Intensifiers, Focus, and Clitics: Is Pronoun Position Truly an Argument for D in SC?

Abstract: This paper reanalyzes an argument for the existence of null DP in Serbo-Croatian based on certain asymmetries in the distribution of nouns and pronouns in this language. It is argued that on close scrutiny the facts in question not only do not challenge, but in fact support the lack of DP in Serbo-Croatian and that they can be directly deduced from other, independently motivated properties of the Serbo-Croatian grammar. The central empirical motivation for the analysis is found in the observation that the relevant asymmetry occurs in full paradigm only with one modifier, a typical intensifier. It is proposed that it is movement of clitic pronouns to the phrase projected by this intensifying adjective that gives rise to the contrast in distributional patterns of nouns and pronouns. In the course of this investigation, issues pertaining to general properties of two types of pronouns in Serbo-Croatian are addressed, as well as the syntax and semantics of intensifiers and focus.

Key words: DP/NP, intensifiers, pronouns, clitics, focus. *Languages*: Serbo-Croatian, Italian, German, Spanish

1. Introduction

The central motivation for the DP Hypothesis was a conceptual parallel with the structure of the clause, where functional projections (at least IP and CP) dominate the lexical projection of the verb. The logic was that if functional categories like C and Infl fit the X-bar schema, and head XPs with complements and specifiers, we should expect the same for functional heads like D. Also, on the basis of certain morphological parallels between clauses and nominals in agreement and case, some researchers suggested an NP-internal Infl, parallel to the clause. As discussed in Bruening (2009), early suggestions of this hypothesis include Jackendoff (1972), Hogg (1977), Brame (1982), Szabolcsi (1983), while among early proponents of this theory are Fukui and Speas (1986), Hellan (1986), Abney (1987), Szabolcsi (1987), among many others.

There are still, however, a few serious unsolved problems for motivating the DP Hypothesis on the noun-sentence parallelism, as argued in Payne (1993), and more recently in Bruening (2009). For instance, verbs that select for clausal complements only select things that are high in the clause, plausibly on C (questions vs. declaratives, finite vs. nonfinite, etc.); they

never select V (see (1), taken from Bruening 2009). In contrast, verbs that select for nominal arguments only select for N, and never for the functional elements like D. Generally, if a verb admits an NP, any sort of NP is allowed: quantificational, deictic with demonstrative, definite or indefinite, number, adjective, and so on. As pointed out by Baltin (1989) there is no verb that allows NPs without a possessor but not ones with a possessor; there is also no verb that allows indefinite NPs but not definite ones (see (2)).¹

(1) Questions versus declaratives:

- a. Sue thinks that the world is flat.
- b. * Sue thinks whether the world is flat.
- c. * Sue wonders that the world is flat.

(2) Nonexistent selectional pattern:

- a. John glorped books. (Baltin, 1989:(35))
- b. *John glorped his books. (Baltin, 1989:(36))

A variety of authors, on the other hand, have argued for a parametric approach to DP. Authors like Baker (2003), Bošković (2005, 2008, 2010), Chierchia (1998), Fukui (1988), among others, have argued on independent grounds that DP is not a universal projection and that languages may differ with respect to whether they have DP. According to Dryer's study of definiteness (The World Atlas of Language Structures Online), roughly half the world's languages have some formal marking of definiteness, but Bošković (2008, 2010), for instance, shows that the variation is not simply free and that there are parametric differences associated with whether or not a language has definite articles. Chierchia (1998) proposes that languages may vary in what they let their NPs denote. In some languages (like Chinese), NPs are argumental (names of kinds) and can thus occur freely without determiner in argument position; in others they are predicates (Romance), and this prevents NPs from occurring as arguments, unless the category D(eterminer) is projected. Finally, there are languages (like Germanic or Slavic) which allow both predicative and argumental NPs; these languages, being the 'union' of the previous two types, are expected to behave like Romance for certain aspects of their nominal system and like Chinese for others.

¹ For further problems for the general DP Hypothesis see Bruening (2009) and Payne (1993).

Following the footsteps of the parametric approach to DP, in this paper I explore the legitimacy of advancing the DP Hypothesis into the <u>Universal</u> DP Hypothesis (UDPH hereafter), that is, extending it to languages without articles. According to this view, which has become almost standard in generative linguistics literature, the difference between languages with overt articles such as English, and languages that lack articles such as Serbo-Croatian (SC hereafter) is simply phonological. That is, even languages like SC introduce an article (i.e., a D head) at the syntactic level, but which in contrast to the article in English is not pronounced. One of the goals of the argument presented below will be to show that the situation is not that simple and that an appropriate treatment of the absence of articles in SC can adequately answer the problems that the UDPH faces. I will try to show that admitting the possibility that languages without articles differ from languages with articles in a way deeper than *just* not pronouncing the article can provide new, refreshing perspectives on study of language and UG.

The proposal that SC lacks DP is certainly not novel, and has been argued for independently by Bošković (2005, 2008, 2010), Despić (2008), Zlatić (1997, to appear, this volume). Importantly, I will not argue against the DP hypothesis in general (as Payne 1993 and Bruening 2009 do) but only against its universality aspect. That is, I will argue that certain differences in syntactic behavior of SC and, for instance, Italian can be easily explained on the assumption that DP is projected only in the latter, but not the former.

The paper is organized as follows: In Section 2 I introduce the facts which constitute the main point of our interest and then I briefly present Progovac' (1998) original, "null DP" analysis, which is based on Longobardi (1994). In the same section I lay out several problems for the DP approach. In Section 3 I offer an alternative account whose core assumption is that SC lacks DP. I argue that the central role in explaining the noun/pronoun asymmetry has to be attributed to the intensifying nature of the sole modifier with which the asymmetry occurs. I show that this asymmetry comes about as a consequence of clitic movement of pronouns. By recognizing these as crucial aspects of the problem I argue that the proposed analysis successfully captures all the facts. In this section I also discuss the nature of the intensifying adjective in question and examine two types of pronouns in SC and their relation to focus. Section 4 concludes the paper.

2. The Noun/Pronoun Asymmetry in SC

2.1 The DP analysis - Progovac (1998)

One of the most compelling arguments for the existence of null D in SC is given by Progovac (1998). Following Longobardi (1994) Progovac observes that those adjectives that can appear with pronouns in SC must necessarily follow pronouns, in contrast to nouns, which follow adjectives. The basic paradigm is illustrated in (3) below (Progovac, 1998: 167):

(3)	a. I samu Mariju to nervira.	c. I nju samu to nervira.
	And alone Mary that irritates	And her alone that irritates
	'That irritates Mary herself.'	'That irritates her herself.'
	b. ?*I Mariju samu to nervira.	d. ?*I samu nju to nervira.

The contrast exhibited in (3) is significant to the extent that it exists in Italian, a language with overt articles. Longobardi (1994), following Postal (1969), argues that pronouns in Italian underlyingly occupy the D position, and that nouns are generated in N positions, and may, in some languages, raise to D. Importantly, this movement can only take place in the absence of articles suggesting that the D position is the landing site. This is shown in (4) ((4a-c) are originally from Longobardi 1994: 625-626, and (4d-f) from Progovac 1998: 168):

(4)	a. La sola Maria si è presentata.	d. *La sola lei si è presentata
	The only Maria showed up	The only she showed up
	'Only Mary showed up.'	e. Lei sola si è presentata.
	b. *Sola Maria si è presentata.	'Only she showed up.'
	c. Maria sola si è presentata.	f. *Sola lei si è presentata.
	Maria only(fem) showed up	

Briefly, the observation is that if the article is missing, the proper name has to precede the adjective, suggesting that it moves to D, a position in which the pronoun is generated. This is mainly based on the meaning that the Italian adjective *solo* has in these constructions. This

adjective has two distinguishable reading: it can mean either 'only, unique' or 'alone'. The claim is that when used with a proper name introduced by an article, the adjective *solo* can have the 'only, unique' meaning only if it occurs prenominally – a postnominal occurrence is marginal and obligatorily displays the 'alone' reading:

(5) a	a.	La sola Maria si è presentata.	b. ?La Maria sola si è presentata
		The only Maria showed up	The Mary alone showed up
	'Only Mary showed up.'		'The Maria who is (notoriously) alone showed up.'

Longobardi notes that certain constructions with common nouns behave similarly (Longobardi 1994: 625):

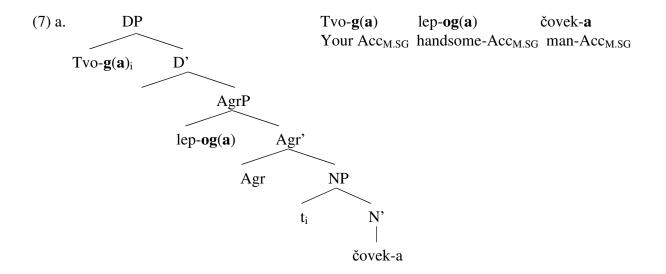
(6) a. La sola ragazza presente era antipatica. b. ?La ragazza sola presente era antipatica.The only girl present was dislikable The girl only present was dislikable

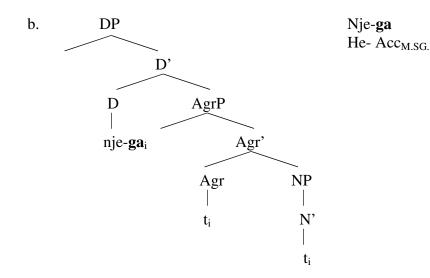
However, when the article is not present the order A + N becomes ungrammatical, as shown in (4b), and the order N + A illustrated in (4c) comes to display the same meaning as (5a) and not as (5b). That is, even though *Maria* linearly precedes the adjective *solo* in (4c), the adjective has the 'only, unique' meaning, which according to Longobardi provides a strong argument for N-raising of *Maria* to D over *solo*. It is also suggested that this obligatory raising of a proper name is driven by the strong referential feature of D in Italian, as opposed to the weak R feature in Germanic, where N raising takes place only in LF, and where the noun/pronoun asymmetry of this kind is not realized overtly.

Progovac (1998) observes that SC nouns and pronouns in (3) display a similar type of asymmetry. Given that the SC adjective in question has the same meaning regardless of the position of the modified noun/pronoun and under the assumption that it occupies a fixed syntactic position, Progovac concludes that it must be the case that pronouns occupy a structurally higher position than nouns. Progovac claims that this position is D and the reasoning behind it is illustrated by the following quote: "Since the evidence of such asymmetries is extremely sparse in the data, the children presumably cannot rely on them to conclude that there is a DP in SC. Since there are also no articles in SC, children have virtually no evidence of the existence of a

DP. It must be then that the projection of DPs is a universal property, independent of the presence of the lexical item which solely occupies the head of the projection" (Progovac, 1998: 165).

In order to account for the differences between SC and Italian (e.g., the fact that in SC proper names pattern with common nouns in that they uniformly follow the adjective) Progovac makes two additional assumptions. First, SC is taken to be similar to Germanic in that the referential feature on D in SC is weak. For this reason the N raising does not occur in SC and the difference between SC and Italian follows: adjectives will necessarily precede nouns in SC, but can either precede or follow proper names in Italian, depending on the presence vs. absence of the overt article. Second, Progovac maintains that pronouns in SC are, in fact, not generated in D as in Italian, but that they actually move from N to D. The argument for this is mainly based on certain morphological properties of SC pronouns and adjectives, since both adjectives and pronouns in SC show overt morphology not present in the nouns. According to Progovac, this morphology is acquired/checked by head movement of the pronoun through the extended projections of N all the way to D. In somewhat simplified terms, agreement markers on adjectives and nouns are not identical all the time, and adjectives sometimes may show, what Progovac calls, "heavier" agreement, which "comprises" the nominal agreement. Since pronouns surface bearing this "heavier" adjectival agreement as well Progovac posits another functional projection below D, labeled AgrP. The idea is that pronouns move to D at S-structure through the head of this projection, checking its features, whereas nouns procrastinate their movement until LF, and thus do not surface with the same agreement pattern. Consider (7) below (Progovac 1998: 173):





It is assumed, along the lines of Cinque (1991), that the heavy agreement visible on the adjective in (7a) (*lepo-ga* – 'handsome') is generated in AgrP, which is an extended projection of NP. The pronoun in (7b) moves to D through the head of AgrP acquiring the agreement morphology characteristic for adjectives. Since nouns, on the other hand, procrastinate their movement to D until LF (if they move at all) they do not surface with the same agreement morphology as adjectives and pronouns do.

Progovac's analysis is undoubtedly elegant and appealing since it appears to derive many facts in a fairly simple way. As discussed in Section 3 I agree for instance that the noun/pronoun asymmetry in SC arises as a consequence of movement of pronouns. However, I believe that the facts at hand are much more complex than they may initially appear and that they do not give legitimate motivation for certain important aspects of Progovac's account. In particular, I will try to show in the next subsection that there are several important empirical observations that cast serious doubt on the validity of postulating a null D in SC.

2.2 AgrP in SC DP/NP.

SC and generally Slavic agreement facts are a notoriously complex matter (e.g., Wechsler and Zlatić 2005, Bošković 2009, Despić to appear a), certainly outside of the scope of this paper, but I believe that pointing out a few relevant facts may shed some light on the present discussion.

SC has two forms of adjectives which have been widely discussed in the literature (Leko 1986, Zlatić 1997, Aljović 2002, Rutkowsky and Progovac 2005, among others). A commonly

ignored fact about long form (definite) adjectives in Slavic and SC, however, is that they were historically "formed by adding the anaphoric pronoun *j*- to the forms of the indefinite adjective. The coalescence of these forms yielded the definite or pronominal inflection of the adjective" Schenker (1993:91). This is morphologically clearly evident in modern SC: whereas endings on long form adjectives in the masculine paradigm (almost entirely) correspond to clitics and endings on the strong pronouns, endings on short form adjectives correspond to the ones found on nouns. These inflection types have been therefore called in traditional grammars *Pronominal* (zamenička) and *Nominal* (imenička) declensions/paradigms (e.g., Stevanović, 1962), and they correspond to long and short form, respectively:²

	/					
	Pr	Nominal Declension				
SG	Adj _{LONG} 'bad'	Noun _{MASC} 'boy'	Pronoun _{3P-SG-M}	Clitic _{3P-SG-M}	Adj _{SHORT}	Noun _{MASC}
Nom	loš-i	dečak	on	pro	loš	dečak
Gen	loš-e-g(a)	dečak-a	nje -ga	ga	loš- a	dečak- a
Dat	loš-e-m(u)	dečak-u	nje- mu	mu	loš- u	dečak- u
Acc	loš-e-g(a)	dečak-a	nje- ga	ga	loš- a	dečak- a
Ins	loš-im	dečak-om	nj- im	-	loš- im	dečak-om
Loc	loš-e-m(u)	dečak-u	nje- mu	-	loš- u	dečak- u

Table I 'bad boy'

Thus, it might be the case that -ga in loše-ga is nothing more than a historical rudiment of a cliticezed pronoun and that it is not licensed via some syntactic projection, like AgrP in (7). Furthermore, in addition to the long form, 'pronominal' inflection loše-ga there is also the short form, 'nominal' inflection loš-a, as in $loš-a_{GEN} dečak-a_{GEN}$, which in fact has the same affix as the noun, and not the pronoun. These forms do sound a bit archaic nowadays, but they are grammatical and it has been claimed by various authors (e.g., Aljović 2002, Cinque 2010) that they can combine with long forms in different ways. Thus, it is clearly not the case that adjectives always pattern with pronouns with respect to agreement, i.e., as shown in Table I short form adjectives always pattern with nouns, hence the traditional name 'Nominal Declension Adjectives' (see also Browne 1993).

More importantly, however, in plural we observe the opposite state of affairs from what we expect given the structures in (7). Consider the following example:

² I discuss in detail morpho-syntactic, semantic, and phonological properties of these adjectives in Despić (2010).

(8) a. I sam-e devojk-e to nervira. And alone girls that irritates
'That irritates girls themselves.'
b. ?*I devojk-e sam-e to nervira
c. I nj-ih sam-e to nervira. And them alone that irritates
'That irritates them themselves.'
d. ?*I sam-e nj-ih to nervira

Here the asymmetry in the linear order is identical to the one in (3): the pronoun linearly precedes the adjective, while the noun follows it, regardless of the number of the noun/pronoun in question. In (8), however, it is the adjective and the noun that share the same suffix (i.e., -e), and not the adjective and the pronoun, as predicted by (7). This clearly suggests that the agreement data used to motivate AgrP in (7) are not conclusive. Due to space limitations I put this issue aside and concentrate on some other problems for the DP analysis.

2.3 Problems for the DP analysis

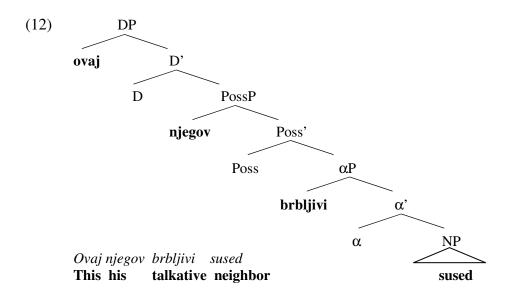
There are basically two kinds of problems that the analysis sketched above faces. First, it makes some wrong predictions, and second, it misses a few generalizations by glossing over some very interesting empirical observations.

Consider first the sentences in (9)-(11). There is an ordering paradox with respect to the position of possessives and demonstratives, on the one hand, and the adjective *sam*, on the other.

- (9) a. I sam njegov brat se složio sa tim.And alone his brother refl. agrees with that 'His brother himself agreed with it.'
- (10) a. I sama ta činjenica dovoljno govori.And alone that fact enough speaks'That fact itself speaks enough.'
- (11) a. I sam taj osećaj je nešto posebno.And alone that feeling is something special'And that feeling itself is something special.'

- b.?*I njegov sam brat se složio sa tim.And his alone brother refl. agrees with that
- b. ?*I ta sama činjenica dovoljno govori. And that alone fact enough speaks
- b. ?* I taj sam osećaj je nešto posebno.And that alone feeling is something special

The problem should be clear: if the position of the adjective *sam* is fixed below the null D head, why do then demonstratives and possessives necessarily follow it, when on most DP analyses these elements are structurally higher than D, either as specifiers of DP, or as part of some higher functional structure? For instance, for Progovac (1998) pronominal possessives are in the specifier of DP in (7). Bašić (2004: 26), on the other hand, suggests a somewhat different structure for the SC DP, as given in (12). Bašić assumes that attributive adjectives are generated in specifier positions of α Ps, functional projections in the functional spine of DP (along the lines of Cinque 1994), and that the possessive is located in the specifier position of a separate PossP, which is structurally lower than DP.



In contrast to Progovac's (1998) structure in (7), possessives are for Bašić positioned below the null D in (12) and that might be consistent with (9). However, (10)-(11) are still problematic for Bašić since the demonstrative is taken to be in the specifier of DP and hence structurally higher than D.

So, the million dollar question for any DP account of the SC noun/pronoun asymmetry is why demonstratives and possessives should necessarily follow the very same adjective *sam* that triggers the noun/pronoun asymmetry in (3), if this adjective's position is fixed somewhere below D, which by assumption hosts pronouns. Furthermore, in contrast to SC in Italian the demonstrative appears in the "expected" place, i.e., before the adjective *sola*, as illustrated in (13), which is a modified version of (6a). Importantly, *sola* here has the 'only, unique' reading: (13) Quella sola ragazza presente era antipatica.that only girl present was dislikable

(Andrea Calabrese p.c.)

This observation reinforces the claim from the beginning of this paper that nominal domains of Italian and SC differ in ways deeper than what the UDPH argues for.

Second, there is only one adjective with which this asymmetry appears and its meaning is quite exceptional, i.e., it is a typical intensifier, as is obvious from the examples given above.³ The intuition behind the analysis that I will shortly propose is simple: it cannot be a coincidence that the only adjective that "triggers" the noun/pronouns asymmetry has such a special meaning. Unless it is demonstrably and conclusively shown that this is in fact a coincidence, this fact cannot be ignored. On the account that I propose, following Eckardt (2002), *sam* is an intensifier and therefore it is always in focus. This correctly predicts, as I will demonstrate, that the intensifying *sam* cannot modify clitic pronouns, which due to their prosodic nature cannot be part of focus.

Also, in addition to having a peculiar meaning, this adjective differs from other, "regular" adjectives in that it has to be linearly adjacent to the pronoun it modifies. When it is separated from the pronoun it modifies, by an intervening clitic for instance, it loses its characteristic intensifying meaning, and can only mean 'alone' (I come back to these distinguishable readings in the next section)⁴:

(14) a. Ona sama je živela u Titovoj kući.
She intens is lived in Tito's house
'She herself lived in Tito's house.'

b. Ona je sama živela u Titovoj kući.She is alone lived in Tito's house'She lived in Tito's house alone.'Not: She herself lived in Tito's house.

Only (14a) has the intensifying meaning (as shown by the English translation): it is she herself that lived in Tito's house (I return to the formalization of this meaning in the next section). (14b),

³ Cases like *Mi bogati* 'We rich' discussed in Progovac (1998), fall out of the scope of this investigation, since, in my opinion, they do not tell us anything conclusive about the problem given that they are limited to 1^{st} and 2^{nd} person plurals (**Oni bogati* 'They rich', or **Ja bogati* 'I rich', are ungrammatical). The asymmetry discussed here, on the other hand, holds throughout the whole paradigm regardless of number, person and case features of the noun/pronoun involved.

⁴ In the remainder of the paper I will gloss *sam* as "intens" when it has the intensifying reading.

on the other hand, lacks this meaning; *sama* here means 'alone' (i.e., she lived in Tito's house alone). These two readings are truth conditionally distinct: in contrast to (14b), (14a) does not entail that she lived alone in Tito's house.

All other adjective-like elements (elements that morphologically behave like adjectives, including both demonstratives and possessives) can easily be separated from the modified noun with a clitic, without any essential change in their meaning.⁵

(15) a. Tu devojku je video.	Tu je devojku video.
That girl is saw	That is girl saw
'He saw that girl.'	
b. Njegovu devojku je video.	Njegovu je devojku video.
His girl is saw	His is girl saw
'He saw his girlfriend.'	
c. Lepu devojku je video.	Lepu je devojku video.
Pretty girl is saw	Pretty is girl saw
'He saw a pretty girl.'	

In this section I have summarized the issues that in my opinion challenge any account of the SC noun/pronoun asymmetries that purely relies on postulating a null D projection in this language. In the next section I offer my analysis.

3 The NP-analysis

I argue in this section that the SC noun/pronoun asymmetry can be deduced from other traits of SC grammar and that it does not necessitate positing a null DP. In a nutshell, I contend that this phenomenon follows straightforwardly from independently motivated properties of SC, key among which being (i) clitic movement: SC pronouns come in two types, strong/full and deficient/clitic, each of which is specified with a set of certain characteristics – most importantly, clitics move and, due to their phonological nature, cannot be associated with focus, and (ii) the

 $^{^{5}}$ There are certain changes in interpretation with respect to focus and topic, but this is clearly not what is observed in (14).

syntax and semantics of intensifiers: as already noted, the asymmetry of this sort occurs in a full paradigm only with one adjective, a typical intensifier.

3.1 The Structure of SC NP

I assume that (16) is the right structure of SC NP. On this traditional view, all prenominal elements are simply adjoined to the NP^6 :

(16) [NP Demonstr. [NP Poss. [NP Adj. [NP N]]]]. NP ovaj NP njegov NP pametni NP | N' | N prijatelj Ovaj njegov pametni prijatelj This his smart friend

It is important to note, in this respect, that both demonstratives and possessives are morphologically adjectival in SC, in that they agree with the noun they modify in case, number and gender in the same way adjectives do. This is illustrated in (17) with respect to a partial case paradigm (see Bošković 2005 and Zlatić 1997 for details):

(17) a. on<u>im</u> Milanov<u>im</u> zelen<u>im</u> knjigama
These_{FEM.PL.INSTR} Milan's_{FEM.PL.INSTR} green_{FEM.PL.INSTR} books_{FEM.PL.INSTR}
b. on<u>ih</u> Milanov<u>ih</u> zelen<u>ih</u> knjiga
These_{FEM.PL.GEN} Milan's_{FEM.PL.GEN} green_{FEM.PL.GEN} books_{FEM.PL.GEN}

⁶ Alternatively, they can also be analyzed as multiple NP specifiers.

Moreover, SC possessives and demonstratives syntactically behave like adjectives in every respect, which is completely consistent with the proposed analysis⁷⁸. For instance they can all be extracted out of the NP they modify:

(18) a. Onu je pročitao [t knjigu].

That is read book 'He read that book.'

b. Njegovu je pročitao [t knjigu].

His is read book

'He read his book.'

c. Zelenu je pročitao [t knjigu].Greeen is read book'He read the green book.'

Thus, as observed by a variety of authors (e.g., Bošković 2005, among others), SC allows Left Branch Extraction (LBE). The LBE facts illustrated in (18) show that in addition to adjectives and possessives, demonstratives also have phrasal status and cannot be analyzed as Ds (see also Zlatić this volume).

I essentially follow here the account of Bošković (2005), who suggests that adjectives in DP languages take NPs as their complements (as in Abney 1987), while adjectives in DP-less languages are either specifiers of NPs, or adjoined to them:

(19) [_{DP} D [_{AP} Adj [_{NP} N]]]	(DP languages)
(20) [_{NP} AP N]	(NP languages)

The underlying assumption is that DPs and NPs, but not APs, can function as arguments. In English-type languages this assumption has no relevant consequences, since DPs always

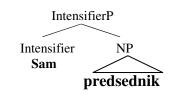
⁷ See Bošković (2005, 2010) and Zlatić (1997) for a number of arguments to this effect, which are based on the appearance of SC possessives and demonstratives in adjectival positions, stacking up, impossibility of modification, specificity effects, etc.

⁸ See also Fukui (1988) for relevant discussion of Japanese.

dominate APs. However, this is not the case in SC-type languages, where, due to the lack of DP, APs would end up functioning as arguments if they dominated NPs. Consequently, in languages like SC APs do not dominate NPs. Given this, LBE is not possible in (19) (i.e., languages that project DP) because it would involve extraction of a non-constituent. That is, the AP in (19) is not a constituent to the exclusion of the NP. The non-constituency problem does not arise in (20) (DP-less languages, like SC) where the NP dominates the AP.⁹

I also propose that, given its unique semantic and syntactic behavior, the intensifying adjective which triggers the observed asymmetry projects a phrase of its own above the NP, and is not adjoined to it as adjectives, possessives and demonstratives are.

(21) [Intensifier Intensifier [NP Demonstr. [NP Poss. [NP N]]]].



Sam predsednik Intensifier president

This structure predicts, correctly, that the intensifying *sam*, which heads the IntensifierP in (21) cannot be extracted in the same manner as adjectives, possessives and demonstratives are:

(22) a. Video sam samog Tita.

Saw am intens Tito

'I saw Tito himself.'

b. Samog sam video Tita.

Alone am saw Toto

'I saw Tito alone.'

Only (22a) has the intensifying meaning; sam in (22b) can only mean 'alone'.

⁹ This is, for instance, supported by the fact that the only two Slavic languages that do not allow LBE, namely Bulgarian and Macedonian, are the only two Slavic languages that have definite articles (see Bošković 2005, 2008 for details).

As for the noun/pronoun asymmetry, I argue that it arises as a consequence of clitic movement of pronouns. In particular I assume that deficient/clitic forms of pronouns are syntactic heads, whereas strong pronouns project NPs. Cross-linguistically clitics always occur in derived positions, i.e. clitics must undergo movements that other pronouns and full NPs/DPs are exempt from, and the structural deficiency of clitics is often assumed to drive this movement (see Bošković 2001, Cardinaletti and Starke 1999, Chomsky 1995, Franks 1998 for different versions). If morphology corresponds to syntactic structure, clitics are then obviously syntactically less complex than pronouns, e.g., (*ga* vs. *njega*) in SC, (*la* vs. *ella*) in Spanish, etc. The position that I take in this paper is that pronominal clitics, unlike SC NPs, have no internal syntactic structure: they are bare heads, syntactic atoms (e.g., Abels 2003a/b).

The idea is that the facts in (3) can be derived simply via clitic movement of the pronoun; the clitic moves, and adjoins to the head of the intensifying adjective, forming a complex head. Importantly the assumption about the complex head formation is what principally distinguishes the intensifying adjective *sam* from other adjective-like elements in SC. It follows from the structure in (21) that the element modified by the intensifying *sam* must be adjacent to it. It also follows that demonstratives, possessives, and adjectives, which are on the present account adjoined to the noun phrase they modify, must be preceded by the intensifying *sam*.

The immediate and very obvious objection to this proposal is that clitics never appear with the intensifying adjective even though clitic movement is taken to essentially underlie the asymmetry. The intensifying adjective *sam* can only modify strong/full pronouns.

(23) a. Video	sam	je	samu.	b. Vide	o sam	nju	samu.
I-saw	am	her _{CLITIC}	alone	I-sav	v am	her _{STRONG}	intens
'I saw he	r alo	ne.'		ʻI saw	her alo	ne.'	
*'I saw he	r her	self.'		ʻI saw	her her	self.'	

As already mentioned, in addition to its intensifying meaning *sam* can also mean 'alone'. However, the intensifying meaning is present only with a strong/full pronoun (e.g., (23b)) and not with a clitic pronoun (e.g., (23a)). This is not expected if the linear order of pronouns in the constructions in (3) is taken to be a consequence of clitic movement.

There is no real problem with this assumption, however, if one adopts a right semantics for the intensifier *sam*. I assume Eckardt's (2002) analysis which among other things suggests that intensifiers of this sort always have to be in focus. On this assumption the intensifier adjective head is always in focus and as such is obligatorily marked with prosodic prominence at PF, which directly conflicts with the phonological nature of the pronominal clitic with which it forms the complex head. That is, clitics by definition cannot bear phrase accent and as such cannot be part of focus which generally requires some higher level of prosodic prominence. I propose that in order to avoid the clash, in the postsyntactic component the clitic is replaced with the corresponding strong form, which can bear the phrasal accent required by focus. The claim is that the strong pronoun modified by the intensifier *sam* is underlyingly a clitic, which is just pronounced as strong. In the next two subsections I justify these assumptions. I first discuss the interpretative properties of *sam* and then argue that the strong pronoun in (3) is in fact a "camouflaged" clitic.

3.2 The Intensifier Sam

At least since Longobardi (1994), referring to the adjective's position and interpretation has been a well-known and widely assumed criterion for establishing an argument for movement. Longobardi observes that in Italian the two surface order possibilities are preserved when the proper name is introduced by the determiner (\checkmark Det A N and \checkmark Det N A), but it appears that the lack of article forces an N-initial order (*A N and \checkmark N A). The assumption is that the empty D has to be filled (in overt syntax, in Italian), which forces the proper name to move from N to D over the adjective. And as already mentioned, an important argument that the actual movement is involved, rather than something else, comes from the interpretation of the adjective. That is, A in \checkmark N A order is (or can be, according to Longobardi) interpreted in the same way the A in \checkmark Det A N order is (as in (4a) and (4c), repeated below).

(4)	a.	La sola Maria si è presentata.	d. *La sola lei si è presentata		
		The only Maria showed up	The only she showed up		
	'Only Mary showed up.'		e. Lei sola si è presentata.		

b. *Sola Maria si è presentata.

'Only she showed up.'

c. Maria sola si è presentata.f. *Sola lei si è presentata.Maria only(fem) showed up

Longobardi illustrates this with another example, which involves possessives (Longobardi 1994: 623-624). Briefly, postnominal possessives in constructions like *Il Gianni miol* 'my Gianni', which include articles, tend to be strongly contrastive: *mio* here is interpreted with contrastive reference to the existence of another salient Gianni in the domain of discourse who is not 'mine'. This interpretation, however, is not required for the prenominal *mio* in *Il mio Gianni*, which can be understood as a purely affective expression. The fact that the expression *Gianni mio* (without the article) can also have this affective interpretation, which *Il Gianni mio* lacks, suggests that *Gianni* moves over *mio* to D position when this position is not filled.

Now, turning to SC we see that it differs very much from Romance in this respect. All adjectives precede the noun they modify, and when they follow it they most naturally have predicative interpretation. Thus, a strictly non-predicative, attributive adjective usually cannot follow a noun or a pronoun. The noun and the pronoun in (24)-(25) behave identically with respect to *pravil* 'real', in that they can only follow it:¹⁰

(24) a. Konačno vidimo pravog Milana. (25) a. Konačno vidimo pravog njega.
Finally we see real Milan.
'Finally we see the real Milan.'
b. *Konačno vidimo Milana pravog.
(25) a. Konačno vidimo pravog njega.
Finally we see real him.
'Finally we see the real him.'
b. *Konačno vidimo Milana pravog.

As for the adjectives that can be both attributive and predicative either order is allowed:

¹⁰ Note that these examples, in particular (25a), are problematic for Progovac's argument for the pronominal movement to D which is based on agreement facts. Recall that on this analysis pronouns acquire the "heavier" morphology via movement through the head of AgrP on their way to D, and that adjectives share the same morphology because they are located in (specifiers of) AgrP. The pronoun in (25a), however, necessarily follows the adjective, but it still bears the "heavier" agreement morphology (i.e., nje-ga), just as the adjective *pravo-ga*, and in contrast to the noun *Milan-a* in (24a), which also necessarily follows the adjective. Thus, even though the pronoun clearly does not move over the adjective to a higher position, both the adjective and the pronoun bear the same "heavy" morphology.

- (26) a. Konačno vidimo veselog njega/Milana.
 Finally we see happy him/Milan
 'Finally we see the happy him/ happy Milan.'
 b. Konačno vidimo njega/Milana veselog.
 - 'Finally we see him/Milan happy.'

In (26b) the adjective happy can follow the pronoun/proper name and the sentence has the meaning characteristic of predication – we finally saw him/Milan when he is happy (similar to English translation). In (26a), on the other hand, when *happy* modifies the pronoun, a restrictive (i.e., contrastive) meaning is forced. The pronoun here is probably treated as a common noun, where different instantiations of "him" are contrasted, e.g., we finally see how his happy modilooks like as opposed to his, say, nervous mood. Similar holds for (25a) as well.

Progovac's examples, repeated below, are in this respect of real importance because they provide the same type of evidence for movement as Longobardi's examples do. The adjective here has the same meaning in all examples regardless of the linear position of the modified element.

(3)	a. I samu Mariju to nervira.	c. I nju samu to nervira.
	And intens Mary that irritates	And her intens that irritates
	'That irritates Mary herself.'	'That irritates her herself.'
	b. ?*I Mariju samu to nervira.	d. ?*I samu nju to nervira.

To the best of my knowledge, this is the only case where the full paradigm holds in that <u>all</u> pronouns precede, while <u>all</u> nouns follow the adjective, and the adjective has the identical meaning. The fact that it agrees with the modified element in case, number and gender tells us that it is indeed morphologically an adjective, like demonstratives and possessives.

Also, as frequently emphasized in the previous section, sam has a few distinct readings:

(26) Intensifier:

Ona *sama* je živela u Titovoj kući. She intens_{3/SG/NOM} is lived in Tito's house. 'She herself lived in Tito's house.'

(27) 'Alone'

a. Ona je *sama* živela u Titovoj kući
She is alone_{3/SG/NOM} lived in Tito's house
'She lived in Tito's house alone.'

b. Ona je živela sama u Titovoj kući.

c. Ona je živela u Titovoj kući sama.

(28) 'Only'

Ona je *samo* živela u Titovoj kući She is only lived in Tito's house 'She only lived in Tito's house.'

In (26), *sam* has the intensifying meaning; it agrees with the noun/pronoun it modifies and it is necessarily adjacent to it. In these cases the observed noun/pronoun asymmetry occurs. *Sam* in (27) also agrees with the pronoun but it means 'alone'. Unlike *sam* in (26), it can appear in a variety of syntactic positions and I will assume that it is adverbial in nature. Finally, *sam* in (28) means 'only' and shows no agreement (i.e., *samo*). Thus, the intensifying *sam* in (26) is similar to *sam* ('alone') in (27) in that it agrees with the nominal it modifies. *Samo* ('only') in (28) and *sam* in (26), on the other hand, are similar in that they are both related to focus, as I show below.

This polysemy of the intensifier and particularly its morphological relation to focus sensitive operators is observed in German as well. German has two different version of the particle *selbst*: the intensifying *selbst* (\approx E *N*-self) and the focus particle *selbst* (\approx E *even*). Eckardt (2002) argues for a principled semantic relation between the two, and proposes a diachronic reanalysis of the intensifying selbst into the focus particle *selbst*. The two meanings of *selbst* are exemplified with the following constructions (Eckardt 2002: 372):

(29) a. Selbst JANE FONDA nascht manchmal Yogurette.

Even Jane Fonda eats sometimes Yogurette'Even Jane Fonda sometimes eats Yougurette.'b. Jane Fonda SELBST nascht manchmal Yogurette.Jane Fonda herself eats sometimes Yogurette

'Jane Fonda herself sometimes eats Yougurette.'

In (29a), two presuppositions related to the assertion are: (i) the proposition expressed is the least plausible, or most surprising proposition among the set of focus alternatives and (ii) all focus alternatives hold true as well. Intensifying *selbst* in (29b), on the other hand, commonly states that the respective sentence is true and that the proposition is the most surprising, or least probable one in a set of alternative propositions. The alternatives in question arise by replacing the referent of the individual/NP that is intuitively linked with *selbst* by alternative individuals. At the same time, sentences with intensifying *selbst* exhibit *centrality effects* on the alternatives to 'N-self'. In (29b), for instance, we understand that Jane Fonda is perceived as the central figure in the contextually given alternative set. These alternative individuals have to somehow 'form the entourage' of the referent of NP to induce the centrality effects. There is also no meaning 'alone' in (29b), since intensification overrides the 'alone' component.

Eckardt proposes that the core meaning contribution of *selbst* is the identity function ID on the domain of objects D_e

(30) ID: $D_e \longrightarrow D_e$ ID(*a*) = *a* for all $a \in D_e$

The claim is that adnominal *selbst* of the sort seen in (29b) denotes a partial function lifted from a function on D_e . This lifted partial function can take certain, but not all, generalized quantifiers as their arguments. The claim is that adnominal *selbst* denotes Lift1 of ID, where Lift1 is defined as follows (Eckardt 2002: 380):

(31) Let f be function on D_e. Then Lift1(f):= f: $D_{((e, t), t)} \rightarrow D_{((e, t), t)}$ is defined as follows: If Q \in $D_{((e, t), t)}$ is a principal ultrafilter, i.e., of the form Q = $\lambda P(P(a))$ for some $a \in D_e$, then f(Q):= $\lambda P(P(f(a)))$. Else, *f* is undefined.

I will follow Eckardt's analysis, and assume that the SC intensifier *sam* essentially has the semantics of the intensifying *selbst*. While the identity function in (24), which correlates the two meanings of *selbst* in German is perfectly plausible, one may wonder if it is legitimate to posit a similar kind of relationship between *sam*-intensifier and *sam*-alone in SC. Strictly speaking 'alone' cannot mean 'self'. It might be that the intensifier reading overrides the truth conditional component 'alone' and that the intensifying *sam* contributes the conventional implicature of surprise, and a very "empty" meaning of identity. At a very informal and intuitive level, on the other hand, the *centrality effects* exhibited by the intensifier (in both German and SC) seem to be quite compatible with some core semantic aspects of 'alone'. In (29b), for instance, Jane Fonda is understood as the central figure in a set of alternative individuals who 'form the entourage', and one may be tempted to say that she is in a way 'alone' with respect to the alternative set. However, I have to leave the problem of exploring and formalizing the potentially deep relation between the intensifier and 'alone' in SC aside since it is well beyond the scope of this paper.

With (30) and (31) the range of sortal restrictions that characterize adnominal *selbst* receives a natural explanation: adnominal *selbst* can only combine with proper names and definite NPs denoting single individuals or groups, since only definites and proper names denote principal ultrafilters. That is, as originally noticed by Edmondson and Plank (1978), adnominal *selbst* cannot combine with quantifiers (see Eckardt 2002: 379). This correctly extends to SC intensifying *sam*: no quantifiers can be modified by it, regardless of whether they appear as agreeing adjectival elements (32a-b), or via Genitive of Quantification (32c):

(32) a. *Sam svaki čovek gleda TV. 'Every man himself watches TV.' Intens every man watches TV
b. *Sam neki/jedan čovek gleda TV. 'Some man himself watches TV.' Intens some/one man watches TV
c. *Mnogo samih ljudi gleda TV. 'Many men themselves watch TV.' Many intens men watch TV At this point we can address the problem of the order of demonstratives and possessives with respect to *sam* raised for the DP approach in the last section. Consider (10) again:

(10) a. I sama ta činjenica dovoljno govori.
And intens that fact enough speaks
'That fact itself speaks enough.'
b. ?*I ta sama činjenica dovoljno govori.
And that intens fact enough speaks

Recall that on the DP approach *sam* is expected to linearly follow the demonstrative and not precede it. On the analysis proposed here, which follows Eckardt's view of intensifiers, the intensifier *sam* is in fact predicted to linearly precede the demonstrative. The standard treatment of demonstrative determiners like *that* is that they are of type <<e,t>,e> (see e.g., Kaplan 1989, King 2001, Roberts 2002, Wolter 2003, among others for discussion). That is, demonstrative noun phrases pick out an individual of type <e>. The individual is picked out at least partially as a function of its predicate complement phrase. Given the assumption that SC *sam* can only combine with proper names and definite NPs denoting single individuals or groups (i.e., type <e>), it is expected that this intensifier can combine only with a noun that has been previously turned into an individual. Since demonstratives turn nouns into individuals, the intensifier can be added to the structure only after the demonstrative and the noun have been combined together.

The situation with possessives is a bit more complicated, but still quite obvious. As illustrated in (9) repeated below possessives also obligatorily follow the intensifier:

(9) a. I sam njegov brat se složio sa tim.
And intens his brother refl. agrees with that 'His brother himself agreed with it.'
b.?*I njegov sam brat se složio sa tim.
And his intens brother refl agrees with that 'His brother himself agreed with it.'

Many analyses treat possessives as modificational. For instance:

(33) Partee & Borschev (1998) (Ri is a free variable)

 $[[Mary's]] = \lambda x.[Ri(Mary)(x)]$

That is, possessives do not turn sets into individuals as demonstratives do, but rather seem to combine with the noun via intersection (i.e., Predicate Modification). The most natural

23

assumption would be that in an article-less language like SC there is a contextually motivated, general type-shifting operation which turns $\langle e,t \rangle$ types to $\langle e \rangle$, and which applies after all Predicate Modification and Functional Application rules have applied (see Heim and Kratzer 1998)¹¹. We may assume this operation to be similar to Partee's (1987) *iota* for instance. The prediction then is that the intensifier *sam*, which necessarily combines with $\langle e \rangle$ type arguments, will combine with the NP only after this shifting rule has applied. This in turn means that the intensifier has to linearly precede not only possessives but "regular" adjectives as well. As (34)-(35) illustrate this is completely borne out:

(34) a. Sam pametni dečak	b. *Pametni sam dečak
Intens smart boy	Smart intens boy
'The smart boy himself.'	
(35) a. Sam bivši predsednik	b. *Bivši sam predsednik
Intens former president	Former intens president
'The former president himself.'	

Now, going back to the function in (30) it might not be immediately obvious what its semantic contribution is supposed to be. Here Eckardt suggests that intensifiers of this sort always have to be in focus: while *selbst* (or SC *sam*) does not contribute anything to the meaning of the sentence, it will become meaningful exactly if it is in focus – focused *selbst* will, like any other focused item, evoke focus alternatives that will enter in the meaning of the respective focus construction. The account predicts that whatever the exact set of focus alternatives to ID will be, it will always induce a set of alternative individual objects in D_e that is structured into a center, held by the referent *a* of the respective NP, and a periphery, generated by applying all alternative functions to *a*. That is, we logically expect the abovementioned *centrality effects*. Thus, it is no surprise that the intensifying *selbst* is always stressed in German, and that it occurs unstressed only under circumstances that will generally suppress all previous accents. Assuming the same semantics for

¹¹ As in many other Slavic languages, (in)definiteness of a noun phrase in SC is usually determined contextually. For instance, the bare singular subject noun in (i) is ambiguous between definite and indefinite reading, depending on the context.

Pazi! Mačka je ušla u kuhinju.
 Watch out Cat is entered in kitchen
 'Watch out! The/a cat entered the kitchen.'

SC *sam* it is not surprising that this element cannot modify clitic pronouns (see (23)), i.e., due to their prosodic nature clitics cannot be in focus, since focus in SC always requires prosodic prominence. In fact, clitics cannot be arguments of focus sensitive operators in general. Take for instance SC *samo* 'only', which is the non-agreeing, adverbial version of *sam*, already presented in (28). It is standardly accepted in semantics literature that this element is focus sensitive.¹² Consider the following examples:

(36)	a. Samo sam <u>ga</u> video	
	Only am him _{CLITIC} sa	IW
	'I only saw him.'	(I only saw him, but I didn't talk to him)
	*'I saw only him.'	(I only saw <i>him</i> and no one else)
	b. Samo sam <u>njega</u> vide	0.
	Only am him _{STRONG} saw	
	'I only saw him.'	(I only <i>saw</i> him, but I didn't <i>talk</i> to him)
	'I saw only him.'	(I only saw <i>him</i> and nobody else)

In contrast to the strong/full pronoun in (36b), the pronominal enclitic *ga* in (36a) cannot be modified by *only*. That is, the clitic pronoun cannot be interpreted as part of focus associated with 'only'.

The topic of SC clitics has been widely researched (see Browne 1974, Bošković 2001, Godjevac 2000, Franks 1998, Franks and Progovac 1994, Zec and Inkelas 1991, among others) and I do not intend to explore their nature in detail here. The property that is relevant for our purposes is fairly clear: SC pronominal (en)clitics are phonologically dependent elements and they cannot be associated with any kind of prosodic prominence. Since focus in SC is always expressed through some means of prosodic prominence (e.g., Godjevac, 2000) it follows that clitics cannot be associated with focus. And to the best of my knowledge the contrast in (36) holds for other languages that distinguish among different classes of pronouns (e.g., Italian, Spanish, etc).

 $^{^{12}}$ See Beaver and Clark (2003) for an overview of the relevant literature and an interesting discussion on how grammaticized the relationship between *only* and its associated focus is.

Before moving on to the next subsection I want to point out an interesting morphological fact about the SC intensifier *sam* which neatly supports Eckard's approach. As the reader might have noticed the intensifier *sam* seems to "optionally" appear with the particle *i*, which in SC primarily has the meaning of the conjunct 'and'. However, this particle's distribution is not entirely unrestricted and seems to correspond to different interpretations of the intensifier. In addition to the distinction between the meaning of adnominal *selbst* and adverbial *selbst*, Eckardt discusses a distinction between so-called "additive" and "exclusive" uses of *selbst*. Roughly, "additive" uses of *selbst* suggest that in addition to N-*selbst*, other persons acted, too, whereas "exclusive" uses, in contrast, indicate that N *instead of someone else* was in involved in a certain action. The following examples from Eckardt (2002: 392) should be sufficient to illustrate the distinction:

(37) (Unfortunately it wasn't only a simple soldier but...) Dar König SELBST wurde gefangengenommen. The king himself was captured
'The king himself was captured.' (exclusive)
(38) Aphrodite SELBST ist nicht schöner als Maria. Aphrodite herself is not more-beautiful than Maria
'Aphrodite herself isn't more beautiful than Maria.' (additive)

We tend to understand (37) as stating that only the king was captured, even though it is logically possible that other persons were captured too. That is, the gravity of the situation is such that none other than the most important figure for our national identity (i.e., the king) has been captured. In (38), we understand by world knowledge that if Aphrodite, being the goddess of beauty, is less beautiful than Maria, then all other women will be less beautiful too. That is, even the mighty Aphrodite is "added" to the unfortunate group of women that are less beautiful than Maria. Now, unsurprisingly when the conjunction particle i "and" appears with the intensifier *sam* the "additive" reading is strongly preferred:

(39) a. Ma nisu zarobili bilo kakvog vojnika!But haven't captured any how soldier'They haven't captured just a simple soldier!'

✓ Sam Kralj je zarobljen! ?? I sam Kralj je zarobljen!
Intens king is captured
'The king himself has been captured!' (exclusive)

b. Rat je bio strašan. Zemlja je izgorela a mnogi vojnici i oficiri su poginuli...
 War is was awful Country is burned and many soldiers and officers are died
 The war was awful. The country was burned and many soldiers and officers died...

✓I sam Kralj je zarobljen. ?? Sam Kralj je zarobljen.
And intens king is captured
'The king himself has been captured.' (additive)

In (39a), similarly to Eckard's (37), a so-called "corrective exclusive" context is set up. The speaker here assumes that the hearer, incorrectly, thinks that another person participated in action X and corrects this presumptive error by uttering the sentence in (39a). Combining the intensifier with the particle i in this context is not very felicitous, since this context implies that the king was captured instead of someone else. In (39b), on the other hand, it is suggested that the action in question is repeatable and that the capturing of the king happened 'in addition', and the more plausible way of expressing it is by adding i to the intensifier.

It seems therefore that the meaning subtleties repotted for the German intensifier *selbst* are in fact morphologically encoded in SC, which in turn provides further evidence for the analysis outlined in the previous section. Moreover, the correlation between the conjunct i and the intensifier *sam*, which is claimed to always be in focus, conforms neatly to other works (e.g., Bošković 2008) that treat (at least certain meaning aspects of) the particle i in SC as deeply related to focus.¹³

Note also in this context that the Greek conjunction ke 'and' (Giannakidou 2007) and SC i display similar properties. Giannakidou observes that unlike its English counterpart 'and', which behaves strictly as a coordinator, ke also behaves like a focus additive particle itself. It is a monadic operator particle which usually attaches to e.g. NPs, DPs and VPs. Such usage is prohibited with 'and' in English (Giannakidou 2007, 46):

¹³ For a comprehensive analysis of morpho-semantic properties of SC conjunctions in general see Arsenijević (2009)

(40)	a. Irthe ke o Janis.	(Lit. *And John came.)
	came and the Joh	
	'John {also/even}	
	b. Fere	(Lit. *Bring and fruit.)
	bring, imperative	
	'Bring fruit too.'	

The SC conjunction *i* behaves exactly like *ke* in this respect:

(41) a. I Jovan je došao (Lit. *And John came.) And John is came
'John also came.'
b. Donesi i voće. (Lit. *Bring and fruit.) Bring and fruit
'Bring fruit too.'

3.3 Focus and two types of pronouns in SC

In this section I will try to show briefly that the pronoun that appears with the intensifier is a clitic, pronounced as strong. I will skip many generalizations and interesting details, for which I refer the reader to Despić (2008, to appear b). I will concentrate here on just a few most important facts.

There are many systematic differences between classes of pronouns as discussed in detail in Cardinaletti and Starke (1999). For instance, if a language includes two (or more) classes of pronouns, and if there is a transparent morphological distinction between them, pronouns that are morpho-phonologically reduced (e.g., *deficient*, Cardinaletti and Starke 1999) among other things disallow coordination and reference only to human entities. Or in other words, only *strong* pronouns may be coordinated, and at the same time they necessarily refer to human entities. SC pronouns are no exception to this: deficient (clitic) pronouns are obviously reduced versions of strong pronouns, they cannot be coordinated, and in contrast to full, strong pronouns they may have both human and non-human referents, as in the following example:

- (42) a. Čuo sam je. <+human> <-human>Heard am her_{DEFIC} \checkmark \checkmark 'I heard her.'
 - b. Čuo sam nju. ✓ *?
 Heard am her_{STRONG}

(42a) can equally well mean that I heard a female singer on the radio, or that I heard a song (which also has feminine gender features), whereas the referent of the strong pronoun in (42b) is most naturally interpreted as a human individual.

One other well-known generalization, not discussed by Cardinaletti and Starke (1999), which distinguishes clitics from strong pronouns is related to the so-called "Montalbetti effect". Montalbetti (1984) notices that overt subjects in Spanish (and Italian), as opposed to *pro*, cannot function as bound variables (e.g., (43)). However, Montalbetti also notes that clitics pattern with *pro* in that they easily function as variables (e.g., (44a)), whereas strong pronouns are unacceptable in similar contexts (e.g., (44b) is an instance of clitic doubling where the most embedded pronoun is strong):

- (43)a. Muchos estudiantes creen que ellos son inteligentes. (Montalbetti, 1984: 82) Many students believe that they are intelligent b. Muchos estudiantes creen que *pro* son inteligentes. students believe that *pro* are intelligent Many 'Many students_i believe that they_i are intelligent.' (44)a. Muchos estudiantes_i creen que Juan los vio [e]_i. (Montalbetti, 1984: 139) Many students believe that John them_{CLITIC} saw
 - b. *Muchos estudiantes_i creen que Juan *los* vio [a ellos]_i. Many students believe that John them_{CLITIC} saw them_{STRONG} 'Many students_i believe that John saw them_i.'

This holds for SC too:

- (45) a. Svaki predsednik_i misli da ga_i/??njega_i svi vole.
 Every president thinks that him_{CLITIC}/him_{STRONG} everyone love
 'Every president_i thinks that everybody loves him_i.'
 - b. Svaki predsednik_i misli da je *pro_i*/??on_i najpametniji.
 Every president thinks that is pro/he smartest
 'Every president_i thinks he_i is the smartest'

However, it is a fairly well known fact that the degraded sentences above improve when the strong pronoun is "emphatic", or, in our terms, a part of focus. In fact, when the pronoun in question is directly modified by a focus operator, it necessarily takes the strong form but it easily functions as variable. I offer here examples from SC and Italian, in which clitic pronominals (and *pro*) are completely unavailable under the indicated readings:

- (46) a. Svaki predsednik_i misli da samo njega_i svi vole.
 Every president thinks that only him_{STRONG} everyone love
 'Every president_i thinks that everybody loves only him_i.'
 - b. Svaki predsednik_i misli da je samo on_i najpametniji.
 Every president thinks that is only he smartest
 'Every president_i thinks that only he_i is the smartest'
- (47) Ogni ragazzo_i pensa che solo lui_i é intelligente. (Andrea Calabrese, p.c.)
 Every boy thinks that only he is smart.'
 'Every boy_i thinks that only he_i is smart.'

I argue that in these examples the deficient pronoun/clitic takes the phonological form of the strong pronoun at PF in order to satisfy phonological requirements of focus. That is, I argue that the strong pronoun here is not the "genuine" strong pronoun, which is for independent reasons unavailable for the bound variable interpretation (see Despić 2008), but rather a "camouflaged" clitic. There is no reason, on this approach, to assume that interpretative properties of strong pronouns change so dramatically when they are part of focus that they start behaving semantically like deficient pronouns, when we independently know that focus is cross-linguistically associated with prosody which is incompatible with the nature of clitics.

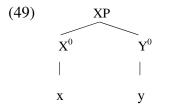
Now, consider in this respect the behavior of the strong pronoun modified by the intensifier in the following example:

- (48) a. Svaka kupola_i se sastoji od 3 dela koji je_i podržavaju.
 Every dome reflexive consists from 3 parts which her_{CLITIC} support
 'Every dome_i consists of 3 parts that support it_i.'
 - b. Svaka kupola_i se sastoji od 3 dela koji podržavaju nju_i samu.
 Every dome reflexive consists from 3 parts which support her_{STRONG} intens
 'Every dome_i consists of 3 parts that support it_i itself.'

c.*Svaka kupola_i se sastoji od 3 dela koji podržavaju nju_i.

(48c) is ungrammatical as expected since the strong pronoun is intended as a variable bound by an inanimate, non-human subject. (48a) is fine since the pronoun in question is a clitic, and can therefore be a variable and have non-human antecedents. The strong pronoun modified by the intensifier in (48b), however, behaves like a deficient/clitic pronoun – it perfectly well functions as a variable bound by a non-human entity. These data reinforce the proposal from the previous section and strongly support the view that strong pronouns modified by the intensifier are underlyingly clitics and that clitic movement creates the noun/pronoun asymmetry in SC.

The analysis developed here seems to give support to certain types of approaches to clitic movement, such as the one proposed in Moro (2000). Moro assumes that clitic movement in Romance (as well as any other movement) is triggered by the necessity of linearizing items, and avoiding symmetry. Clitics are obligatorily displaced to neutralize the point of symmetry they constitute with the head they are sister to, for the sake of linearization at PF. For example, at some point in a derivation a clitic object will create a configuration like (49) with its verb:



When this symmetric configuration is formed, the clitic is forced to move to neutralize it. That is, on the analysis developed here, clitics move not necessarily to satisfy features of the target, but

rather because they are "uncomfortable" with the position they are generated in. They are pronounced as strong at PF simply because they adjoin to the head of the intensifier that is always associated with focus prosodic prominence, i.e., the strong form is then just a phonological/morphological reflex. Strong pronouns, on the other hand, avoid these symmetric configurations, and do not move, on the assumption that they have more internal structure than clitics and form an independent phrase, just as common nouns and proper names do.

Finally this analysis can explain a puzzling property of SC reflexive pronouns. As noted by Progovac (1998; 167, fn.2), SC reflexive pronouns pattern with nouns, rather than with pronouns in that they follow the intensifying adjective:¹⁴

(50) a. On ne podnosi ni samog sebe.He not stands neither intens self-accb.??On ne podnosi ni sebe samog.

This property of SC reflexive pronouns falls out straightforwardly under the present analysis. Unlike pronouns, the SC reflexive *sebe* does not have a deficient/clitic form and therefore cannot undergo the head movement, which, by assumption, derives the asymmetry. For this reason, reflexives do not move, and like nouns and proper names linearly follow the intensifying adjective *sam*.¹⁵

4 Concluding Remarks

The general question that has fundamentally guided the discussion in the preceding pages is to which extent we are allowed to presume the existence of a productive null projection in a language in which there is no morphological evidence for it (at least of the sort that motivated the existence of such a projection in other languages). In this paper I have reviewed probably the strongest argument for the existence of null D in SC, a language without articles, proposed by Progovac (1998). I have developed an alternative, "no-DP" analysis of this phenomenon and I

¹⁴ I have slightly changed the orthography in this example to bring it in line with the orthographic conventions used in this paper.

¹⁵ In Despić (2008, to appear b) I give a number of arguments which clearly indicate that the reflexive clitic *se* cannot be treated as a deficient/clitic form of the reflexive pronoun *sebe*.

have demonstrated that the DP analysis has no significant advantages over it. In fact, I have presented a number of specific syntactic, morphological and semantic arguments that seem to point towards the superiority of the no-DP analysis. The consequence is a model of NP in which the noun is the unique head and demonstratives, possessors and adjectives are all modifiers of that head. To derive the noun/pronoun asymmetry I have proposed that in contrast to other modifiers the intensifying adjective sam projects a phrase on its own, and that it is clitic movement of pronouns to this phrase that creates the observed asymmetry. Assigning a separate projection above NP to the intensifier enables us to explain in a non-circular way why the noun/pronoun asymmetry arises only with this modifier, and not with others, which, on this account, are adjoined to NP. Given that clitic movement is taken to be the operation that drives the asymmetry, we directly account for why only pronouns end up preceding the intensifier, whereas reflexives and nouns, which do not have deficient, clitic forms, obligatorily follow it. The fact that the raised pronoun needs to be linearly adjacent to the intensifier also follows if the result of clitic movement is the creation of a complex head. Since the intensifier in question is always in focus the clitic pronoun spells out as strong in PF to satisfy the prosodic requirements of focus. In other words, although it takes the strong form, the pronoun in these cases is underlyingly deficient and I have presented evidence which show that it exhibits interpretative properties generally attributed to clitic/deficient pronouns.

Unfortunately, within the limited scope of this paper I haven't been able to address all of the potentially relevant issues. The intention has simply been to demonstrate that, despite the current popularity of the Universal DP Hypothesis, an analysis which does not assume the existence of DP in SC has many positive attributes and can quite successfully account for the given facts.

References:

Abels, Klaus. 2003a. *[P clitic] – Why? In Proceedings of FDSL 4.

- Abels, Klaus. 2003b. Successive cyclicity, anti-locality, and adposition stranding. Doctoral dissertation, University of Connecticut, Storrs.
- Abney, Steven Paul. 1987. The English Noun Phrase in Its Sentential Aspect. Doctoral Dissertation, Massachusetts Institute of Technology. Distributed by MIT Working Papers in Linguistics, Cambridge, Mass.
- Aljović Nadira. 2002. Long adjectival inflection and specificity in Serbo-Croatian. *Recherches Linguistiques de Vincennes* 31: 27-42.
- Arsenijević, Boban. 2009. Conjunction marking in Serbo-Croatian. Ms., University of Amsterdam.

Baker, Mark. 2003. Lexical Categories. Cambridge: Cambridge University Press.

- Bašić, Monika. 2004. Nominal subextractions and the structure of NPs in Serbian and English. MA Thesis: University of Tromsø.
- Beaver, David and Clark Brady. 2003. 'Always' and 'only': why not all focus-sensitive operators are alike. *Natural Language Semantics* 11, 323-362.
- Bošković, Željko. 2001. On the Nature of the Syntax-phonology Interface: Cliticization and Related Phenomena. London: Elsevier.
- Bošković, Željko. 2005. On the locality of left branch extraction and the structure of NP. *Studia Linguistica* 59, 1-45.
- Bošković, Željko. 2008. On two types of negative constituents and negative concord. In *Proceedings of FDSL* 6.5, 9-35. Frankfurt am Main: Peter Lang.
- Bošković, Željko. 2009. Unifying first and last conjunct agreement. *Natural Language & Linguistic Theory*, 27:455–496.
- Bošković, Željko. 2010. On NPs and clauses. Ms., University of Connecticut.
- Brame, Michael. 1982. The head-selector theory of lexical specifications and the nonexistence of coarse categories. *Linguistic Analysis* 10:321–325.
- Browne, Wayles. 1974. On the problem of enclitic placement in Serbo-Croatian. *Slavic Transformational Syntax*, Vol. No. 10. Ann Arbor: Michigan Slavic Materials.
- Browne, Wayles. 1993. Serbo-Croat. In Bernard Comrie and Greville g. Corbett eds., *The Slavonic Languages*. Routlege: London and New York.
- Bruening, Benjamin. 2009. Selectional Asymmetries between CP and DP Suggest that the DP Hypothesis is Wrong. In L. MacKenzie (ed.), U. Penn Working Papers in Linguistics 15.1: Proceedings of the 32nd Annual Penn Linguistics Colloquium, 26–35.
- Cardinaletti, Anna. and Michal Starke. 1999. The typology of structural deficiency. A case study of the three classes of pronouns. In *Clitics in the Languages of Europe* Hank van Riemsdijk, 145-233. Berlin: Mouton de Gruyter.
- Chierchia, Guglielmo. 1998. Reference to kinds across languages. Natural Language Semantics 6: 339-405.
- Chomsky, Noam. 1995. Bare phrase structure. In *Government and binding theory and the minimalist program*, ed. Gert Webelhuth, 383-439. Oxford: Basil Blackwell.
- Cinque, Guglielmo. 1991. Functional projections and N-movement within the DP. Paper presented at the 15th GLOW Colloquium, Lisbon.
- Cinque, Guglielmo. 1994. On the evidence of partial N-movement in the Romance DP. In *Paths towards Universal Grammar*, ed., Cinque Guglielmo, 85-110. Georgetown: Georgetown University Press.
- Cinque, Guglielmo. 2010. The Syntax of Adjectives: A Comparative Study. Cambridge, MA: MIT Press.
- Despić, Miloje. 2008. On binding, pronouns, and the structure of NP in Serbo-Croatian. Ms., University of Connecticut.
- Despić, Miloje. 2009. On the structure of the Serbo-Croatian noun phrase evidence from binding. In *Proceedings of the Formal Approaches to Slavic Linguistics 17.*

- Despić, Miloje. 2010. On the Morpho-Syntax of Serbo-Croatian Nouns and Adjectives. Ms. University of Connecticut.
- Despić, Miloje. to appear a. Markedness and marked features in Serbian. In Proceedings of the Formal Approaches to Slavic Linguistics 18 (FASL 18), Cornell.
- Despić, Miloje. to appear b. On two types of pronouns and the so-called 'movement to D' in Serbo-Croatian. In Suzi Lima, Kevin Mullin, and Brian Smith (eds.) *Proceedings of the Northeast Linguistic Society 39 (NELS 39), Cornell.*
- Eckardt, Regine. 2002 Reanalyzing Selbst. Natural Language Semantics 9: 371-412.
- Edmondson, Jerold A. and Franks Plank. 1978. Great expectations: an intensive self analysis. *Linguistics and Philosophy* 2, 373-413.
- Fukui, Naoki. 1986. A Theory of Category Projection and its Application. Doctoral Dissertation, Massachusetts Institute of Technology.
- Fukui, Naoki. 1988. Deriving the differences between English and Japanese. *English Linguistics* 5: 249-270.
- Fukui, Naoki and Margaret Speas. 1986. Specifiers and projection. In Papers in Theoretical Linguistics, ed.Naoki Fukui, Tova R. Rapoport, and E. Sagey, volume 8 of MIT Working Papers in Linguistics, 128–172.Cambridge, Mass.: MITWPL.
- Franks, Steven. 1998. Clitics in Slavic. Paper presented at *Comparative Slavic Morphosyntax Workshop*, Indiana University, Bloomington.
- Franks, Steven and Ljiljana Progovac. 1994. On the placement of Serbo-Croatian clitics. In *Proceeding of* the 9th Biennial Conference on Balkan and South Slavic Linguistics, Literature, and Folklore, Indiana, Bloomington.
- Giannakidou, Anastasia. 2007. The landscape of EVEN. *Natural Language and Linguistic Theory* 25: 39-8.
- Godjevac, Svetlana. 2000. Intonation, Word Order and Focus Projection in Serbo-Croatian. Doctoral dissertation, The Ohio State University.
- Heim, Irene and Kratzer, Angelika. 1998. Semantics in Generative Grammar. Blackwell Publishers.
- Hogg, Richard M. 1977. English Quantifier Systems. Amsterdam: North Holland.
- Jackendoff, Ray. 1972. Semantic Interpretation in Generative Grammar. Cambridge: MIT Press.
- Kaplan, David. 1989. Demonstratives. In *Themes from Kaplan*, ed. Joseph Almog, John Perry and Howard Wettstein, 481-563. Oxford: Oxford University Press.
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. (Linguistic Inquiry monograph 25.) Cambridge, MA: MIT Press.
- King, Jeffrey. 2001. Complex demonstratives: A quantificational account. Cambridge, Mass.: MIT Press.
- Larson, Richard, and Sungeun Cho. 1999. Temporal adjectives and the structure of possessive DPs. In *Proceedings of the 18th West Coast Conference on Formal Linguistics*, ed. by Sonya Bird, Andrew Carnie, Jason D. Haugen, and Peter Norquest, 299-311. Somerville, Mass.: Cascadilla Press.
- Leko, Nedžad. 1986. Syntax of Noun Headed Structures in Serbo-Croatian and Corresponding Phrasal Structures in English. PhD dissertation, Indiana University.
- Longobardi, Giuseppe. 1994. Reference and proper names: A theory of N-movement syntax and logical form. *Linguistic Inquiry* 25, 609-665.
- Montalbetti, Mario. 1984. After binding. Doctoral dissertation, MIT.
- Moro, Andrea. 2000. Dynamic Antisymmetry, MIT Press, Linguistic Inquiry Monograph 38.
- Partee, Barbara H. 1987. Noun phrase interpretation and type shifting principles. In *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers*, eds. J. Groenendijk, D. de Jongh, and M. Stokhof. GRASS 8, Foris, Dordrecht. 115-143.
- Partee, Barbara H., and Vladimir Borschev. 1998. Integrating lexical and formal semantics: Genitives, relational nouns, and type-shifting. In *Proceedings of the Second Tbilisi Symposium on Language, Logic, and Computation*, ed. by Robin Cooper and Thomas Gamkrelidze, 229-241. Tbilisi: Center on Language, Logic, Speech, Tbilisi State University.
- Payne, John. 1993. The headedness of noun phrases: Slaying the nominal hydra. In Heads in Grammatical

Theory, ed. G. G. Corbett, N. M. Fraser, and S. McGlashan, 114–139. Cambridge: Cambridge University Press.

- Postal, Paul. 1969. On so-called "pronouns" in English. In Reibel, David and Schane, Sanford (eds.) *Modern Studies in English.* Prentice-Hall Inc.
- Progovac, Ljiljana. 1998. Determiner phrase in a language without determiners. *Journal of Linguistics* 34, pp. 165–179.
- Roberts, Craige. 2002. *Demonstratives as Definites*. In *Information Sharing*, Kees van Deemter and Roger Kibble, eds. Stanford, CA: CSLI.
- Rutkowsky Pavel. and Ljiljana. Progovac. 2005. Classification projection in Polish and Serbian: The position and shape of classifying adjectives. Steven Franks, Frank Y. Gladney, and Mila Tasseva-Kurktchieva, eds. *Formal approaches to Slavic linguistics 13: The South Carolina meeting*. Ann Arbor, MI: Michigan Slavic Publications, 289-299.
- Schenker, Alexander M. 1993. Proto-Slavonic. In *The Slavonic Languages*, Bernard Comrie and Greville Corbett eds., Routlege: London and New York.
- Stevanović Mihailo. 1962. Gramatika Srpskoxrvatskog Jezika za Više Razrede Gimnazije. Cetinje: Obod.
- Szabolcsi, Anna.1983. The possessor that run away from home. The Linguistic Review 3: 89-102.
- Szabolcsi, Anna. 1987. Functional categories in the noun phrase. In Approaches to Hungarian, Volume 2: Theories and Analyses, ed. I. Kenesei, 167–189. Szeged: JATE.
- Wechsler, Steven. and Larisa Zlatić 2003. The Many Faces of Agreement. Stanford, CA: CSLI Publications.
- Wolter, Lynsey. 2003. Demonstratives, definiteness and determined reference. In *Proceedings of NELS* 34, Keir Moulton and Matthew Wolf eds. 603-617. GLSA, Amherst.
- Zec, Draga. and Sharon Inkelas 1991. The place of clitics in the prosodic hierarchy. In *Proceedings of the* 10th West Coast Conference on Formal Linguistics, Bates, D. ed., 505-519.
- Zlatić, Larisa. 1997. The Structure of the Serbian Noun Phrase. Doctoral Dissertation, University of Texas, Austin.
- Zlatic, Larisa, to appear. Slavic Noun Phrases are NPs not DPs. *Comparative Slavic Morphosyntax*, edited by George Fowler. Columbus: Slavica Publishers.
- Zlatic, Larisa, this volume.