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Miloje Despić

Cornell University

# Coordinating Gender: What Can Coordinate Structure Agreement Tell Us about Gender?

### Abstract

This paper examines gender agreement with coordinate structures in Serbian, focusing exclusively on coordinate phrases with singular conjuncts. I discuss in detail four unexpected and challenging facts about coordinate structure gender agreement and provide a unified account of them. I argue that a participle or predicative adjective agreeing with a coordinate phrase takes the default masculine form either when the coordinate phrase contains conflicting gender information, which can sometimes surprisingly happen even when all conjuncts have identical gender specifications, or when at least one of the conjuncts is not marked for a gender value. On the bases of behavior of neuter, I also propose that gender in Serbian (and possibly other Slavic languages) should be represented in terms of binary features [±masculine] and [±feminine]

### Keywords

gender, agreement, coordination, number, features

#### Streszczenie

Przedmiotem analizy przedstawionej w artykule jest akomodacja wartości kategorii rodzaju w zdaniach z podmiotem szeregowym o składnikach w liczbie pojedynczej w języku serbskim. Szczegółowo omówione są cztery problematyczne właściwości akomodacji wartości rodzaju przez podmiot szeregowy ze spójnikiem współrzędnym. Przedstawione są argumenty popierające tezę, że wartość rodzaju męskiego jest wartością nieuzgodnioną (domyślną) imiesłowów oraz przymiotników predykatywnych wtedy, gdy składniki podmiotu szeregowego różnią się pod względem informacji o rodzaju, co wbrew oczekiwaniom może występować zarówno wtedy, gdy składniki podmiotu szeregowego mają tę samą wartość gramatycznej kategorii rodzaju, jak i wtedy, gdy jeden ze składników podmiotu szeregowego nie posiada określonej wartości cechy rodzaju. Na podstawie analizy dystrybucji rodzaju nijakiego postuluje się, że cecha rodzaju w języku serbskim (oraz przypuszczalnie w innych językach słowiańskich) jest cechą kompleksową o wartościach binarnych [±masculinum] oraz [±femininum]

### Słowa kluczowe

rodzaj gramatyczny, akomodacja, konstrukcje współrzędne, liczba, cechy

## 1. Introduction: The problem\*

This article investigates some puzzling properties of gender agreement with coordinate structures in Serbian and the challenges they present for theories of grammatical gender and agreement. A number of studies of South Slavic have investigated agreement with coordinated phrases which contain at least one plural number conjunct (Bošković 2009; Marušič et. al 2015; etc.), especially in the context of the so-called "last/closest conjunct agreement." These studies have shown that in certain contexts an agreeing plural participle or adjective agrees not with the whole Coordination Phrase (CoordP), but with a single (plural) conjunct. In this paper I will focus exclusively on coordinate structures in which all conjuncts are singular and try to show how such structures can shed new light on our understanding of grammatical gender and coordinate structure agreement in general. CoordPs with only singular number conjuncts are substantially less complicated to work with since they do not involve the possibility of single-conjunct agreement: the obligatory plural number of the agreeing participle/adjective is clearly not a consequence of direct agreement with one conjunct since all conjuncts are singular, but arguably a result of agreement with the whole CoordP. However, although number agreement with such CoordPs seems rather straightforward, gender agreement raises a number of interesting questions, which are the main focus of this paper. In Sections 2–5 I lay out the relevant facts and present my analysis.

## 2. Puzzle #1: Neuter gender, coordination and binary features

As in other Slavic languages, there are three grammatical genders in Serbian: masculine, feminine and neuter. When two (or more) feminine singular arguments are coordinated in the subject position, the agreeing participle/predicative adjective must take the *feminine plural* form.

(1) Ova žena i ona devojka su stigl-**e**. Feminine
This woman and that girl are arrived.F.PL
'This woman and that girl arrived.'

Similarly, when two (or more) *masculine* singular arguments are coordinated, the participle shows *masculine* plural agreement.

(2) Ovaj čovek i onaj dečak su stigl-i. Masculine
This man and that boy are arrived.M.PL
'This man and that boy arrived.'

<sup>\*</sup> Thanks to Boban Arsenijević, Aida Talić, and Neda Todorović for discussing some of the material presented here with me on various occasions. I would also like to thank the two anonymous SPL reviewers for their very helpful feedback. All errors are my own.

However, when there is no complete matching in gender among *all* conjuncts, the participle/adjective must show *masculine* plural agreement. This is true of any combination of masculine and some other gender (3a–b), but importantly, this is also true when none of the conjuncts are masculine; e.g. when feminine and neuter are combined, as in (3c):

- (3) a. Jedan dečak i jedna devojčica su došli/\*došle.

  One.M.SG boy and one.ESG girl AUX.3.PL arrived.M.PL/arrived.E.PL 'One boy and one girl arrived.'
  - b. Jedan dečak i jedno pile su došli/\*došla. One.M.SG boy and one.N.SG chicken AUX.3.PL arrived.M.PL/arrived.N.PL 'One boy and one chicken arrived.'
  - c.Jedna devojčica i jedno pile
    One.F.SG girl and one.N.SG chicken
    su došli/\*došla/\*došle.
    AUX.3.PL arrived.M.PL/arrived.N.PL/arrived.F.PL
    'One girl and one chicken arrived.'

A commonplace explanation for these facts is that masculine is the default gender (e.g. Bošković 2009; Begović and Aljović 2015; etc.), which shows up on the agreeing element whenever CoordP contains conflicting gender specifications. This seems to be a natural assumption, which works for the data in (3). However, a simple masculine-as-default account is not sufficient to explain the following contrast: the participle must take *masculine* plural form when two (or more) *neuter* conjuncts are coordinated, even when they all match in neuter gender (4). This is quite unexpected since there is an independent neuter plural form, which is otherwise required with regular neuter plural nouns (5).

- (4) Naše selo i celo jedno brdo su ✓izgorel-i/\*izgorel-a. Neuter Our village and whole one hill AUX.3.PL burned.M.PL/burned.N.PL u požaru.'
  in fire
  'Our village and one whole hill were burned in the fire.'
- (5) Sela/Brda su ✓izgorel-a/\*izgorel-i. Villages/Hills Aux.3.PL burned.N.PL/burned.M.PL 'Villages/Hills were burned.'

The question here is: why would the default masculine show up in (4), when just like in (1) and (2) all conjuncts match in gender and there is a designated plural participle form for that gender, which otherwise must be used for (non-coordinated) plural nouns of the same gender? That is, if there is something peculiar about the combination of plural number and neuter gender that

forces the default masculine form, why is masculine agreement impossible with regular neuter plural nouns (e.g. (5))?

I will first assume that CoordP is always automatically assigned plural number, which, given its meaning, shouldn't be controversial. The participle in (1), for instance, agrees with this plural number. Second, it seems reasonable to assume that CoordP is assigned a particular gender value when <u>all</u> of its conjuncts match in gender; in (1) both conjuncts are feminine and the whole CoordP is therefore assigned feminine gender.

Similarly, when two (or more) masculine singular arguments are coordinated (as in (2)), the participle shows masculine plural agreement, as expected. Here again both conjuncts match in masculine gender. However, as the examples in (3) indicate, when there is no complete matching in gender among *all* conjuncts, the participle/adjective must show *masculine* plural agreement. These facts strongly suggest that masculine is the default gender value, as already argued by many authors (e.g. Bošković 2009; Begović and Aljović 2015; etc.). In particular, I propose that when there is no complete matching in gender among all conjuncts, CoordP will simply be left unspecified for gender value; i.e. it will be specified only for plural number. Since CoordP cannot provide a gender value for agreement targets like adjectives or participles, which in general need to be specified for some gender value in these contexts, they will take the masculine form by default.<sup>1</sup>

However, the participle unexpectedly takes the *masculine* plural form when two (or more) *neuter* conjuncts are coordinated, even when they all match in neuter gender, as already shown in (4). This indicates that neuter is in some deep sense different from masculine and feminine. One way of deriving this contrast is to assume that the Serbian gender system is based on the following binary-value feature system:

(6) a. [GENDER ±masculine and ±feminine]
b. Masculine: [+masc, -fem]
c. Neuter: [-masc, -fem]
d. Feminine: [-masc, +fem]
e. Not possible: [+masc, +fem]

Binary feature systems have been proposed for other domains as well. For instance, Nevins (2011) argues that the number system in languages with

<sup>&</sup>lt;sup>1</sup> More precisely, the morphology treats masculine gender and the lack of value as the same, i.e. it could be argued that there is in fact no default assignment, but something with no gender value specification will come out as masculine. This is similar to the proposal of Bobaljik and Zocca (2010), who argue specifically for the need to have an underlying three-way contrast: feminine vs. masculine vs. 'not specified', even where morphology makes only a two-way contrast (i.e. neuter aside). See Section 3 and Despić (2010) for more details on how exactly gender values are assigned to nouns.

singular, plural and dual are based on features [±singular], [±augmented], where dual is represented with the combination [-singular, -augmented] (for a similar type of analysis of Serbian number system, which is based on singular, plural and paucal see Despić 2013). In the domain of person, binary feature systems based on [±speaker], [±hearer] (Bobaljik 2008 and references therein) or [±participant], [±author] (e.g. Nevins 2007) have been proposed.

On binary feature system analysis of gender, neuter is special because it involves two minus values. The neuter plural suffix -a of the participle *izgorela* 'burned' in (5) would then be represented by the following combination of features:

(7) 
$$-a \Leftrightarrow [[-\text{masc}, -\text{fem}], [PL], [NOM]]$$

To account for why coordination of neuter arguments triggers masculine plural agreement (and not neuter plural agreement) I propose that only [+] gender values can be 'passed on' to CoordP; i.e. only [+] values are relevant for determining the gender specification of CoordP. CoordP will be marked for a gender value only if every conjunct is marked with a [+] gender value of the same kind (i.e. if there is no gender mismatch) – this is the case in (1) and (2), as illustrated in (8) and (9), respectively. In (1) the whole CoordP is marked as feminine, and in (2) as masculine:

Now, CoordP will not be marked for gender in two types of situation. First, when conjuncts have mismatching [+] gender values, as in (3a), where [+masc] is in conflict with [+fem] – in this case there is no unique gender value that can be assigned to CoordP as a whole. As a consequence, the agreeing adjective/participle will take the default masculine form:

(10) CoordP 
$$\rightarrow$$
 conflicting [+] features Masc + Fem =  $\underline{Default}$ : Masculine [+fem, -masc] [+masc, -fem]

Second, CoordP will be specified for gender when at least one of its conjuncts is not marked with a [+] gender value. In this case, the whole CoordP is *underspecified* for gender – in order for CoordP as a whole to be marked for a gender value, *each* of its conjunct must contribute a [+] gender value. But whenever a CoordP contains at least one neuter conjunct, it will be left

unspecified for gender, since, by hypothesis, neuter is represented by two [–] values. This is true for (3b–c), where only one conjunct is neuter, but also for (4) where *both* conjuncts are neuter – in all of these cases at least one conjunct is not be marked with a [+] gender value, and as a result the agreeing adjective/participle takes the masculine form, by default. This is illustrated for (3c) in (11):

(11) CoordP 
$$\rightarrow$$
 underspecified for a [+] feature Fem + Neut =  $\underline{Default}$ : Masculine [+fem, -masc] [-masc, -fem]

A natural question at this point is whether there is any independent evidence for this approach. I believe that strong support for this analysis comes from the behavior of adverbs and adjectives agreeing with infinitival clauses. One of the main upshots of the binary feature representation of gender given in (6) is that neuter is essentially a negation of gender features – thus, on this analysis it would be expected, or at least unsurprising, that modifiers of inherently "genderless" entities, such as infinitives or VPs, would take the neuter form. This is exactly the case: adjectives agreeing with infinitives take the *neuter* singular form (e.g. (12)), while Serbian adverbs, which are VP-modifiers, are, in terms of morphological form, in fact always *neuter* singular adjectives (e.g. (13)):

- (12) Prihvatiti krivicu nije lak- $\mathbf{o}$ . Accept $_{\text{INF}}$  fault $_{\text{ACC}}$  not-AUX.SG easyN.SG 'To admit one's fault is not easy.'
- (13) a. Marko trči spor-o. b. Jedn-o spor-o dete.

  M runs slowN.SG OneN.SG slowN.SG child
  'Marko runs slowly.' 'One slow child.'

This is an unsurprising state of affairs on this analysis, since both infinitives and VPs are genuinely non-nominal objects; e.g. they cannot be pluralized or associated with any declension class or grammatical gender, and, as shown in (12), they assign structural accusative case to their objects (*krivicu* 'fault(acc)'), which is of course impossible in the case of true nominals. It is then natural that of all modifier forms in Serbian, they would be least incompatible with the one which is clearly marked for negative gender values, i.e. neuter. And as observed by one of the reviewers, coordinating two (or more) infinitives never leads to *plural* agreement – the predicate always takes the *singular* neuter form (14a). Also, coordinating VPs does not affect the form of the adverb (14b). As this reviewer points out, this indicates that the neuter singular form appears in contexts where there is no agreement whatsoever; i.e. no  $\varphi$ -features to agree with, including number, as the facts in (14) suggest. In the case of the default

masculine plural form, on the other hand, there are  $\phi$ -features to agree with, but they are underspecified. This analysis is therefore able to make a meaningful connection between Serbian coordinate agreement and the facts in (12)–(14), while on other approaches any similarity between them appears completely accidental.

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(14) a. Prihvatiti krivicu i pokajati se nije lak-\mathbf{o}/*ni\mathbf{su} laki/lak\mathbf{a}. Accept<sub>INF</sub> fault<sub>ACC</sub> and repent not-AUX.SG easyN.SG/not-AUX.PL easyM.PL/N.PL 'To admit one's fault is not easy.'
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b. Marko trči i jede spor-o.
M runs and eats slowly
'Marko runs and eats slowly.'
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### 3. Puzzle #2: Gender-mismatch nouns

The second empirical puzzle I explore in this paper is of the same kind. There are quite a few nouns in Serbian that display a gender mismatch. Nouns like *vojvoda* 'duke', *tata* 'dad' or a proper name like *Nikola* denote male individuals, but decline as feminine nouns; i.e. there is a meaning-form contrast between feminine and masculine gender. As shown in Table 1, these nouns decline in both singular and plural as typical feminine nouns (e.g. *žena* 'woman'), but clearly refer to male individuals. In singular they obligatorily trigger masculine agreement on adjectives (attributive and predicative) and participles, as illustrated in (15).

Table 1: Declension Class II: žena 'woman'; vojvoda 'duke'

	SINGULAR	PLURAL	
Nominative	žen- <b>a</b> /vojvod- <b>a</b>	žen- <b>e</b> /vojvod- <b>e</b>	
Genitive	žen- <b>e</b> /vojvod- <b>e</b>	žen- <b>a:</b> /vojvod- <b>a:</b>	
Dative	žen-i/vojvod-i	žen- <b>ama</b> /vojvod- <b>ama</b>	
Accusative	žen- <b>u</b> /vojvod- <b>u</b>	žen- <b>e</b> /vojvod- <b>e</b>	
Instrumental	žen- <b>om</b> /vojvod- <b>om</b>	žen- <b>ama</b> /vojvod- <b>ama</b>	
Locative	žen-i/vojvod-i	žen-ama/vojvod-ama	

(15) a. Lepi/?\*Lepa tata/Nikola/vojvoda Beautiful.M.SG/Beautiful.F.SG dad/Nikola/duke 'Handsome dad/Nikola/duke.'

b. Naš/?\*Naša tata/vojvoda je stigao/?\*stigla.
Our.M/our.F dad/duke is arrived.M arrived.F
'Our dad/duke has arrived.'

c. Tata/vojvoda je pametan/?\*pametna.

Duke is smart.M/smart.F

'The dad/duke is smart.'

As discussed in Despić (2010), however, the agreement pattern with these nouns changes dramatically in plural: the plural form *vojvode* 'dukes' triggers *feminine* plural agreement on adjectives and participles. In Despić (2015), I present results of a judgment survey, in which I asked 42 native speakers of Serbian to rate the acceptability of semantic and syntactic agreement patterns in a variety of contexts. In a nutshell, for each context the speakers were presented with two relevant forms, and asked to choose according to their native intuition among the following options: (i) both forms are equally acceptable, (ii) both forms are in principle acceptable, but one is more preferable, and (ii) only one form is acceptable. In particular, in cases like (16)–(17), out of 42 informants I consulted, 39 chose the feminine pattern on the attributive adjective (35 of those speakers completely rejected the masculine form, while 4 of them allow the masculine form, but do not prefer it), whereas only 3 speakers overall chose the masculine form (completely rejecting the feminine form).

- (16) a. Naše vojvode dolaze sa severa.

  Our.F.PL dukes come.PL from north
  'Our dukes come from the North.'

  b. \*?Naši vojvode dolaze sa severa.

  Our.F.PL dukes come.PL from north
  'Our dukes come from the North.'
- (17) Naše/\*?Naši tate. Our.F./Our.M. dads

The feminine (formal) agreement is preferred for predicative adjectives and participles as well, although to a bit lesser degree. For predicative adjectives 36 speakers prefer the feminine form vs. 4 speakers who chose the masculine pattern (1 speaker finds them equally acceptable), while for participles 32 speakers favor the feminine form as opposed to 9 speakers who chose the masculine form (1 speaker again found the two patterns equally acceptable).

(18) Tate/vojvode su stigle/?\*stigli /pametne/?\*pametni.

Dads/dukes are arrived.F/arrived.M /smart.F/smart.M

'Dads/dukes arrived/are smart.'

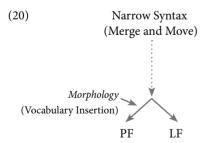
However, when two (or more) singular nouns like *tata* 'dad' or *vojvoda* 'duke' are coordinated, the agreeing participle/adjective *must* take the masculine plural form; i.e. the feminine plural form is completely unacceptable, even though it is the preferred form in (16)–(18) for the majority of speakers.

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(19) a. Moj tata i tvoj tata su stigli/*stigle.
My dad and your dad are arrived.M/arrived.F
'My dad and your dad arrived.'
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b.Moj tata i jedan vojvoda su stigli/\*stigle. My dad and one duke are arrived.M/arrived.F 'My dad and a (certain) duke arrived.'

This contrast is thus in essence very similar to the one with neuter gender in (4)–(5). Although a noun like *tata* 'dad' in its plural form triggers *feminine* plural agreement (for the majority of speakers), a CoordP consisting of two (or more) singular nouns like *tata* must trigger *masculine* plural agreement. We can ask the same question again: why would the default masculine be obligatory here?

Before providing an explanation for this set of facts, I will briefly summarize the analysis of grammatical gender assignment from Despić (2010), which I will assume here. First, I adopt the framework of Distributed Morphology (DM) (e.g. Halle and Marantz 1993), which advances a piece-based view of word formation, in which the syntax/morphology interface is as transparent as possible. One of the core positions of DM with respect to features is the so-called Separation Hypothesis, i.e. morphosytactic 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 (see (20)). As discussed in Embick (2000), for instance, a clear consequence of this hypothesis is that features that are purely phonological, morphological or arbitrary properties of vocabulary items, such as declension class discussed below, are not present in syntax, and are thus invisible to semantics. Conversely, syntactic/semantic features cannot be inserted in morphology.



There are certain important generalizations about gender and declension class in Serbian which need to be outlined, at this point. I adopt Mrazović and Vukadinović's (1990) declension class system, which is based on genitive singular endings and generates 3 declension classes: Classes I, II, and III (see

Wechsler and Zlatić 2003). $^2$  Class I is further subdivided into the masculine Class  $I_M$  and the neuter Class  $I_M$ . Gender/sex in Serbian strongly correlates with declension classes. For instance:

- Declension  $I_M$ : All Class  $I_M$  nouns are masculine. This, however, does not mean that all male sex nouns are Class  $I_M$  the dependency goes in one direction only, as discussed below.
- Declension  $I_N$ : All and only Class  $I_N$  nouns are neuter. The adjectival agreement paradigm is the same as with Class  $I_M$  nouns, apart from nominative and accusative, 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', tata 'dad', papa 'pope', delija 'hero/paladin', vladika 'bishop', tata 'dada' etc., which decline as žena 'woman' (see Table 1), but show masculine agreement on adjectives modifying them, as if they were Class I<sub>M</sub> (see also Ivić 1963, 1966). This is shown in Table 2:

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

Table 2: Gender-mismatch nouns

As already mentioned (e.g. (16)–(18)), the puzzling fact about these nouns is that in nominative plural, the only plural case that marks gender distinctions, they do not show the 'mismatched' agreement of the type illustrated in Table 2, but they rather 'retreat' to the declension class agreement paradigm.

I first propose, building on some of the ideas of Corbett (1991), the following set of declension class-gender matching rules. Note that I will in the interest of clarity and brevity mark gender (i.e. [GEN]) with the privative features [MASC], [FEM], [NEUT], instead of the binary features introduced in the previous section – this will, however, not affect my analysis in any way (the same rules can easily be restated in terms of binary features).

<sup>&</sup>lt;sup>2</sup> I will disregard Class III nouns here since they are not relevant to the main goal of this paper (see again Wechsler and Zlatić 2003 for more details).

The idea is that every nominal vocabulary item has to be associated with at least one grammatical gender ([GEN]) specification. Nouns denoting animate/human entities are marked with " $\cite{}$ " and " $\cite{}$ " diacritics (and possibly " $\cite{}$ " for neuter) for their "real world" sex. For example, sestra 'sister' denotes a female human individual, and is specified for the " $\cite{}$ " diacritic, which according to the rule in (21a) assigns [FEM] to this vocabulary item. The rules in (21b), on the other hand, assign [GEN] to nouns that lack the " $\cite{}$ " and " $\cite{}$ " diacritics: [GEN] is assigned by arbitrary declension class features (DCII and DCI $_{
m N}$ ), 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 $_{
m M}$  and therefore [MASC] is completely arbitrary and irrelevant for semantics. Finally, the rules in (21c) 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 (21) is that [MASC] is a gender value with a special status: Class  $I_M$  nouns are [MASC] either because they have the " $\eth$ " diacritic, or because they lack any diacritic whatsoever. Crucially, there can be no  $DCI_M$  diacritic that assigns [MASC]. This is important since we need to derive the fact that there are no Class  $I_M$  nouns that trigger feminine agreement on the adjective. That is, there is no opposite case of vojvoda 'duke', i.e. a noun that would belong to Class  $I_M$ , denote a female individual and trigger feminine agreement on adjectives. This is a very important language-internal generalization, which should fall out naturally from any analysis. It also provides further support to the view that masculine has a special status in the language and that it functions as the default value. Given the rules in (21), the Serbian vojvoda-type nouns from above are

 $<sup>^3</sup>$  Wechsler and Zlatić (2003) discuss the noun *devojčurak* 'small girl', which declines as Class  $I_M$  and denotes a female individual, but this noun crucially cannot trigger feminine agreement (\*lepa\_{FEM} devojčurak) – the masculine agreement is obligatory  $lep_{MASC}$  devojčurak. Note also that unlike nouns like *vojvoda*, devojčurak is clearly morphologically complex: it is based on the root devojk- 'girl' and the diminutive suffix -urak, which arguably contributes the Class IM specification.

viewed as specified for both " $\circlearrowleft$ " and DCII, which assign [MASC] and [FEM], respectively. Since [MASC] is assigned by the "real-word sex"  $\circlearrowleft$  diacritic it drives the agreement in singular. If a DCI $_{\rm M}$  diacritic also existed we would expect to see a reverse situation where some nouns would be specified for " $\circlearrowleft$ " and DCI $_{\rm M}$ . These would assign [FEM] and [MASC], respectively, and the singular agreement for these Class I $_{\rm M}$  nouns would be driven by [FEM]. Since this never happens, the assumptions behind the above rules gain important empirical justification.

This analysis, which makes a distinction between [GEN] assigned by the " $\subsetneq$ " and " $\circlearrowleft$ " diacritics, and [GEN] assigned by the DC diacritics, predicts that only nouns denoting animate/human entities may show gender agreement mismatches of this sort, which is also true. To keep this distinction clear, I will label these two types of [GEN] as [GEN]<sub>SEM</sub> and [GEN]<sub>DC</sub>. Below I offer some examples of how the rules in (21) function:

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(22) a. Class I<sub>M</sub> animate/human:
                                                                          b. Class I<sub>M</sub> inanimate:
                                                                                          rečnik 'dictionary'
                      muškarac 'man'
                       \mathcal{P}, \mathcal{F}, \circ: [MASC]
                                                                                           \mathcal{L}, \mathcal{L}, \mathcal{L}, \mathcal{L} DC: \mathcal{L}
                      DC: Ø
                                                                                                    [MASC] by default
     c. Class II animate/human:
                                                                          d. Class II inanimate:
                      majka 'mother'
                                                                                          knjiga 'book'
                       \mathcal{P}, \mathcal{J}, \circ: [FEM]
                                                                                           \mathcal{P}, \mathcal{J}, \circ: \emptyset
                      DC: \rightarrow DCII by (21c)
                                                                                           DC: DCII \rightarrow [FEM] by (21b)
```

e. Class II animate, denoting a male individual:

vojvoda 'duke'

♀, ♂, ∘: [MASC]

DC: DCII → [FEM] by (21b)

The opposite of (22e) is not possible, since there is no diacritic for Class  $I_M$  – Class  $I_M$  is the absence of a declension class diacritic, which inevitably comes out as [MASC]. Every noun that is marked with  $\[ \]$  (i.e. which denotes a female individual) and therefore marked with [FEM] by (21a), cannot be left without a declension class diacritic, since the redundancy rule in (21c) assigns DCII to every noun marked with [FEM].

Recall, however, that gender-mismatch nouns like *vojvoda* 'duke' trigger feminine agreement in plural for the majority of Serbian speakers. In Despić (2010) I analyzed this in terms of 'markedness'. In particular, I argued that [PL], [-NOM] and [GEN] induce markedness accumulation when they appear together (e.g. Calabrese 2005, 2011). A strong piece of evidence for this claim comes from adjectival agreement: in all Slavic languages including Serbian, [PL] [-NOM] adjectives and pronouns do not make any gender distinctions. The explanation for this is that in this case an excessively marked situation is resolved by a feature deletion operation/Impoverishment (Bonet

1995; Noyer 1997; Nevins 2011). The main idea is that when morphologically marked features accumulate to the extent that exceeds language-specific or universal thresholds of complexity, some of those features get deleted by post-syntactic deletion rules and are not morphologically realized. In particular, I proposed that a markedness accumulation constraint in (23a) is responsible for this state of affairs. It specifies that no gender can be expressed on the adjectival agreement suffix or a pronoun in the environment of the marked feature values [PL] and [–NOM]. [PL] and [–NOM] accumulate markedness to a degree that triggers complete impoverishment/deletion of gender, via the rule in (23b). The hierarchy in (24), according to which gender is least grammatically relevant, ensures that number and case win out over gender when no other considerations establish order (see Noyer 1997; Harley and Ritter 2002; etc. for approaches to feature hierarchies).<sup>4</sup>

(23) a.\*[[PL], [-NOM], [GEN]]/+\_\_\_\_]<sub>W</sub>  
b. [GEN] 
$$\rightarrow \emptyset$$
 / [\_\_\_[PL] [-NOM]]

(24) Number/Case>Gender

Note also that different languages may draw markedness accumulation lines at different points. In Serbian, plural adjectives and pronouns make a gender distinction in nominative, which is the unmarked value for Case. Only when plural is combined with non-nominative cases, which are marked Case values, do we see gender neutralizations triggered by (23). In Russian, however, the markedness accumulation line is arguably at a lower point – gender is neutralized in all plural cases, including nominative:

Table 3: Russian gender inflection

	Singular	Plural
Masculine	On-Ø	On-i
Feminine	On-a	On-i
Neuter	On-o	On-i

The markedness accumulation constraint for Russian then would be specified as in (25a), and the related impoverishment rule as in (25b) (see Bobaljik, to appear):

<sup>&</sup>lt;sup>4</sup> The assumption is that different morphological features carry different levels of cognitive significance and therefore exist in some type of hierarchical relation; the Person > Number > Gender hierarchy is, for instance, a common example (e.g. Greenberg 1966; Harley and Ritter 2002; etc.). It has also been proposed that there are subhierarchies within features; e.g. first and second person are more highly ranked than third person (Silverstein 1985). For evidence from production and processing in support of feature hierarchies see Carminati (2005).

(25) a. \*[[PL], [GEN]]/+\_\_\_\_]<sub>W</sub>  
b. [GEN] 
$$\rightarrow \emptyset$$
/[ \_\_ [PL]]

The logic behind this approach then is that morphologically marked information accumulates and that different languages (and possibly different speakers) may vary as to at which point of accumulation impoverishment rules are triggered.

I argued in Despić (2010) that markedness is also responsible for the agreement pattern triggered by the *vojvoda* type nouns in plural nominative. This particular context is very similar in terms of marked features to (23a). The only difference is that it includes one marked feature less than (23a) in that it has [NOM] instead of [–NOM]. However, unlike the majority of "regular" nouns, a noun like *vojvoda* is specified for two gender values (i.e. [GEN] $_{\rm SEM}$  and [GEN] $_{\rm DC}$ ) and it is not unreasonable to assume that these two values together create a marked situation when they combine with [PL], as illustrated in (26a). In this case the impoverishment rule in (26b) deletes [GEN] $_{\rm SEM}$  (i.e. masculine) in the adjectival agreement suffix. Consequently, the agreeing target shows feminine agreement.

(26) a. \*[[PL], [GEN]<sub>SEM</sub>, [GEN]<sub>DC</sub>, [NOM]]/+
$$\_$$
]<sub>W</sub> b. [GEN]<sub>SEM</sub>  $\rightarrow \emptyset$ /[ $\_$ [GEN]<sub>DC</sub> [PL] [NOM]]

Why should it be  $[GEN]_{SEM}$  and not  $[GEN]_{DC}$  that gets deleted; i.e. why is  $[GEN]_{DC}$  assumed to be unmarked? The reason is quite simple: in order to know  $[GEN]_{SEM}$  a certain amount of complex, real-world knowledge is required (e.g. that in our society 'duke' denotes a male individual), while  $[GEN]_{DC}$  is always unmistakably present in the noun's form, namely, its case suffix. In other words, in a situation of accumulated markedness, or some type of information overload,  $[GEN]_{DC}$  is, in contrast to  $[GEN]_{SEM}$ , always easily retrievable from the noun's form. As shown below, it is [FEM] assigned by the declension class diacritic and not the real-world based [MASC], that is visible in the suffix position of a noun like *vojvoda* 'duke':<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> As discussed in Despić (2010), Croatian seems to behave differently from Serbian in this respect. That is, in contrast to the majority of Serbian speakers, who reject the masculine agreement in plural, the majority of Croatian speakers seem to prefer it to the feminine pattern. This indicates that the markedness constraint in (23a) does not apply in Croatian, which shouldn't be surprising given the discussion of the contrast between Serbian and Russian from above. That is, whether or not a markedness constraint and a related impoverishment rule will apply in a language may depend on a number of different factors, which I don't have much to say about (recall that even in Serbian there are some speakers (3 out of 42 in this study), who choose the masculine pattern in plural). However, this analysis makes a clear prediction about the direction in which markedness may accumulate: there shouldn't be any speakers (Croatian or Serbian), who strictly follow the declension class (feminine) agreement in singular (e.g. lepa vojvoda) and choose strictly masculine (semantically based) agreement in plural (e.g. lepi vojvode) – to the best of my knowledge this prediction is borne out.

Recall now the puzzle posed by coordination: even though nouns like *vojvoda* 'duke' or *tata* 'dad' for the majority of speakers of Serbian trigger *feminine* agreement in plural, CoordP consisting of two (or more) singular nouns of this type must trigger *masculine* plural agreement (e.g. (19)). Masculine plural agreement is obligatory even when this type of noun is coordinated with a regular (non-mismatch) feminine noun like *sestra* 'sister' (28), or *mama* 'mom' (29):

- (28) Vojvoda i njegova sestra su stigli/\*stigle.

  Duke and his sister are arrived.M/arrived.F

  'The duke and his sister arrived.'
- (29) Tata i mama su stigli/\*stigle.

  Dad and mom are arrived.M/arrived.F

  'Dad and mom arrived.'

However, given my assumptions about coordination from the previous section and my analysis of gender-mismatch nouns, there should be no mystery here. In order for CoordP to receive a gender value, each of its conjuncts must be specified for the same gender value; i.e. all conjuncts must match in gender value. Or, in more precise terms of binary features, each conjunct of the CoordP must be marked with a [+] gender value of the same kind. If there is any sort of gender mismatch within it, CoordP will be left unspecified for gender, which will in turn result in the default masculine form of the agreeing element. But a noun like *vojvoda* is already marked with conflicting gender values – it is marked with [MASC] (i.e. [+masc, -fem]) because of its meaning, and with [FEM] (i.e. [+fem, -masc]) because of its declension class. Thus, whenever a noun like *vojvoda* is coordinated, it will automatically introduce conflicting gender information, which will necessarily leave the CoordP unspecified for gender. This, in turn, results in default masculine agreement:

### 4. Puzzle #3: More feminine nouns

I turn now to another context in which masculine agreement is unexpectedly obligatory. Recall from Section 1 that CoordPs consisting only of singular feminine nouns trigger feminine plural agreement regardless of the animacy

of their conjuncts. In particular, feminine agreement can be triggered when conjuncts are all either animate (31) or inanimate (32), and even when they do not match in animacy (33):

- (31) Ova žena i ona devojka su stigle. Feminine
  This woman and that girl are arrived.F.PL
  'This woman and that girl arrived.'
- (32) Knjiga i olovka su pale sa stola. Feminine
  Book.F and pen.F are fell.F.PL off table
  'A book and a pen fell off the table.'
- (33) Slavna glumica i njena haljina su zadivile sve prisutne. *Feminine* Famous actress and her dress.F are amazed.F.PL all present 'The famous actress and her dress amazed everyone present.'

This is expected on the analysis of gender assignment proposed here – all feminine nouns in (31)–(33) are marked with [FEM] only, and as a result their CoordPs are marked with [FEM] as well. The only difference between them is the source of [FEM], which is in principle irrelevant for determining the gender specification of the whole CoordP; i.e. while [FEM] of *glumica* 'actress' is determined by the  $\mathcal{P}$  diacritic, [FEM] of *haljina* 'dress' is determined by the declension class diacritic DCII. However, when a feminine noun like *glumica* 'actress' is coordinated with a feminine noun like *porodica* 'family' the adjective/ participle <u>must</u> take the masculine plural form.

(34) Slavna glumica i njena porodica su bili veoma bogati /\*bogate. Famous actress and her family.F are were.M.PL very rich.M.PL/rich.F.PL 'The famous actress and her family were very rich.'

This is surprising since *porodica* 'family' is a typical feminine noun; e.g. in singular it triggers feminine singular agreement (35a), and when two (or more) of them are coordinated they trigger feminine plural agreement (35b):

- (35) a. Cela porodica je stigla. Whole.F.SG family.SG is arrived.F.SG 'The whole family arrived.'
  - b. Moja porodica i tvoja porodica su bile veoma bogate.
     My family.F and your family.F are were very rich.F.PL
     'My family and your family were very rich.'

Since the unavailability of feminine agreement in (34) cannot be due to a mismatch in animacy (see (33)), some other factor must be at play. I suggest that the main reason for this state of affairs is the difference in the type of object *glumica* 'actress' and *porodica* 'family' refer to. Note first that in terms of

inflectional suffixes they take and the type of agreement they trigger these two nouns are identical.

```
(36) a. Jedn-a glumic-a je stigl-a.

One.F.SG actress.F.SG is arrived.F.SG 'One actress arrived.'
```

b.Sv-e glumic-e su stigl-e.
All.F.PL actress.F.PL are arrived.F.PL
'All actresses arrived.'

(37) a. Jedn-**a** porodic-**a** je stigl-**a**.

One.F.SG family.F.SG is arrived.F.SG 'One family arrived.'

b.Sv-e porodic-e su stigl-e. All.F.PL families.F.PL are arrived.F.PL 'All families arrived.'

As shown in (36)–(37), both nouns combine with the same suffixes in singular and plural: in both cases, the suffix -a represents the combination of features: feminine, singular and nominative (38a), while -e is the exponent of feminine, plural and nominative (38b):

```
(38) a. -a \Leftrightarrow [[FEM], [SG], [NOM]]
b. -e \Leftrightarrow [[FEM], [PL], [NOM]]
```

However, in the case of *glumica* 'actress' and *porodica* 'family', the feature [FEM] is associated with nouns that crucially denote different kinds of entities. In the case of *glumica* 'actress', [FEM] is associated with a noun that denotes an individual – a single individual (*glumic-a*), or a plurality of individuals (*glumic-e*). In the case of *porodica* 'family', on the other hand, [FEM] is associated with a noun that denotes a group, either a single group (*porodic-a*), or a plurality of groups (*porodic-e*). Now, in (39) below, in which *glumica* 'actress' is coordinated with *majka* 'mother', the feminine plural suffix *-e* on the participle indicates that each conjunct is a singular feminine noun with the same type of referent, namely, an individual. [FEM] of *glumica* 'actress' and [FEM] of *majka* 'mother', is in each case associated with a noun denoting an individual.

(39) Slavna glumica i njena majka su bil-e veoma bogat-e. Famous actress and her mother.F are were.F.PL very rich.F.PL 'The famous actress and her mother were very rich.'

In (35b), on the other hand, [FEM] of each conjunct is associated with a noun which refers to a group, rather than to an individual. In both (39) and (35b) then, the combination of [FEM] [PL] on the participle (i.e. the suffix -e) entails that feminine singular conjuncts count and denote the same type of objects – either

only individuals, or only groups. This is exactly why the [FEM] [PL] suffix -e on bogat-e in (34) is unacceptable – it entails that both feminine singular conjunct denote the same type of object (i.e. have same type of referent), contrary to fact. It forces the speaker to attribute non-group interpretation to porodica 'family', for instance. Since there is a conflict in the type of referent [FEM] in each conjunct in (34) is associated with, the whole CoordP is left unspecified for gender, which then triggers the default masculine form on the adjective/participle.

I have shown in Sections 3 and 4 that different types of gender information conflicts may cause CoordP to be unspecified for gender, which in turn always results in default masculine agreement. Whenever nouns like *vojvoda* 'duke' or *tata* 'dad' are coordinated, the two conflicting gender values ((FEM] and [MASC]) they are inherently specified for will automatically block CoordP from being assigned a unique gender specification. However, CoordP may be left unspecified for gender even when all conjuncts match in feminine gender, as in (34), but when there is a conflict in the type of object (individual vs. group) these conjuncts refer to.<sup>7</sup>

## 5. Puzzle #4: Coordination and the honorific pronoun

The final empirical puzzle I discuss in this paper is presented by the honorific pronoun vi 'you'. This is a  $2^{nd}$  person plural pronoun, which can be used to formally address a single male or female individual (see Despić 2015; Wechsler 2011; Wechsler and Hahm 2011). In a language like Serbian, the honorific pronoun in the subject position triggers plural agreement on both the finite verb and the participle/adjective in the predicative position, as in (40a). The singular form on the adjective, as in (40b), is quite marginal/ungrammatical and considered non-standard:

```
(40) a. Vi ste duhovit-i. Serbian you.PL AUX.2PL funny-M.PL 'You (one formal addressee/multiple addressees) are funny.'

b.*?Vi ste duhovita/duhovit. you.PL AUX.2PL funny-F.SG/funny-M.SG 'You (one formal addressee) are funny.'
```

<sup>&</sup>lt;sup>6</sup> If *porodica* in (34) meant, 'nanny', for example, the form *bogate* would, of course, be perfectly grammatical.

<sup>&</sup>lt;sup>7</sup> For reasons of space, I limit my discussion to predicate agreement with CoordP in this paper. It would certainly be interesting to see how prenominal, attributive adjectives behave when agreeing with the type of CoordPs discussed here (to the extent that *plural* agreement is possible with attributive adjectives modifying CoordPs with singular conjuncts). See Begović and Aljović (2015) for a recent discussion.

French

```
c. Vi ste duhovit-e.
you.PL AUX.2PL funny-F.PL
'You (multiple (formal or informal) female addressees only) are funny.'
```

Serbian is in this way different from French, for instance, which exhibits mixed agreement with the polite second person pronoun *vous*. In particular, this pronoun triggers singular agreement on a predicate adjective, but plural agreement on the verb (41a). When the pronoun refers to multiple addresses, the plural adjective form is used (41b):

```
(41) a. Vous êtes loyal. French you.PL be.2.PL loyal.M.SG 'You (singular, formal, male) are loyal.'
```

```
b. Vous êtes loyaux.
you.PL be.2.PL loyal. PL
'You (plural) are loyal.'
```

comes perfectly fine:

What is important for the purposes of this paper is that in Serbian the honorific pronoun vi used to address a female individual triggers masculine plural agreement, and not feminine singular or plural agreement. However, as discussed in Despić (2015), feminine agreement becomes possible when vi is coordinated with another feminine noun, or with another instance of the honorific vi addressing a female individual. For example, if two polite plural pronouns vi are coordinated, each of which is used to address a female individual, feminine plural agreement (semantic agreement) on the participle be-

```
(42) Vi (draga Ana) i Vi (draga Jelena) ste obe bile
You.PL (dear Ana) and you (dear Jelena) AUX.PL both.FEM were.FEM.PL
veoma zauzete.
very busy.FEM.PL
'You (dear Ana: one formal addressee) and you (dear Jelena: one formal addressee)
were both very busy.'
```

The same holds for (43), in which the polite pronoun is coordinated with a feminine NP referring to a female individual:

```
(43) Vi i vaša kćerka ste bile veoma zauzete.
You.PL and your daughter AUX.2PL been.F.PL very busy.F.PL
'You (one formal female addressee) and your daughter were very busy.'
```

The contrast between (42) and (43), on the one hand, and (40b), on the other, is quite striking: even the speakers of the standard Serbian who immediately reject (40b) and accept only (40a) easily accept both (42) and (43). Furthermore, many speakers in addition allow *masculine* plural agreement for both (42) and (43), as shown in (44) and (45). This agreement pattern seems to

be somewhat marked compared to the feminine plural pattern, but it is nevertheless possible; importantly, (42)–(45) are all clearly much better than (40b).

- (44) Vi (draga Ana) i Vi (draga Jelena) ste bili veoma zauzeti. You.PL (dear Ana) and you (dear Jelena) AUX.PL were.M.PL very busy.M.PL 'You (dear Ana: one formal addressee) and you (dear Jelena: one formal addressee) were both very busy.'
- (45) Vi i vaša kćerka ste bili veoma zauzeti. You.PL and your daughter AUX.2PL been.M.PL very busy.M.PL 'You (one formal female addressee) and your daughter were very busy.'

Unlike in cases discussed in Sections 2–4, in which coordination seems to somehow block the expected form and force the default masculine gender agreement, here coordination appears to enable the true (feminine) gender agreement, which is for some reason unavailable when vi is not coordinated (40b). This is quite an interesting state of affairs which calls for explanation.

In order to understand why (42)–(45) are possible, we first need to understand why the non-coordinated honorific pronoun triggers masculine plural agreement. In Despić (2015), I argue that this is another example of default agreement. Consider first the featural makeup of  $1^{\rm st}$  and  $2^{\rm nd}$  pronouns. Unlike  $3^{\rm rd}$  person pronouns,  $1^{\rm st}$  and  $2^{\rm nd}$  pronouns in Serbian (and many other languages), including the honorific vi, do not overtly mark gender. However, elements that in general encode gender distinctions (e.g. adjectives) must show appropriate gender agreement with these pronouns:

Serbian

```
(46) a. Ti si pametan.
you.SG are.2SG smart.M.SG
'You (a man) are smart.'
b. Ti si pametna.
you.SG are.2SG smart.F.SG
'You (a woman) are smart.'
```

In Despić (2015), I proposed that gender is part of the featural makeup of a pronoun like *ti* 'you', even though it is not encoded in the pronoun's form; i.e. gender here is an exclusively semantic feature. In the case of *ti* 'you', person, number and case features are represented in its form, while gender is not. Thus, the pronoun in (47) is a bundle of features, similar to a nominal suffix – it refers to a female, non-aggregate (singular) addressee.

```
(47) Ti [PER: [2], Num: [SG], Case: [NOM]] 'you' (sg) (female) Addressee \rightarrow PER: [2] Single individual \rightarrow Num: [SG] \hookrightarrow Gen: [FEM]
```

The crucial property of the honorific pronoun *vi* is that in addition to the purely *semantic* gender feature, it has an exclusively *formal* feature – plural. Plural number of the honorific pronoun is an exclusively formal feature, because it is present in the pronoun's form, but not in its meaning – the pronoun's referent is a single individual. But note that when an agreement controller is a mix of purely formal and purely semantic features, an agreement target cannot agree with both of them at the same time. Consider, for instance, the so-called 'hybrid' nouns in Serbian, like *deca* 'children, or *braća* 'brothers'. *Deca* 'children' declines as a singular Class II noun, that is, as a *feminine singular* noun, but its referent is *neuter plural*. This noun then has two exclusively formal features (not present in its meaning): feminine and singular, and two exclusively semantic features (not present in its form): neuter and plural. As discussed in Wechsler and Zlatić (2003) and Wechsler and Hahm (2011), a noun like *deca* then triggers the so-called "mixed agreement" – attributive modifiers take the feminine singular form, while finite verbs, finite auxiliaries, and personal pronouns appear in neuter plural:<sup>8</sup>

```
(48) Posmatrali smo ovu dobru decu.
watched.1PL AUX this.F.SG good.F.SG children.ACC
Ona su se lepo igrala.
they.N.PL AUX.3PL REFL nicely played.N.PL
'We watched those good children. They played well.' Wechsler and Hahm (2011: 266)
```

Thus, certain agreement targets will agree only for purely formal features (feminine singular), while others will agree only for purely semantic features (neuter plural). But crucially, no target will ever simultaneously agree for one purely formal and one purely semantic feature (e.g. feminine plural, or neuter singular) – this is simply impossible:

```
(49) Ta /*te /*to deca.
That.FEM.SG /that.FEM.PL /that.NEUT.SG children
```

At the same time, no target that agrees with the honorific pronoun referring to a single female individual will ever show feminine plural agreement – this simply *never* happens.

```
(50) Vi ste duhovit-e.
you.PL AUX.2PL funny-F.PL
*'You (one formal female addressee) are funny.'
'You (multiple female addressees) are funny.'
```

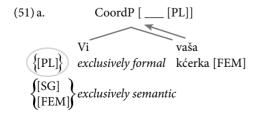
The reason why (40b) is considered ungrammatical is that participles and adjectives agreeing with the honorific pronoun in Serbian must agree with it

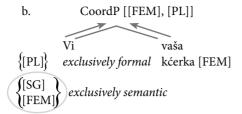
<sup>&</sup>lt;sup>8</sup> Note that among the latter, only third person singular and third person nominative plural pronouns actually make gender distinctions; see Despić (2015).

for *plural* number, just like the main verb (in contrast to French). But unlike the main verb, an adjective or participle must also show some type of gender inflection, and since in the case of the honorific pronoun plural is an exclusively *formal* feature, the true semantic gender agreement will be blocked. That is, the type of agreement in (50) is blocked with the honorific pronoun (used to address a single female person), because it involves one exclusively formal feature, not present in the meaning (plural), and one exclusively semantic feature, not present in the form (feminine), which is in general disallowed. Consequently, the adjective/participle agreeing (in plural) with the honorific pronoun will take the *default* masculine form – this explains (40a).

But when the honorific pronoun is coordinated, as in (42)–(45), the participle is agreeing with the whole CoordP, which, depending on its conjuncts, may or may not have gender specification. And since CoordP is always marked for plural, the participle will show plural agreement.

Let us look first at (43), in which vi is coordinated with the feminine noun vaša kćerka 'your daughter'. In order for the whole CoordP to be marked as feminine, each of its conjuncts must be marked with a feminine feature, which is always true for a noun like kćerka 'daughter'. But there are two ways in which the honorific pronoun can be interpreted by coordination in terms of number: singular or plural. If it is interpreted as singular it will also have to be interpreted as feminine, since both of these features are exclusively semantic (i.e. not represented in the form). In this case both conjuncts will be taken to be marked as feminine by coordination and therefore the whole CoordP will be marked as feminine, which will trigger feminine plural agreement on the participle (see (51b)). If, on the other hand, vi is interpreted as plural, which is an exclusive formal feature, it will not be interpreted as feminine, since feminine is an exclusively semantic feature (see (51a)); i.e. grammatical operations cannot target an exclusively formal and an exclusively semantic feature at the same time. Thus, if vi is interpreted as plural, it will be taken as not marked for gender at all and therefore the whole CoordP will be unmarked for gender, given our assumptions from above (i.e. CoordP is underspecified for gender, since one of its conjuncts does not contribute a gender feature). Consequently, the participle will take the default masculine form.





Masculine comes out as default both when the participle agrees with *vi* directly, and when it agrees with the CoordP which has *vi* as one of its conjuncts. Masculine is obligatory in the first case because participles/predicative adjectives in Serbian-type languages chose to agree with the strictly formal feature plural *vi* for independent reasons, which forces default masculine. In the latter case, however, masculine is not obligatory precisely because plural agreement on the participle is triggered by the plural feature of CoordP, and is independent of the honorific pronoun's plural feature. Feminine agreement then becomes possible too provided all conjuncts are marked with a feminine feature.

## 6. Summary

In this paper I examined gender agreement with CoordPs consisting of singular conjuncts in Serbian. My goal was to offer a unified account for four unexpected agreement patterns. I argued that an agreement target (e.g. adjective or participle) agreeing with CoordP takes the default masculine form in two types of cases.

First, when CoordP contains conflicting gender information, it will be unmarked for gender, which will trigger the default masculine form on the adjective/participle. This happens when conjuncts do not match in gender, but it also sometimes surprisingly happens when all conjuncts have identical gender specifications. In particular, in the case of gender-mismatch nouns like *vojvoda* 'duke' or *tata* 'dad', CoordP is unspecified for gender because a single conjunct contributes conflicting gender information.

Second, CoordP will be unmarked for gender when at least one of its conjuncts is not specified for an appropriate gender value. Neuter illustrates this: in contrast to CoordPs with all masculine or all feminine singular conjuncts, CoordPs with all neuter singular conjuncts fail to trigger the expected neuter plural form. I argued that this supports a binary feature approach to gender, based on [±masculine] and [±feminine] features, and in which neuter is represented with two minus values. On the assumption that only plus values are relevant for calculating gender of the whole CoordP, a neuter conjunct will always fail to contribute the necessary value.

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Cornell University
Department of Linguistics
213 Morrill Hall
159 Central Avenue
Ithaca, NY 14853-470, USA
[md682 (at) cornell.edu]