

Morphology-Free Syntax: Two Potential Counter-Examples from Serbo-Croat*

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1. Introduction

An important aspect of Wayles' work is his combined interest in the small and the large: he is very interested in the detail, the individual items of language, and at the same time in how these impact on larger-scale generalizations. For instance, his (1978) paper on the Russian verb *výgljadet'* 'appear' focuses on this single verb, whose stressed prefix suggests it would be perfective, according to the general rule, yet it is imperfective.

In this paper I look at the very general principle of morphology-free syntax and consider two potential counter-examples from Serbo-Croat. Following Wayles' usage in Corbett and Browne 2009, I use "Serbo-Croat" as a linguistic cover term for Bosnian, Croatian, Montenegrin, and Serbian; an alternative is Central South Slavonic. The first example has been discussed previously, and is recapitulated in order to highlight the type of argumentation involved. It concerns conjoined noun phrases (the "carelessness and capriciousness problem"). The second has received little attention, and is our main focus. It may be summarized as the "two colleagues problem."

2. Morphology-Free Syntax

Just as we recognize different components in grammar (syntax, morphology, phonology, and so on) so there are different features appro-

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priate to these components. In addition, there are features which cross the component boundaries. The relevant type here are morphosyntactic features, which have an effect both in syntax and in morphology. The typical morphosyntactic features are gender, number, person, and case. Morphological features are those which characterize variations in form without reference to syntax. The most obvious example is inflectional class. We use an inflectional class feature to represent the fact that morphosyntactic specifications (such as NUMBER: singular, CASE: dative) are realized differently according to the class of the particular item.

Once we accept purely morphological features, we do not expect to find rules of the type:

*nouns which inflect according to inflectional class II are placed last in the noun phrase, while all others are placed first.

The intuition that such rules are not possible is what is behind the principle of “morphology-free syntax” (Zwicky 1996: 301). Syntax does not have access to purely morphological information.

On the one hand this principle may seem obvious. The whole point of conjugations and declensions is that they describe lexical items which are morphologically different but the same otherwise. “Of course” the word order properties of nouns do not depend on how they inflect. And since the principle accords with our intuitions about language and is adhered to in so many instances, it is worth trying to maintain it by scrutinizing apparent counter-examples with suspicion and rigor. Yet, on the other hand, linguists occasionally propose analyses which are not in accord with the principle, and do so almost nonchalantly, as though the violation were of no great import.

Two such potential violations have been suggested on the basis of Serbo-Croat data. We look carefully at each in turn. First we need some basic facts about the morphology of nouns.

3. Key Facts about Serbo-Croat Noun Inflection

Examples of the main Serbo-Croat declensions are given in Table 1.

Table 1: Serbo-Croat Noun Declensions

SINGULAR:

	I	II	III	IV
NOMINATIVE	zákón 'law'	žèna 'woman'	stvâr 'thing'	sèlo 'village'
VOCATIVE	zákone	žèno	stvâri	sèlo
ACCUSATIVE	zákón	žènu	stvâr	sèlo
GENITIVE	zákona	žènē	stvâri	sèla
DATIVE	zákonu	žèni	stvâri	sèlu
INSTRUMENTAL	zákonom	žènōm	stvârju/stvâri	sèlom
LOCATIVE	zákonu	žèni	stvâri	sèlu

PLURAL:

	I	II	III	IV
NOMINATIVE	zákoni	žène	stvâri	sèla
VOCATIVE	zákoni	žène	stvâri	sèla
ACCUSATIVE	zákone	žène	stvâri	sèla
GENITIVE	zákōnā	žénā	stvârī	sèlā
DATIVE	zákonima	žènama	stvârīma	sèlima
INSTRUMENTAL	zákonima	žènama	stvârīma	sèlima
LOCATIVE	zákonima	žènama	stvârīma	sèlima

These are the major declensional classes, each containing thousands of nouns. There are smaller, irregular types, and several nouns which fit broadly into one of these types but with some additional specification (for instance, predictable mutation of the final consonant of the stem).¹

¹ The subgender of animacy is an additional differentiating factor. Nouns of inflectional class I have the accusative singular as the genitive, if they denote an animate: thus *muž* 'man, husband', accusative *muža*. Animacy is morpho-syntactically relevant, being involved in agreement. For agreement, all animate masculine singular nouns are involved, irrespective of inflectional class; see Corbett (1991: 161–65) for details. Thus the nouns we discuss below, like *kolega* 'colleague', have a unique accusative (being in inflectional class II) but agreement shows accusative-genitive syncretism: *mog kolegu* 'my colleague'.

The point is that we need at least these four types. We have given them numbers, to avoid prejudging their status; more traditional names would be masculine *o*-stem (I), *a*-stem (II), *i*-stem (III), and neuter *o*-stem (IV).

The evidence for distinct dative and locative case values is rather limited in the modern language; there is a prosodic difference, and that for a restricted number of nouns. More generally, as can be seen from our examples, the position of the stress may move within a paradigm, and the length and tone of the stressed syllable may change. These distinctions may also be modeled using morphological features. Note that these prosodic possibilities are orthogonal to the segmental information we are focusing on: thus not all the nouns in inflectional class I belong to the same prosodic class as *zakon* 'law' (see Gvozdanović 1980 and Lehiste and Ivić 1986).

What is the motivation for this account? We wish to have rules of syntax which, for example, have the effect of requiring the object of a transitive verb to be in the accusative case (unless the verb is specified otherwise in its lexical entry). This regularity obtains equally, whether the case value is realized by a suffixed *-a*, *-e*, *-i*, *-o*, *-u*, or indeed by a bare stem. The syntax does not have access to these distinctions.

The syntax does have access to the morphosyntactic feature GENDER, as shown by agreement, and so we should consider the relation of this feature to morphological class. Following a common typological pattern (Corbett 1991: 34–50), Serbo-Croat assigns nouns to genders according to both semantic and morphological information. For sex-differentiable nouns, those denoting males are masculine and those denoting females are feminine. Thus *otac* 'father' is masculine and *majka* 'mother' is feminine. For the rest, nouns in inflectional class I are masculine, those in classes II and III are feminine, and those in IV are neuter. Where the criteria conflict, the semantic generalization takes precedence, in conformity with a cross-linguistic pattern; thus *Nikola* 'Nicholas' denotes a male (requiring masculine), belongs to inflectional class II (requiring feminine) and is masculine: *Nikola je došao* 'Nicholas has arrived' in which *došao* is unambiguously masculine. Note that it is indeed the inflection and not the phonology which counts. *Zakon* 'law' and *stvar* 'thing' both end in a consonant, in the

This fits with the discussion in section 5, but does not directly affect the argument.

nominative singular, but belong to different inflectional classes and are of different genders. Equally, *žena* ‘woman’ and *stvar* ‘thing’ inflect very differently, but they are of the same gender. They take the same agreements, for instance: *ova žena* ‘this woman’ and *ova stvar* ‘this thing’, where *ova* is feminine singular.

4. Problem I: Resolution Rules

We now come to the first suggested rule of Serbo-Croat syntax which made reference to a morphological feature (the discussion here follows Corbett and Baerman 2006). It was suggested by Gudkov (1965: 174) that gender resolution can operate in part according to the inflectional class (rather than the gender) of the nouns heading the conjuncts. This was no wild claim. The data which Gudkov put forward deserve careful consideration, and his claim was taken up and repeated in the literature.

Before Gudkov, the situation with regard to gender resolution could be summarized like this. When noun phrases are conjoined, the basic rules are:²

1. if all conjuncts are feminine, the resolved form is feminine;
2. in all other instances the resolved form is masculine.

Thus the masculine is used if we have masculine and feminine conjoined, or feminine conjoined with neuter, or even for neuter conjoined with neuter. Examining texts and working with consultants has produced very large numbers of instances in accord with the rules as stated above (see Corbett 1983: 187–88 for examples). And this is how things “ought” to be: we have syntactic rules referring to the morpho-syntactic feature GENDER. However, Gudkov (1965) found some examples of masculine being used as the resolved form, even though all the conjuncts were headed by feminine nouns. His examples were primarily like this one (hence our label the “carelessness and capriciousness problem”):

² Subsequent research showed that the picture is more complex (see references at the end of this section), but these rules give an appropriate context for the original analysis to be discussed. Similar rules are found in the most closely related language, namely Slovene (Lenček 1972).

- (1) Vređa-l-i su ga nebrig-a i
 offend-PST-PL.M AUX.3PL 3SG.ACC carelessness(F)-SG and
 lakomislenost Tahir-beg-ov-a.
 capriciousness(F)[SG] Tahir-beg-POSS-F.SG

‘Tahir-beg’s carelessness and capriciousness offended him.’

(Andrić, *Travnička Hronika*; cited in Corbett 1991: 301)

Both conjuncts are headed by nouns which are feminine, yet there is masculine agreement. One of the nouns (*lakomislenost* ‘capriciousness’) is of the smaller inflectional class of feminines, type III, and according to Gudkov it is this which allowed for masculine agreement. (There are sufficient examples like (1) for us to be confident that they are not accidental, but we also find many similar examples with feminine agreement, as we would have expected according to the rule given.) In (1) the inflectional types are mixed; it is this mixing of inflectional types which makes masculine agreement possible, according to Stevanović (1974: 129). However, Gudkov also found an example, with nouns only of the *kost* ‘bone’ type, again with masculine agreement (and I have found further such examples). So it appears rather that if all the conjuncts are feminine, and they include one headed by a noun of the inflectional class labeled III in Table 1, then masculine agreement is possible.

This is a disturbing conclusion, but one which was accepted and reproduced in the literature. We have a syntactic rule referring to a purely morphological feature, the inflectional class of nouns. And if this is possible, then in principle the outlandish rule given in the introduction is potentially available. I therefore started looking for an alternative analysis.

In fact Gudkov himself provided a key piece of evidence. Several years after his original article, he noticed that even when all conjuncts are headed by nouns of inflectional class II, there are occasional instances of masculine agreement (Gudkov 1974: 61):

- (2) Štul-a i štak-a bi-l-i su sve
 wooden.leg(F)-SG and crutch(F)-SG be.PST-PL.M AUX.3PL all
 što je tadašnja medicina mogla da mu
 that AUX.3SG of.that.time medicine could that 3SG.DAT
 pruži.
 offer

‘A wooden leg and a crutch were all that medical science of that time could offer him.’

(M. Popović, *Vuk St. Karađić*)

Examples like this are not common, but can be found, as in this one which I noted:

- (3) Žustrin-a sa koj-om je pisa-o i
 speed(F)-SG with which-F.SG.INS AUX.3SG write-PST.3SG.M and
 lakoć-a sa koj-om je nalazi-o
 ease(F)-SG with which-F.SG.INS AUX.3SG find-PST.3SG.M
 reč-i i poređenj-a zagreja-l-i su
 word-PL and comparison-PL warmed-PST-M.PL AUX.3PL
 ga, i konzul oseti nešto kao olakšanje.
 3SG.M.ACC and consul feel[AOR.3SG] something like relief
 ‘The speed with which he wrote and the ease with which he found words and comparisons encouraged him, and the consul felt a kind of relief.’

(Andrić, *Travnička Hronika*)

This shows that the idea that the rule depends on inflectional class is probably wrong. However, we are still without an analysis. The next piece of evidence is that in all the difficult examples, those with feminine conjuncts but masculine agreement, the noun phrases denote inanimates. None of the examples I have found, in texts or in the linguistic literature, have masculine agreement when the feminine nouns denote persons.³ Thus we have a semantic condition: if all conjuncts refer to females, the feminine must be used; if not, both masculine and

³ Ljubomir Popović informs me (personal communication) that he has found rare examples even of this type in written text.

feminine agreement are possible if all conjuncts are headed by feminine nouns.

Though we are making progress, we are still not free of the problem of morphology intruding into syntax. We still need to explain why most examples with feminine conjuncts and masculine agreements involve a noun of inflectional class III. In Corbett (1991: 302–03) I suggested this solution. Inflectional class III includes many abstract nouns and very few animates. In real texts, examples of conjoined noun phrases almost always have conjuncts which are consistent in semantic terms: they are all animate or all inanimate. Putting these two points together, it follows that when a feminine noun of class III is one of the conjuncts then other conjuncts will normally be inanimate too. For such situations the use of the feminine agreement form will have no semantic justification (unlike its use with animate conjuncts which denote females). It appears that the gender resolution rules are increasingly determined by semantic considerations.⁴

Thus the apparent effect of inflectional class is an indirect indicator of the semantic distribution of the nouns over the inflectional classes. We do not need a syntactic rule referring to inflectional class.⁵ For further discussion of resolution in Serbo-Croat see Megaard (1976), Leko (1986: 220–43), Wechsler and Zlatić (2003: 171–95), and Corbett (2006: 262).

The point of going over this ground is to draw out the following points. Gudkov's original suggestion was plausible. However, it ran counter to the principle of morphology-free syntax, and so required critical examination. When investigated further, as Gudkov himself showed, the analysis which contravened the principle of morphology-

⁴ Ranko Matasović (personal communication) gives another argument supporting this conclusion: if we take conjoined indeclinable proper names for females, like *Ingrid* and *Ines*, then only the following is acceptable: *Ines i Ingrid su pjevale* 'Ines and Ingrid were singing', with a feminine plural verb. (**Ines i Ingrid su pjevali* with masculine agreement is completely ungrammatical in his view.)

⁵ Of course, I have not proved that inflectional class has no effect on the choice of agreement in conjoined structures, only that there is a better explanation for the currently available facts. It is theoretically possible that, if we control for the semantic type of the noun phrases (animate/inanimate concrete/inanimate abstract), inflectional class might still play a role. I have no evidence to suggest that this is true, and predict that it is not.

free syntax did not actually cover the data. The analysis which respects morphology-free syntax gives us a clearer view of what is going on, and the way in which the language is developing.

5. Problem II: Numeral Phrases Involving Hybrid Nouns

Our second problem involves phrases like this:

- (4) *dve kolege*
two colleagues

I have not included glossing here, since it is far from obvious, and opting for one possible glossing would predetermine the analysis. The issue is:

1. normally *dva* 'two' is used for masculine and neuter nouns, and *dve/dviije* for feminines;⁶
2. *kolega* 'colleague' belongs to a class of nouns whose semantics and form do not match, since they denote (or can denote) males, but inflect according to class II;
3. thus the form of the numeral appears to be sensitive to the inflectional class of the noun.

This appears to be a problem for morphology-free syntax. Indeed, when writing about numerals and the fate of the dual, Naylor put it like this:

In Serbocroatian, on the other hand, it is declensional type which takes precedence over gender and such masculine stems shift to the feminine gender, i.e., *dve dobre kolege* like *dve dobre žene*. (This may also be due to the fact that the nominative plural of Serbocroatian distinguishes masc/fem/neuter which Russian does not.)

Naylor (1977: 93)

⁶ Here *dve/dviije* are equivalent forms, according to the different variants, *ekavski* and *ijekavski*, and this option does not bear directly on the problem here.

Here Naylor explicitly talks of declensional type taking precedence; this suggestion is in conflict with the principle of morphology-free syntax.⁷

We should note that *dve kolege* is not the only possibility. We find instances of *dva kolege* 'two colleagues' with the masculine form of the numeral. A clear illustration comes from the well-known film by Krešo Golik entitled *Imam dvije mame i dva tate* (*I Have Two Moms and Two Dads*, 1968). That is the official name of the film, produced and filmed in Zagreb, and a Google search on July 25, 2008 produced 2880 hits for this form, with the masculine *dva*). However, there were 49 hits for the title with the problematic form: "Imam dvije mame i dvije tate", in which *dvije tate* 'two Dads' is comparable to Naylor's *dve kolege*. And more generally, quite apart from the film title, we find a substantial majority of instances of *dva tate*, and a sizable minority of *dve/dvije tate*. There is certainly variation, synchronically and diachronically. This will prove helpful, but it is not our main concern. Our problem is that anyone at any time should have been able to say *dve kolege* 'two colleagues', if this means that the form of the numeral was determined by the inflectional class of the noun.

It is also worth saying that for some of the relevant nouns it could be the case that a given instance involved female referents (for instance, *kolege* 'colleagues' could, under certain circumstances, include some women as well as men). We therefore concentrate on instances like *tata* 'Dad', *vladika* 'bishop', and *papa* 'pope', where we can avoid this complication, and where the use of *dve/dvije* 'two' in the feminine form is a real problem.

We need to investigate in turn the numeral, the form of the noun in this construction, the noun type, and then return to the numeral-noun combination.

⁷ A referee suggests that examples like *dve kolege* could be due to assonance; this suggestion would put us out of the frying pan and into the fire, since it suggests a phonological rule operating in syntax. Besides being morphology-free, syntax is generally taken to be phonology-free, and counter-examples to this principle would be even more serious than a counter-example to morphology-free syntax.

5.1. The Numeral

The Slavonic numerals are notoriously tricky; see, for instance, Popović 1979 and Corbett 1993. The particular complexities with the numerals *dva/dve/dviije* 'two', *tri* 'three', and *četiri* 'four' arise from the loss of the dual, as has been noted in many accounts (for instance, Naylor 1972 and Mayer 1973). In Serbo-Croat, *dva* 'two' is used with masculine and neuter nouns, and *dve/dviije* with feminines.

5.2. The Form of the Noun

We should now ask what is the form of the noun required by the numeral (when it is *dva/dve/dviije* 'two', *tri* 'three', or *četiri* 'four'). Let us start from the more straightforward instances (those involving ordinary nouns). There are two approaches: one is to describe the form in terms of the available morphosyntactic features, the other is to claim that it is a special form in the paradigm. For masculine and neuter nouns the form taken is identical to the genitive singular. For example, *dva grada* 'two cities', where we have a genitive singular form of the noun. The plural has an augment, *gradovi* 'cities'. With feminines, it is less obvious. For some nouns the form could be genitive singular or nominative plural, since the forms can be syncretic. This is always so for nouns of class III. For class II nouns, however, there can be prosodic differences,⁸ and where there is a difference the form required by the numeral is the nominative plural.⁹ Thus some would have a complex rule, according to which the form required by the numeral varies according to the gender of the noun. The alternative is to say that there is a special additional form in the paradigm, required precisely for use in phrases with *dva/dve/dviije* 'two', *tri* 'three', or *četiri* 'four'. This would be akin to the "quantification form" (Naylor 1977) or the ad-

⁸ For nouns of type II there are different factors to consider. There are potential prosodic differences between the genitive singular and the nominative plural. First, for some nouns the accentuation of the stem differs. And second, for nouns of type II in general, the genitive singular inflection has a long vowel, but this latter is a distinction which not all speakers retain

⁹ Importantly, we can see the difference even with the nouns we are specially interested in. *Sluga* 'manservant' has the genitive singular *slúgē* versus nominative plural *slúge* (Browne 1993: 322), and it is the nominative plural that we find with *dve/dviije*.

numeral proposed for Russian (see Mel'čuk 1985: 430–37; discussed in Corbett 2008: 22–23). Browne (1993) takes this approach, labeling the form simply the “234 form.”¹⁰ Note that it is a non-autonomous form in Zaliznjak's sense (1973: 69–74) since it has no unique form: it is always syncretic with some other form in the paradigm.

At first sight, the analysis of the form of the noun is just another side of this complex issue, and one that does not help us in understanding morphology-free syntax. But there is a route it might open up. Given that in the first approach we need to refer to number, perhaps we could use this as a way of keeping the agreement of the numeral morphology-free. Could we propose that the numeral agrees with the gender of the noun when it is plural? Of course, for the majority of nouns, this will make no difference, since they are of the same gender in the singular and the plural. But for the nouns we are interested in, that is not so straightforwardly the case. And it is not unreasonable that a feature specification of the numeral would be determined by the plural. However, this possible solution fails. Serbo-Croat has several heteroclite nouns, with different declension in the singular and plural. Gender can be assigned according to inflectional class, and so may be different in the singular and plural (see Table 2).

Table 2: The Noun *oko* ‘eye’

	SINGULAR		PLURAL	
Form (Nominative)	oko		oči	
Inflectional Class	IV		III	
Example	njezin-o	oko	njezin-e	oči
	her-NOM.SG.N	eye	her-NOM.PL.F	eyes
	‘her eye’		‘her eyes’	
Gender	neuter		feminine	

The noun *oko* ‘eye’ declines according to class IV in the singular, and is neuter, while in the plural (*oči* ‘eyes’) it declines according to class III and is feminine. Such nouns are the ideal test for our suggestion. In fact we find *dva oka* ‘two eyes’ with the genitive singular of the noun, and neuter agreement of the numeral (identical to masculine).

¹⁰ See Franks (1995: 125, fn. 8 for discussion).

We find thousands of such examples. On the web one can find just a handful of examples of *dve oči* ‘two eyes’, with feminine agreement. Hence the idea of trading directly on the gender of the noun in the plural is not adequate.

5.3. The Noun Type

The type of noun involved in the construction we are interested in, namely *tata* ‘Dad’, is typologically unusual. The inflectional paradigm is class II, like *žena* ‘woman’ but these nouns denote males. The mismatch looks like that found in Russian or Latin. In those languages, for similar nouns (Russian *djadja* ‘uncle’ and Latin *nauta* ‘sailor’), given that they are sex-differentiables, sex determines gender. Yet in Russian, *djadja* ‘uncle’ is completely masculine: all the agreements are masculine no matter what.

Now if Serbo-Croat were like that, in having such nouns being uniquely masculine, but also retained the current situation with the numerals, then there would be a real problem for morphology-free syntax. But Serbo-Croat has extra complexity. First it preserves the three genders in the plural—three different sets of agreements. Nouns like *tata* ‘Dad’, *vladika* ‘bishop’, and *papa* ‘pope’ are clearly masculine in the singular. However, in the plural, they can be masculine or feminine. Here is a striking example:

- (5) Pap-e su **napusti-l-e** Rim i **obitava-l-i** u
 pope.PL AUX.3PL leave-PST-F.PL Rome and live-PST-M.PL in
 Avignon-u u Francusk-*o*j od 1305 do 1377
 Avignon-SG.LOC in France-SG.LOC from 1305 to 1377
 godin-e.
 year-SG.GEN

‘The popes left Rome and lived in Avignon in France from 1305 to 1377.’

(wapedia.mobi/hr/Papa, accessed 11/23/2007)

Here we see the same controller (*pape* ‘popes’) controlling first feminine then masculine agreement. This is important since it shows that there is variation not just across time or space, but that a single individual can use both agreements. Nouns of this type do not control

a single set of agreements, as canonical nouns do, rather they are “hybrids,” controlling different agreements, dependent in part on the target. Hybrids are not particularly unusual. The Serbo-Croat hybrids are special, in being hybrids specifically in the plural, which is typologically unusual. (For details of the agreements of these nouns, see Corbett 1983: 14–17 and references there.) Thus these nouns, when plural, can control syntactic (feminine) and semantic (masculine) agreement. They are subject to the usual constraints on such agreements (Corbett 2006: 206–37). For instance, for parallel targets (the two verbs in (5)) the nearer may show syntactic agreement while the more distant shows semantic agreement, but I have no instance of the reverse in this construction.

There is a large inventory of these hybrid nouns in Serbo-Croat, including: *komšija* ‘neighbor’, *gazda* ‘landlord, boss’, *tata* ‘Dad’, *kolega* ‘colleague’, *sluga* ‘manservant’, *papa* ‘pope’, *kalfa* ‘journeyman’, *mušterija* ‘customer’, *zanatlija*, ‘artisan’. The list is longer in Serbo-Croat than in several other Slavonic languages because there are additional derived nouns in *-ija*, *-lija*, and *-džija* (like the last two just given). A good list can be found in Babić (1973: 205–06). Nouns of this type are discussed in various sources, though not generally with any mention of numerals. Marković (1954) includes a wealth of textual data, and Wechsler and Zlatić (2003: 39–44, 70–71) provide a more recent discussion.

5.4. Back to the Construction as a Whole

This is little discussed. Herrity (1977: 269) states that the form found in the standard language is *dve sluge* ‘two manservants’, but he also gives examples with other usage. He cites these examples from the writer Milovan Vidaković (1780–1841), (Herrity 1977: 267, cited from Kašić 1968: 112): *dva sluge* ‘two manservants’ and *dva najbolje vojvode* ‘two best generals’. This shows us once again that there is variation, at different times and in different places; for the situation in the dialects, see Neweklowsky (1983). Ranko Matasović (personal communication) says that *dve sluge* is favored in the east, and *dva sluge* in the west, which certainly fits with the data I have obtained to date.

What then can we say about examples like *dve kolege* ‘two colleagues’? The point is that nouns like *kolega* ‘colleague’ are typologically unusual. They are hybrids, since the agreement they take de-

pendes in part on the agreement target, but this is restricted to the plural. When plural, they allow both syntactic agreement (feminine) and semantic agreement (masculine). The distribution of the two types of agreement is subject to the usual constraints. For instance, the syntactic domain in which syntactic agreement is most likely is in attributive position, and that is indeed true for nouns like *kolege* ‘colleague’ (Corbett 2006: 217).¹¹

Nouns like *tata* and *kolega* are hybrids, and as such they fit into patterns recognized cross-linguistically for such nouns. This fact is something that has to be a part of their lexical entry to account for the ordinary types of agreement. Since they are hybrids, it is not surprising that *dve/dviije* (syntactic agreement) and *dva* (semantic agreement) are possible with them. But this is nothing special about the numeral phrase. Rather it follows from the fact that these nouns are hybrids. The syntactic rule of agreement does not need to have access to the inflectional type of these nouns, but simply to the fact that they are hybrids.

6. Conclusion

We have considered two possible counter-examples to the principle of morphology-free syntax. In each case we have seen that the analysis which runs counter to the principle does not account for the data. By seeking an analysis in accord with the principle, we have made some progress in understanding the two constructions. This is not to say that we have given an adequate account of either. They both remain challenging, both in terms of understanding the detail of how they work in Serbo-Croat, and the implications of those facts for a more general theory of morphology and syntax.

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¹¹ We find occasional examples with numerals showing mismatches. The example cited above from the nineteenth century writer Vidaković, *dva najbolje vojvode* ‘two best generals’, indicates what can occur. Note that we find the semantically agreeing *dva* outside the syntactically agreeing *najbolje*.

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