIH KLAUZA**

Rezime

Cilj ovog rada je analiza specifikacijskih kopulativnih kluza u srpskom i njihovih sintaksičkih karakteristika u poređenju sa predikativnim kopulativnim kluazama i predikativnim topikalizovanim kluazama. Specifikacijske kopulativne kluze se sastoje od glagola *biti* i dva DP-a, od kojih je nereferencijalan na početku rečenice, a referencijalan u
finalnoj poziciji u rečenici (*Pobednik je Petar*). Problem koji se javlja jeste mogućnost primene pristupa inverzije predikata na specifikacijske kopulativne klauze u srpskom. Najvažniji argumenti u korist ove teorije jesu slaganje između subjekta i predikata, kao i distribucija padeža u srpskom. Testovi koje Mikelsen (2004) koristi za razlikovanje danskih specifikacijskih klauza i predikativnih topikalizovanih struktura su korišćene i u srpskom. Tvrdim da se u srpskom DPref, što predstavlja referencijski izraz, u predikativnim klauzama pomera u poziciju subjekta u TP nivo, dobijajući padež, dok se DPredpred u specifikacijskim klauzama pomera u poziciju subjekta u SpecTP, dobijajući odliku [top], pri čemu DPref ostaje u istoj poziciji. Osnovna pretpostavka je da ove dve vrste kopulativnih klauza imaju sličnu sintaktičku strukturu u odnosu na topikalizovane strukture.

*Ključne reči:* specifikacijske, kopulativne, predikativne, topikalizacija, slaganje.