

## **Markedness and Marked Features in Serbian\***

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The goal of this paper is to provide a unified account for a handful of phenomena in Serbian, and generally Slavic morphology related to plurality, gender and possessive adjectives. The phenomena in question display similarities that suggest a common source, and thus motivate a unified analysis. Some of these observations are well known, and have been widely discussed in the literature, whereas others are new, and to the best of my knowledge haven't been investigated or even noticed. In what follows, I will mainly discuss Serbian language/dialect avoiding the use of the 'hyphenated' language name "Serbo-Croatian", particularly because this paper among other things aims to deal with certain apparent differences between Croatian and Serbian. Also, some of the data considered here have been argued independently to give strong support to highly lexicalist theories of morphology (e.g., Wechler and Zlatić 2003). I argue in that respect that only the derivational approach maintained here can account for the observed phenomena in a consistent manner.

### **1. Marked Features in Serbian - Some Key Assumptions**

In this section I will briefly outline my analysis and key assumptions. The presentation here will be somewhat sketchy, but is offered at this point so that my conclusions will be clear as I flesh out the empirical motivation for these assumptions in the coming sections.

I adopt a theory of morphological markedness, which determines which features, or combinations of features are marked. It has been known since Trubetzkoy that feature systems of any kind tend to be more efficient if an unmarked or default value is contrasted with a marked value. I will be mainly concerned here with  $\phi$ -features, and since they are

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unequivocally important in different domains of linguistic theory markedness considerations related to them arise in multiple ways. However, as Haspelmath (2006) points out, there are various senses in which the term “Markedness” is used, and it is important to be clear about the way this notion is implemented. Thus, in determining which features in Serbian are marked or unmarked I will mainly (but not always) appeal to what Haspelmath labels “formal markedness”, or “markedness of overt coding”, with which many other usages of this term may coincide. That is, on this understanding of markedness a category X is marked as opposed to a category Y if X is overtly coded by an affix. I call this “markedness” *morphological*.<sup>1</sup> Table I summarizes the features I discuss and divides them in terms of “markedness”:

Table I:

Grammatical Features	Unmarked	Marked
<i>number</i> [NUM]	<i>singular</i> [SG]	<i>plural</i> [PL]
<i>case</i> [CASE]	<i>nominative</i> [NOM]	<i>non-nominative</i> [-NOM]
<i>gender</i> [GEN]	[GEN] <sub>DC</sub>	[GEN] <sub>SEM</sub>

Briefly, I argue that [PL], [-NOM] and [GEN] induce markedness accumulation when they appear together. I base this claim on two types of empirical evidence: (i) adjectival agreement - in all Slavic languages including Serbian [PL] [-NOM] adjectives are syncretic for gender, and (ii) Serbian/Slavic possessive adjectives cannot be formed out of plural nouns, but may be formed out of plural pronouns. I argue that the analysis developed here derives these facts in a principled manner. I show that in the case of adjectival agreement the excessively marked situations are resolved by some type of gender deletion, whereas this solution is not applicable in the case of plural possessive adjectives.

I assume the *Distributed Morphology* (DM) framework (e.g., Halle and Marantz 1993) in this paper. This theoretical model advances a piece-based view of word formation, in which the syntax/morphology interface is as transparent as possible. In this essentially syntactic theory

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<sup>1</sup> This, however, is not the only type of markedness that may affect grammatical operations, and I argue in the next section that markedness related to gender is of a different type.

of morphology, the syntactic component generates (via *Merge* and *Move*) an abstract representation which in turn serves as the input to two interpretative components: PF and LF. In the morphological component, which is a part of PF, a mapping procedure takes a syntactic structure as its input and incrementally alters it in order to produce a phonological form. For instance, a process called *Vocabulary Insertion* adds phonological material to the abstract morphemes, whereas some PF rules linearize the hierarchical structure generated by the syntax. One of the core positions of DM with respect to features is the so-called *Separation Hypothesis*, i.e., morphosyntactic and morphophonological features are distinct from one another. On this view, syntax proper operates with sets of features that are visible to both PF and LF, whereas post-syntactic morphological operations operate with morphophonological features of vocabulary items that do not affect syntax or have any ramifications on interpretation. As discussed in Embick (2000), a clear consequence of the hypothesis that Late Insertion is universal is that features that are purely phonological, morphological or arbitrary properties of vocabulary items, such as declension class discussed here, are not present in syntax, and are thus invisible to semantics. Conversely, syntactico-semantic features cannot be inserted in morphology.

I mark  $\phi$ -features and their values with bracketed capitalized letters, as already shown in Table I. Only features marked this way can enter grammatical (syntactic or morphological) processes. Thus, to meet the requirements of morphological well-formedness, an adjective, for instance, has to be supplied with grammatical features of number: [NUM], case: [CASE], and gender: [GEN], and certain values for them. I assume that all  $\phi$ -features are essentially specified in syntax, prior to PF, to which corresponding vocabulary items are mapped. Vocabulary items, however, can also contribute grammatical features. As discussed in the next section, grammatical gender can either be semantic - [GEN]<sub>SEM</sub>, or specified by the noun's arbitrary declension class feature - [GEN]<sub>DC</sub>. I will argue that [GEN]<sub>SEM</sub> is more marked than [GEN]<sub>DC</sub>.

I take plural [PL] to be marked as opposed to singular [SG]. In terms of “morphological markedness”, [PL] in Serbian and Slavic generally involves morphological coding that is absent with [SG] – affixation, suppletion etc. The limitation to “morphological” markedness is, however, important here since it has been argued with a reasonable force (see e.g., Sauerland 2003) that [PL] is “semantically” less marked than

[SG]. This is not incompatible with this analysis as long as the distinction between two types of markedness is kept.

In the realm of case, nominative [NOM] is taken to be unmarked as opposed to all non-nominative [-NOM], on the basis of the fact that nominative is the only case value that lacks an overt affix.

Finally, marked features can accumulate resulting in “markedness overload” situations which sometimes may be resolved by various deletion operations (e.g., Calabrese, 2005, 2008).

## 2. Adjectives, Pronouns and Plurality in Slavic and Serbian

The first important and fairly well-known generalization that holds for all Slavic languages including Serbian is that in the plural, in all non-nominative cases, all adjectives and 3<sup>rd</sup> person pronouns are syncretic for gender. This is illustrated by Serbian examples in the tables below.

Table II - *Singular masculine adjectives and pronouns in Serbian*

SINGULAR	Adjective	Noun <sub>MASC</sub>	Pronoun	Clitic
Nominative	lep- <b>i</b>	dečak	on	<i>pro</i>
Genitive	lep- <b>og(a)</b>	dečak-a	nje- <b>ga</b>	<b>ga</b>
Dative	lep- <b>om(u)</b>	dečak-u	nje- <b>mu</b>	<b>mu</b>
Accusative	lep- <b>og(a)</b>	dečak-a	nje- <b>ga</b>	<b>ga</b>
Instrumental	lep- <b>im</b>	dečak-om	nj- <b>im</b>	-
Locative	lep- <b>om(u)</b>	dečak-u	nje- <b>mu</b>	-

Table III- *Singular feminine adjectives and pronouns in Serbian*

SINGULAR	Adjective	Noun <sub>FEM</sub>	Pronoun	Clitic
Nominative	lep- <b>a</b>	žen- <b>a</b>	on- <b>a</b>	<i>pro</i>
Genitive	lep- <b>e</b>	žen- <b>e</b>	nj- <b>e</b>	<b>je</b>
Dative	lep- <b>oj</b>	žen- <b>i</b>	nj- <b>oj</b>	<b>joj</b>
Accusative	lep- <b>u</b>	žen- <b>u</b>	nj- <b>u</b>	<b>je/ju</b>
Instrumental	lep- <b>om</b>	žen- <b>om</b>	nj- <b>om</b>	-
Locative	lep- <b>oj</b>	žen- <b>i</b>	nj- <b>oj</b>	-

Table IV- *Plural non-nominative adjectives and pronouns in Serbian*

Pl.	Adj.	Noun <sub>MASC</sub>	Noun <sub>FEM</sub>	Pronoun	Clitic
Gen	lep- <b>ih</b>	dečaka:	žena:	nj- <b>ih</b>	<b>ih</b>
Dat	lep- <b>im(a)</b>	dečacima	ženama	nj- <b>ima</b>	<b>im</b>
Acc	lep- <b>e</b>	dečake	žene	nj- <b>ih</b>	<b>ih</b>
Instr	lep- <b>im(a)</b>	dečacima	ženama	nj- <b>ima</b>	-
Loc	lep- <b>im(a)</b>	dečacima	ženama	nj- <b>ima</b>	-

Both adjectives and pronouns in Tables II-III distinguish gender, regardless of case, i.e., just by looking at the adjectival or pronominal form we are able to determine the gender of the noun modified by the adjective, that is, the sex of the pronoun's referent. However, as illustrated in Table IV, in plural non-nominative cases the gender distinction is absent, i.e., *lep-ih*<sub>GEN.PL</sub> 'beautiful' or *njih*<sub>GEN.PL</sub> 'them' may equally refer to a feminine or masculine aggregate entity, while this distinction is clear with singular forms.

A peculiarity of Serbian adjectival agreement is manifested in certain plural nominative cases related to nouns that exhibit 'agreement mismatches' with respect to gender. To illustrate this problem properly we need to briefly introduce the relation between declension classes and what I call grammatical gender in Serbian. Since this is a complex matter I will ignore many possibly important details due to space limitations, and will concentrate only on the major generalizations.<sup>2</sup>

I adopt here Mrazović and Vukadinović (1990)'s declension class system, which is based on genitive singular endings and generates 3 declension classes: Classes I, II, and III. Class I is further subdivided into the masculine Class I<sub>M</sub> and the neuter Class I<sub>N</sub>.<sup>3</sup> Gender/sex in Serbian strongly correlates with declension classes. For instance:

- *Declension I<sub>M</sub>*: All Class I<sub>M</sub> nouns are masculine. This, however, does not mean that all male sex nouns are Class I<sub>M</sub> - the dependency goes in one direction only, as discussed below.

<sup>2</sup> For a more complete overview of declension class-gender correlation see Wechsler and Zlatić (2003), and the references cited therein.

<sup>3</sup> Stevanović (1962), for instance, proposes a system with four declension classes.

- *Declension I<sub>N</sub>*: All and only Class I<sub>N</sub> nouns are neuter. The adjectival agreement paradigm is the same as with Class I<sub>M</sub> nouns, apart from nominative, which is reflected by the fact that these are two subgroups of the same class.
- *Declension II*: All nouns that denote female sex individuals belong to Class II. However, there is a not so small group of male-denoting Class II nouns, like the proper names *Nikola*, or *Nemanja* and the common nouns like *vojvoda* ‘duke’, *papa* ‘pope’, *delija* ‘hero/paladin’, *vladika* ‘bishop’, which decline as *žena* ‘woman’ (Table III above), but show masculine agreement on adjectives modifying them, as if they were Class I<sub>M</sub> (Table II above). This paradigm is given in Table V<sup>4</sup>.

Table V

SINGULAR	Adjective (Class I <sub>M</sub> )	Noun (Class II)
Nominative	lep( <b>i</b> )	Nikola- <b>a</b> /vojvod- <b>a</b>
Genitive	lep- <b>og(a)</b>	Nikola- <b>e</b> /vojvod- <b>e</b>
Dative	lep- <b>om(u)</b>	Nikola- <b>i</b> /vojvod- <b>i</b>
Accusative	lep- <b>og(a)</b>	Nikola- <b>u</b> /vojvod- <b>u</b>
Instrumental	lep- <b>im</b>	Nikola- <b>om</b> /vojvod- <b>om</b>
Locative	lep- <b>om(u)</b>	Nikola- <b>om</b> /vojvod- <b>om</b>

The interesting thing about these nouns is that in nominative plural, the only plural case that distinguishes gender, they do not show the ‘mismatched’ agreement of the sort shown in Table V, but rather they ‘retreat’ to the declension class agreement paradigm:

- (2) a. Lep-**e**<sub>FEM/PL</sub> vojvod-**e** ‘Beautiful dukes’. (Class II agreement)  
 b\* Lep-**i**<sub>MASC/PL</sub> vojvod-**e** ‘Beautiful dukes’. (Class I<sub>M</sub> agreement)

To account for these two phenomena, I propose, building on ideas of Greville Corbett, the following set of declension class-gender matching rules.

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<sup>4</sup> I disregard Class III nouns, which are not important for the present purposes (see again Wechsler and Zlatić 2003 for more details).

- (3) a. Semantic assignment rules  
 $\text{♀} \rightarrow [\text{FEM}], \text{♂} \rightarrow [\text{MASC}], \text{○} \rightarrow [\text{NEUT}]$   
 b. Declension assignment rules  
 $\text{DC II} \rightarrow [\text{FEM}]$   
 $\text{DCI}_N \rightarrow [\text{NEUT}]$   
 c. Redundancy rule  
 $[\text{FEM}] \rightarrow \text{DC II}$   
 $[\text{NEUT}] \rightarrow \text{DCI}_N$

The idea is that every nominal vocabulary item has to be associated with at least one grammatical gender ([GEN]) specification, in order for the relevant agreement targets, such as adjectives, to meet their well-formedness requirements. Nouns denoting animate/human entities are marked with “♀” and “♂” diacritics (and possibly “○” for neuter) for their “real world” sex. For example, *sestra* ‘sister’ denotes a female human individual, and is specified for the “♀” diacritic, which according to the rule in (3a) assigns [FEM] to this vocabulary item. When a syntactic node is specified for [FEM] a vocabulary item with the matching feature, e.g., *sestra* is inserted. The rules in (3b), on the other hand, assign [GEN] to nouns that lack the “♀” and “♂” diacritics: [GEN] is assigned by arbitrary declension class features (DCII and DCI<sub>N</sub>), simply to satisfy morphological well-formedness conditions. That is all nouns are specified for [GEN] and all adjectives agree for [GEN], but the fact that, say, *knjiga* ‘book’ is Class II and hence specified for [FEM], whereas *rečnik* ‘dictionary’ is Class I<sub>M</sub> and therefore [MASC] is completely arbitrary and irrelevant for semantics. That is, [GEN] of *knjiga* and *rečnik*, in contrast to [GEN] of *sestra*, is not matched to any [GEN] in the syntactic structure. Finally, the rules in (3c) are redundancy rules that assign declension class diacritics to the feminine and neuter “real world” sex nouns, which do not have them.

The idea underlying this particular formulation of the rules in (3) is that [MASC] is a gender value with a special status. That is, Class I<sub>M</sub> nouns are [MASC] either because they have the “♂” diacritic, or because they lack any diacritic whatsoever and as a consequence receive [MASC]. Crucially, there can be no DCI<sub>M</sub> diacritic that assigns [MASC]. This is important since we need to derive the fact that there are no Class I<sub>M</sub> nouns that trigger feminine agreement on the adjective (something like *\*lepa<sub>FEM</sub> dečak<sub>MASC</sub>*). Given the rules in (3) the Serbian *vojvoda*-type

nouns from above are viewed as specified for both “♂” and DCII, which assign [MASC] and [FEM], respectively. Since [MASC] is assigned by the “semantic” ♂ diacritic it drives the agreement in singular. If DC<sub>I<sub>M</sub></sub> also existed we would expect to see a reverse situation where some nouns would be specified with “♀” and DC<sub>I<sub>M</sub></sub>. These would assign [FEM] and [MASC], respectively, and the singular agreement for these Class I<sub>M</sub> nouns would be driven by [FEM]. Since this never happens, the assumptions behind the above rules and the assumption that [MASC] is somehow special gain important empirical justification. To deal with [MASC], I assume that [GEN] has values [NEUT], [FEM], [MASC], but that it can also be unvalued. I further argue that the morphology (insertion rules) treat [MASC] and the lack of value as the same, i.e., there is in fact no default assignment, but something with no [GEN] value will come out as [MASC]. This is very much like treating [MASC] as unmarked, and seems partially redundant, but is needed to block (3b) from assigning [FEM] to nouns like *Nikola*, for instance. This line of reasoning is in accordance with the proposal of Bobaljik and Zocca (to appear), who argue specifically for the need to have an underlying three-way contrast: [FEM] vs. [MASC] vs. ‘not specified’, even where morphology makes only a two-way contrast (i.e., neuter aside).

Furthermore, distinguishing between [GEN] assigned by the “♀” and “♂” diacritics, and [GEN] assigned by the DC diacritics clearly predicts that only nouns denoting animate/human entities may show gender agreement mismatches of this sort, which is also confirmed by the facts. To keep the distinction clear, I henceforth label these two types of [GEN] as [GEN]<sub>SEM</sub> and [GEN]<sub>DC</sub>, respectively. Below I offer some examples of how the rules in (3) function:

- |  |   |
|--|---|
| <p>(4) a. Class I animate/human:<br/> <i>muškarac</i> ‘man’<br/> ♀, ♂, ∅: [MASC] DC: ∅</p>             | <p>b. Class I inanimate:<br/> <i>rečnik</i> ‘dictionary’<br/> ♀, ♂, ∅: ∅↯ DC: ∅<br/> [MASC]</p>                   |
| <p>c. Class II animate/human:<br/> <i>majka</i> ‘mother’<br/> ♀, ♂, ∅: [FEM] DC: DCII<br/> by (3c)</p> | <p>d. Class II inanimate:<br/> <i>knjiga</i> ‘book’<br/> ♀, ♂, ∅: ∅ DC: DCII<br/> ♀, ♂, ∅: [FEM]<br/> by (3b)</p> |

I suggest that both the massive gender syncretism that holds for all Slavic non-nominative adjectives and pronouns, and the peculiar agreement facts in Serbian have a common source and can be explained away in a uniform manner. Both of these phenomena involve marked features which accumulate markedness to different degrees. I propose that a high-level “markedness overload” constraint in (5a) is responsible for the gender syncretism.

- (5) a. \*[[PL], [-NOM], [GEN]]/+\_\_\_\_\_]<sub>w</sub>  
 b. [GEN] → ∅ / [PL] [-NOM]

(5) specifies that no gender can be expressed on the adjectival agreement affix in the environment of the marked features [PL] and [-NOM]. [PL] and [-NOM] accumulate markedness which triggers the deletion of all gender, both [GEN]<sub>SEM</sub> and [GEN]<sub>DC</sub>, via the rule in (5b). Due to the morphological well-formedness constraints that require some sort of gender expressed on adjectives and pronouns, these elements surface as [MASC], which corresponds to the lack of gender value, as suggested above. The hierarchy in (6), which presumes that of all φ-features gender is the least grammatically relevant, makes sure that it is the gender feature that is systematically excluded.

(6) Number/Case > Gender

The interesting agreement pattern with the *vojvoda* type nouns in plural nominative is similar in terms of marked features to the situation in (5). The only difference is that it includes one marked feature less than (5) in that it has [NOM] instead of [-NOM]. In addition to that, it involves two different values for [GEN]<sub>SEM</sub> and [GEN]<sub>DC</sub>.

I propose that there is another markedness relation that holds between these two [GEN] type specifications, and this markedness is not of the *morphological* type discussed so far, i.e., ‘the markedness of overt coding’. Specifically, I assume that [GEN]<sub>SEM</sub>, the one associated with the semantic diacritic, is, because of its nature and role in grammar, marked as opposed to [GEN]<sub>DC</sub>. In particular, [GEN]<sub>SEM</sub> controls the agreement on adjectives in singular and principally drives the process of Vocabulary Insertion in matching the syntactic information, whereas [GEN]<sub>DC</sub> is “given”, that is, it comes for “free” since it exists primarily to

satisfy the morphological well-formedness conditions. In light of this assumption, I propose (7) to explain the Serbian facts:

- (7) a. \*[[PL], [GEN]<sub>SEM</sub>, [NOM]]/+\_\_\_\_]w  
 b. [GEN]<sub>SEM</sub> → ∅ / [PL] [NOM]

The constraint in (7a) is another markedness accumulation statement, which specifies that Serbian adjectival agreement affixes cannot express more than two marked features, where [GEN]<sub>SEM</sub> is in addition to [PL] viewed as a marked feature. Given the hierarchy in (6), and the rule in (7b), [GEN]<sub>SEM</sub> is deleted and the gender agreement is realized for the unmarked [GEN]<sub>DC</sub>, which is assigned by the DC diacritic.

(7) is particularly interesting since it narrowly specifies an environment where Serbian and Croatian principally and materially differ. That is, in contrast to Serbian speakers who uniformly and categorically express the judgments reported in (2), Croatian speakers behave almost the opposite way in this respect. All Croatian speakers allow masculine agreement in nominative plural, and many of them disallow feminine agreement. That is, for many Croatian speakers the judgments in (2) are completely reversed: (2a) is ungrammatical and (2b) is grammatical<sup>5</sup>:

- |   |  |
|---|--|
| (2) <i>Serbian</i> :                                  | <i>Croatian</i> :                                      |
| a. Lep- <b>e</b> <sub>FEM/PL</sub> vojvod- <b>e</b>   | a. #/*Lep- <b>e</b> <sub>FEM/PL</sub> vojvod- <b>e</b> |
| b. *Lep- <b>i</b> <sub>MASC/PL</sub> vojvod- <b>e</b> | b. Lep- <b>i</b> <sub>MASC/PL</sub> vojvod- <b>e</b>   |
|   | ‘Beautiful dukes’                                      |

Judgment variations of this sort in general are notorious for resisting principled explanations, but I believe that the analysis here does not face this chronic problem. One possibility is to assume that (7a) is ignored in Croatian simply because it is a markedness constraint of a much lower degree than (6a), which also includes [-NOM], another marked feature by assumption. The other possibility is that [GEN]<sub>SEM</sub> is not perceived in Croatian as a marked feature, as opposed to [GEN]<sub>DC</sub>, which would also

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<sup>5</sup> According to my data set, not too many Croatians allow feminine agreement, and the ones that do never prefer it to the masculine pattern.

make the Croatian agreement in [PL] [NOM] look like the one in singular.

### 3. Possessive Adjectives in Serbian

In this section I present another piece of evidence in favor of the view advanced here. The argument is drawn on the basis of the Possessive Adjectives (PAs) formation in Slavic, with special attention to Serbian. PAs in Slavic, including Serbian, are formed from nouns via affixation. Thus, *dečakov* ‘boy’s’ in (8a) is a PA, formed from the noun *dečak* ‘boy’, by adding the suffix *-ov* to the nominal stem. Similarly in (8b) *žen-in* ‘woman’s’ is formed from the noun *žena* ‘woman’ and the suffix *-in*. The choice between the two affixes depends on the noun’s gender (or more precisely, on declension class):

- |   |                      |
|---|----------------------|
| (8) a. <i>dečak-<b>ov</b>-a bicikl-a</i> ‘the boy’s bicycle’. | Class I <sub>M</sub> |
| b. <i>žen-<b>in</b>-a bicikl-a</i> ‘the woman’s bicycle’.     | Class II             |
| c. <i>dečak-<b>ov</b>-∅ automobil-∅</i> ‘the boy’s car’.      | Class I <sub>M</sub> |
| d. <i>žen-<b>in</b> -∅ automobil-∅</i> ‘the woman’s car’.     | Class II             |

The property that makes it quite clear that forms in (8) are indeed adjectives is agreement. They agree in precisely the same features – number, case, and gender – as do ordinary adjectives like *nov* ‘new’ and comparatives like *noviji* ‘newer’, in the following example:

(9) *nov-a/novij-a bicikla* - new/newer bicycle

PAs in (8) show agreement in the same way the adjective in (9) does – the ending *-a* in (8b), for instance, represents the agreement with the noun *bicikla* it modifies, i.e., [NOM], [FEM], and [SG].

PAs are, however, restricted in many ways. One of the most obvious restrictions, particularly interesting from the perspective of this paper, is that they cannot be formed out of plural nouns. Conversely, the ones formed from singular nouns, as the ones in (8), cannot have a plural referent. The common way to express the meaning of the English phrase

‘boys’ bicycle’, for instance, is to express the plural possessor as the genitive complement of the possessed noun. For example<sup>6</sup>:

(10) ‘boys’ bicycle’ - *bicikla*<sub>NOM</sub>*dečâka*<sub>GEN</sub> (bicycle of boys)

A possible explanation for this constraint would be to posit a simple ordering of rules, whereby the possessive affix [POSS] cannot be added after the plural case affix. That this is not enough is strongly suggested by the behavior of nouns like *deca* ‘children’ or *braća* ‘brothers’, which are discussed in Wechsler and Zlatić (2003) for different reasons. As Wechsler and Zlatić (2003) show, these nouns are interesting because they exhibit a double mismatch – in gender and number. For instance, *deca* belongs to the Class II, like *žena* ‘woman’ and correspondingly triggers the Class II ([FEM] [SG]) agreement on adjectives (see Table VI), even though it has an aggregate referent and triggers plural on finite verbs and auxiliaries, as in (11). In contrast to [FEM] specified by the DCII diacritic, its [GEN]<sub>SEM</sub> is [NEUT]<sup>7</sup>:

(11) *Deca dolaze* /\**dolazi*.  
 Children come<sub>PRES.3.PL</sub>/ come<sub>PRES.3.SG</sub>  
 ‘The children are coming.’

Table VI

SINGULAR	Adj Class II	Noun Class II
Nominative	lep-a	dec-a /brać-a
Genitive	lep-e	dec-e/brać-e
Dative	lep- <b>oj</b>	dec-i /brać-i
Accusative	lep- <b>u</b>	dec-u/brać-u
Instrumental	lep- <b>om</b>	dec-om/brać-om
Locative	lep- <b>oj</b>	dec-i/brać-i

<sup>6</sup> For interpretative and other differences between this type of construction and PAs in Serbian see Zlatić (1997) and Ivić (1986), and for the distribution of PAs in Slavic generally see Corbett (1987).

<sup>7</sup> The singular forms *dete* ‘child’ and *brat* ‘brother’ belong to Class I<sub>N</sub> and Class I<sub>M</sub>, respectively.

That is, even though they denote aggregate entities and trigger plural agreement on finite elements, they decline as singular, Class II nouns, and PAs could conceivably be formed out of them via *-in* suffixation, as in the case of *žena*, *Nikola*, or *vojvoda* in (12). This, however, is impossible, as shown in (13), which clearly suggest that something more needs to be said about these constructions than just positing an ordering of operations rule that would ban the adding of [POSS] after the plural case affix.

- (12) a. ✓ *žen-in otac* ‘the woman’s father’.  
 b. ✓ *Nikol-in otac* ‘Nikola’s father’.  
 c. ✓ *vojvod-in otac* ‘the duke’s father’.
- (13) a. \**dec-in otac* ‘the children’s father’.  
 b. \**brać-in otac* ‘the brothers’ father’.

Furthermore, in contrast to nouns, pronouns in Serbian do not observe this rule. That is, pronominal PAs can be both singular and plural. These are formed via the same set of suffixes used for nouns: *-ov* and *-in*, with the number distinction marked on the genitive stem:

- (14) a. *njeg*<sub>GEN.S.M</sub> + **-ov** – *njegov* ‘his’.  
 b. *nje*<sub>GEN.S.F</sub> + **-in** – *njen* ‘her’.  
 c. *njih*<sub>GEN.PL</sub> + **-ov** – *njihov* ‘their’.  
 d. *njih*<sub>GEN.PL</sub> + **-in** – *njin* ‘their<sub>PL.F</sub>’.

As shown in (14d), there are pronominal plural PAs that even distinguish for gender<sup>8</sup>, which is obviously in sharp contrast with nominal PAs.

I propose that this is due to the markedness constraint in (15)

- (15) \*[[PL], [GEN]/\_\_\_ + [POSS]]<sub>w</sub>

The possessive affix [POSS] (e.g., *ov/in*) cannot be added to the overly marked combination of [PL] and [GEN]. In the case of nouns, the presence of [GEN] is always implied, either as [GEN]<sub>SEM</sub> or [GEN]<sub>DC</sub>; in

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<sup>8</sup> These are, however, nowadays considered fairly archaic. For speakers who still do use these productively (14d) refers to feminine plural, and (14c) to masculine plural.

fact, since one of the constraints on the PA formation is that they can be derived from only animate nouns (see e.g., Zlatić 1997), the presence of the more marked [GEN]<sub>SEM</sub> is entailed under the present approach. At the same time, I assume that the pronominal stem is just a phonological host for agreement affixes/clitic pronouns. Unlike nouns, pronouns have no inherent gender, and always receive their number/gender features via agreement (as in Kratzer, 2008). At an abstract level, the pronominal stem lacks features, and thus will not create a markedness accumulation violation when combined with the PA affix, so the constraint in (15) does not hold for them, and even PAs that distinguish for [PL] and [GEN] are possible, as confirmed by the existence of (14d). Thus, the systematic difference between pronominal and nominal PAs is that the latter are, due to their morphological character, always specified for one feature that the former always lack, namely [GEN]. This becomes relevant in plural, where only nominal PAs enter markedness accumulation situations and are subject to constraints like (15).

## **5. Conclusion**

The foregoing has attempted to concisely answer three related questions of Serbian, and more generally Slavic, morphology: why plural non-nominative adjectives and pronouns do not distinguish gender, why gender in plural nominative adjectives may reduce to declension class, and why possessive adjectives cannot be formed from plural nouns. The answers to all three questions boil down to which features plural combines with. Specifically, I have argued that in addition to plural, all non-nominative cases and gender induce markedness accumulation. In the case of adjectival agreement, exceedingly marked situations are resolved by some type of gender deletion, whereas in the case of plural possessive adjectives this solution is not applicable, which results in the general unavailability of these constructions. In addition, the proposal advanced in this paper offered a solution for one of the clearest differences between Croatian and Serbian in a manner that is consistent with the general tenets of the theoretical framework adopted. I hope that the data and questions presented here will help to stimulate further research in this direction.

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