

The two faces of agreement

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The two faces of agreement

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The goal of this discussion note is to argue that the complex facts of hybrid agreement in Serbo-Croatian can and should be accounted for by assuming that only two sets of features are relevant to agreement: a syntactic set and a semantic set. This is in opposition to existing proposals that claim that two distinct sets of syntactic features are required in addition to the set of semantic features in order to account for those agreement facts (Wechsler & Zlatić 2000, 2003). The proposal defended here with two sets of agreement features is shown to be superior to the alternative with three feature sets because it not only is simpler and accounts for the facts just as well, but it also does not make some incorrect predictions that the alternative makes when crucial facts are considered.*

Keywords: agreement, hybrid agreement, concord, semantic agreement, Serbo-Croatian

It is an accepted view in linguistics that agreement phenomena may reflect either the grammatical, or syntactic, features of the agreement trigger or its semantic, or pragmatic, features, yielding a distinction between syntactic agreement and semantic agreement (as in Corbett 1979, 1983, 1991). Consequently, nouns and other agreement triggers come equipped with these two sets of features: grammatical agreement features and semantic agreement features. Wechsler and Zlatić (2000, henceforth W&Z, and in subsequent work, Wechsler & Zlatić 2003) argue for a theory of agreement in which a noun triggers three different types of agreement, reflecting the three different sets of features that it carries. These three sets of features are referred to as CONCORD, INDEX, and SEMANTIC, or pragmatic, features.¹ Broadly, concord features, which are close to the traditional syntactic features, are used for noun-phrase-internal agreement; index features, which are somewhere between the traditional syntactic features and the traditional semantic features, are used for agreement of a noun phrase with elements external to it; and semantic features are relevant for pronominal coreference. This yields the possibility that one and the same noun may have three distinct sets of fea-

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¹ The features in these three sets are partially overlapping: concord consists of case, gender, and number; index consists of person, gender, and number; and semantics includes, in addition to many features that are irrelevant for agreement, an opposition based on sex that classifies entities as male, female, and unsexed and an opposition based on quantity that classifies entities as aggregate and nonaggregate. It is important to note that each of these features is different, even when the same name is used to refer to them: concord gender is a different feature from index gender, and the same can be said about concord number and index number. This is necessary because they can have different values. Similarly, the sex-based opposition is different from both concord gender and index gender and the same can be said about the quantity-based opposition in relation to number. For ease of exposition, however, we refer to the sex-based opposition as (semantic) gender and to the quantity-based opposition as (semantic) number and use the same terms for their values as for syntactic gender and number respectively. A set of constraints can be assumed, as by W&Z, that provide the unmarked, or matching, correspondence among these feature sets; for expedience, we often refer to pairs of features that satisfy, or do not satisfy, the relevant correspondence constraint as having the same, or different, values respectively.

tures, as in the following example from Serbo-Croatian (S-C), which is the language that provides the data for W&Z's arguments for their proposal.²

(1) *braća* 'brothers' (agreement features according to W&Z):

CONCORD	$\left[\begin{array}{l} \text{NUMBER} \text{ SG} \\ \text{GENDER} \text{ F} \end{array} \right]$	INDEX	$\left[\begin{array}{l} \text{NUMBER} \text{ PL} \\ \text{GENDER} \text{ N} \end{array} \right]$	SEMANTICS	$\left[\begin{array}{l} \text{NUMBER} \text{ PL} \\ \text{GENDER} \text{ M} \end{array} \right]$
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We can refer to the idea proposed by W&Z of having two sets of syntactic features for agreement (concord and index), distinct from the semantic features, in place of the single set standardly assumed, as the DUAL SYNTACTIC AGREEMENT HYPOTHESIS (2SAH). This hypothesis has so far gone uncontested and has been used by other authors as the theoretical background for the analysis of agreement data from different languages (Dalrymple & Hristov 2010, King & Dalrymple 2004, Osenova 2003, Rezac 2011, among others).³ In this discussion note, we provide three types of arguments against the 2SAH: (i) it is a considerable complication of the theoretical framework arguably motivated by only a handful of words in S-C (two, to be specific) and the range of possibilities predicted by the hypothesis is greatly underused; (ii) it does not make the explanation of the facts any simpler, as a careful analysis of the relevant S-C facts reveals; and (iii) it actually makes some incorrect predictions. In contrast, the alternative framework with a single set of syntactic features relevant for agreement—the 1SAH—explains all of the facts correctly with a greater economy of theoretical means, as we demonstrate below.⁴

To make the comparison between the two hypotheses clearer, the 1SAH claims that the linguistic information of a word like *braća* is as shown in 2, where there are only two sets of features relevant for agreement.⁵

(2) *braća* 'brothers' (agreement features within the 1SAH):

SYNTAX	$\left[\begin{array}{l} \text{NUMBER} \text{ SG} \\ \text{GENDER} \text{ F} \end{array} \right]$	SEMANTICS	$\left[\begin{array}{l} \text{NUMBER} \text{ PL} \\ \text{GENDER} \text{ M} \end{array} \right]$
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1. ARGUMENT 1: MASSIVE COMPLICATION. There are several words that are analyzed by W&Z as having different values for the concord and index agreement features. Relevant examples of such words in S-C are *deca* 'children', *braća* 'brothers', *gospoda* 'gentlemen', *vlastela* 'landowners', and collective nouns ending in *-ad*. These words are all analyzed by W&Z as having feminine singular concord features and neuter plural or masculine plural index features. In addition, they are all semantically plural and

² The following abbreviations are used: F: feminine, M: masculine, N: neuter, SG: singular, and PL: plural. And combinations of them: F.SG (feminine singular), M.PL (masculine plural), and so forth.

³ But see Baker (2008:108), who notes some problems in W&Z's arguments for the 2SAH.

⁴ We have nothing to say about frameworks that are superficially similar to that of W&Z in that they include two sets of features relevant to agreement in the grammatical representation of nouns and noun phrases, but they differ in that one of these feature sets is identical to (or derivable from) the relevant semantic information. This is the case of Kathol 1999 and Kim 2004. Such a framework does not assume the 2SAH, since it does not assume that nouns and NPs include two syntactic feature sets relevant to agreement that are distinct from the corresponding semantic information. Some work that claims to adopt the W&Z framework (such as King & Dalrymple 2004) does not actually make use of the three-way distinction that is inherent in the 2SAH and would be compatible with the 1SAH. A special case is Wechsler 2011, where a different analysis of S-C is proposed (in terms of underspecification of concord features), but a divergence between concord and index features is in principle still allowed.

⁵ As pointed out by a referee, one could take issue with the idea that semantic agreement refers to semantic features, which correlate with properties of the referents, and assume instead that it refers directly to properties of the referents of the relevant expressions. Since our focus here is on whether two sets of syntactic features do, as W&Z argue, indeed facilitate a better analysis of agreement facts in Serbo-Croatian, we adopt their terminology and their point of view in all respects except for the issue of one or two sets of syntactic features.

animate and either masculine (denoting male individuals) or unspecified as to sex. However, not all of these words can be used to motivate the 2SAH, because the 2SAH implies three distinct sets of agreement features, and for some of these words the index features are claimed to have the same (or corresponding) values as the semantic features. *Gospoda* ‘gentlemen’ and *vlastela* ‘landowners’, for example, are analyzed by W&Z as being masculine plural in both their index and semantic feature sets (but see §3 below). Consequently, a single set of syntactic features, distinct from the semantic features, would be sufficient to account for their properties. We are left with *braća* ‘brothers’ and *deca* ‘children’ as the only instances of words that are claimed to have two sets of syntactic agreement features that are distinct from each other and from the semantic feature set. The feature sets associated with *braća*, in 1, show that each of the three postulated feature sets has different values for at least one of the features.

Not only does the 2SAH rest exclusively on two words in S-C: there is also a massive underuse of the range of possibilities that this hypothesis opens up. Under the standard view that there is only one set of syntactic features relevant to agreement, a language like S-C, with three gender values and two number values, is analyzed as having six classes of words in this area: one for each combination of gender value and number value (F.SG, F.PL, M.SG, M.PL, N.SG, and N.PL). Each of these classes of words has members in it. In a theory that incorporates the 2SAH, a language like S-C is analyzed as having thirty-six classes of words, since there are three gender values and two number values in concord and three gender values and two number values in index. Of these thirty-six classes, only eight have any members—the six classes whose index and concord features are identical and two more that have F.SG as concord features and either M.PL or N.PL as index features: the remaining twenty-eight classes are empty sets.⁶

Given that some of the words in the two classes with mismatched concord and index features have a match between index and semantic features, we are left with the words *braća* and *deca* as the only words that are argued to require three different sets of agreement features: a big price to pay in terms of theoretical complexity for a very small compensation in terms of explanation. In addition, since the 2SAH is claimed to be part not only of the grammar of S-C, but also of the basic architecture of all languages, an important complication of the theory of grammar is based on just two words of a single language. Let us see if these two words support that complication.

2. ARGUMENT 2: NO ADDED BENEFIT. W&Z argue for the 2SAH on the basis of examples like the following, where 3b is their example 36 (p. 815).⁷

- (3) a. Starija braća su stroga. Oni puno viču.
 old.F.SG/N.PL brothers AUX.PL strict.F.SG/N.PL they.M.PL much shout.PL
 ‘Older brothers are strict. They shout a lot.’
- b. Sreo sam braću. Ona su došla.
 met.M.SG AUX.1SG brothers they.F.SG/N.PL AUX.PL came.F.SG/N.PL
 ‘I met the brothers. They came.’

⁶ A referee notes that the 2SAH predicts a much larger range of variation than the 1SAH, since variation is also factored by the different targets of agreement. Within the 2SAH, each type of target of syntactic agreement has to be specified as being sensitive to either of the two syntactic feature sets, whereas for the 1SAH, only one option is available. While Wechsler (2011) sketches a possible diachronic explanation for the attested combinations, the disproportion between the expected and the empirically verified complexity remains as a problem.

⁷ Unless noted otherwise, example sentences reflect the judgments of the second named author and have been checked with over ten other native speakers of S-C.

The assumption that *braća* has F.SG concord features is supported by the form of the attributive adjective *starija* in 3a (see also W&Z's exx. 37 and 38). The claim that it is semantically M.PL (as it denotes a plurality of male individuals) explains the fact that we can use the masculine plural pronoun *oni* coreferential with the NP headed by *braća*. As an alternative to the masculine plural form of the pronoun, the form *ona* can be used, as shown in 3b: this form is argued to be neuter plural, which is explained by assuming that it agrees in index features (N.PL) with its antecedent *braću*, the accusative form of *braća*. (The case difference between *braća* and *braću* is irrelevant for the choice of pronoun form: either *oni* or *ona* can be used in a subsequent sentence.)

The crucial argument for assuming that *braća* has the index features of neuter plural is that it can be coreferential with the pronoun *ona*, as in 3b, and that *ona*, although ambiguous between feminine singular and neuter plural, has to be neuter plural in this particular example. As we see below, this conclusion is driven purely by theoretical considerations, not by empirical evidence. W&Z (p. 817) note that, due to a quirk of S-C morphology, in the nominative case only, the feminine singular form of nouns, as well as adjectives, pronouns, and participles, is homophonous with the neuter plural form. The glosses in 3b, as in other examples from W&Z, have been modified to reflect this homophony.⁸

The argumentation for assuming that *ona* and the participle *došla* in 3b are neuter plural, rather than feminine singular, is the following.

- (i) The finite verb is assumed to agree with its subject in index features;
- (ii) the finite verb form in 3b, *su*, is unambiguously plural;
- (iii) therefore, the subject of this verb in 3b, *ona*, has to have plural as an index feature;
- (iv) since *ona* can be either feminine singular or neuter plural, it has to be neuter plural in this example;
- (v) since *došla* agrees with *ona* in 3b, it also has to be neuter plural in 3b.

Consequently, the coreference of *ona* with *braću* in 3b forces W&Z to assume that *braća* is also neuter plural (in index features). This coreference cannot be an instance of semantic agreement, because *braća* is semantically masculine, hence the option of using the masculine form of the pronoun in 3a. It has to be an instance of syntactic agreement (agreement in index features), which entails that *braća*, like *ona* in 3b, has the index features of neuter plural.

The conclusion that *braća* is a neuter plural is based on the fact that the finite verb in the clause (the auxiliary *su* in 3) takes the plural form and on the assumption that the agreement between a subject and its verb is of the syntactic type. What is the evidence that the finite verb in S-C shows syntactic, rather than semantic, agreement—that is, it reflects the syntactic, and not the semantic, features of the subject? Just as pronouns may agree either in the syntactic or the semantic features of their antecedent, as evidenced by the choice of *ona* or *oni* in 3 to refer back to *braća*, we should consider the possibility that the finite verb signals the semantic agreement features of its subject.

In order to explain the facts in 3, a theory that endorses the 1SAH (rejecting the idea of splitting syntactic features into concord and index) would just have to assume the following:

⁸ This homophony may be related to a more widespread F.SG/N.PL syncretism in the nominative case in Indo-European languages. In Latin, for example, the nominative *bona* could be 'good.F.SG' or 'good.N.PL'. See Espinal 2009:n. 26 for more information, and Baerman 2004 for a general examination of syncretism.

- words like *deca* and *braća* are syntactically feminine singular and semantically plural and either masculine or compatible with either sex;
- adjectives, possessives, and participles that agree with them, in both attributive and predicative position, show syntactic agreement with them (i.e. feminine singular);
- finite verb forms show semantic agreement with a subject headed by a hybrid noun, following the principle in 4 below (therefore, a plural verb form is required to agree with *deca* or *braća*);
- a pronoun in the nominative may show either syntactic or semantic agreement with its antecedent, hence, the choice between F.SG *ona* and M.PL *oni* in 3a.⁹

(4) A singular finite verb is compatible only with a subject that is both syntactically and semantically singular. Otherwise, a plural finite verb must be used.¹⁰

A situation that clearly favors the 1SAH framework over the 2SAH framework is the construction involving secondary predication. The predicative adjective in this construction is in the instrumental case and agrees in gender and number with its subject. Unlike what happens in the nominative form, the instrumental form distinguishes feminine singular from neuter plural. What we see is that the secondary predicate is unambiguously feminine singular when agreeing with *deca*-type words, as shown in 5, W&Z's ex. 50 (p. 818).

(5) Ja smatram decu gladnom/*gladnim.
I consider children hungry.INST.F.SG/*INST.PL
'I consider the children hungry.'

W&Z can account for this fact, but only by stipulating that secondary predicates agree with their agreement target in concord features.¹¹ This is in opposition to primary pred-

⁹ A singular personal pronoun in a case other than nominative cannot have a plural referent. Therefore, non-nominative pronouns coreferential with *deca*-type words have to be semantically appropriate, that is, plural, not feminine singular. (There is a gender syncretism in the plural forms in all case forms but the nominative.) The nominative *ona* in 3b, though syntactically F.SG, has a plural referent, as reflected in the plural form of the verb, but no other case form of the pronoun accepts this syntax/semantics mismatch in number. Thus, in a discourse segment like (i), the F.SG pronominal clitic cannot be used, and only the plural yields a well-formed sentence. Here, W&Z and the present proposal make the same prediction.

(i) Poznajem tvoju braću. Sreo sam ih/*je; u prodavnici.
know.1SG your.SG.ACC brothers.ACC met AUX.1SG them/her in shop.LOC

¹⁰ This principle accounts also for the behavior of pluralia tantum nouns as in (i) (unless these are all also semantically plural, which would further simplify the picture, without clashing with our generalization) and for the polite forms referring to a single addressee as in (ii). At first sight, it makes wrong predictions for cases like (iii), but in our view, these cases do not involve a proper plural reference, but a singular reference in terms of an extensive measure function in the sense of Krifka 1998, as hinted at also by the mass quantifier in the predicate (*mnogo* 'much', never *mnog-i/a/e* 'many-M/N/F').

(i) Makaze [su oštre]/*[je oštra]. Pantalone su/*je se skratile/*skratila.
scissors.F are.sharp.F.PL/*is.sharp.F.SG trousers.F AUX.PL/*SG REFL shortened.F.PL/*F.SG

(ii) Vi ste divni.
you.PL are.PL wonderful.M.PL

(iii) Dvadeset kilometara nije/nisu mnogo/*mnogi.
twenty kilometers isn't/aren't much/many

A referee notes that polite forms in languages like French show a different pattern (e.g. Wechsler 2011), with a plural finite verb, but with the adjective in a copular construction in the singular, that is, showing semantic rather than syntactic agreement. While this is not incompatible with our view, we focus here on the analysis of agreement in S-C and refrain from any discussions of other languages.

¹¹ This construction does not fit well with the idea that the concord feature set includes case, in addition to gender and number. Whereas, in other constructions, concord agreement involves case identity, as well as

icates, which are stipulated to agree in index features (W&Z, p. 819). In contrast, in the 1SAH framework, the fact illustrated in 5 simply follows from assuming that adjectives show syntactic agreement, as noted above; consequently, the feminine singular form is required when agreeing with a *deca*-type word.

Another area in which the 2SAH fares no better than the 1SAH is in accounting for the facts of relative pronouns; indeed, these facts turn out to be more complex in a 2SAH framework than in a 1SAH framework. A relative pronoun of the *koji* series whose antecedent is a *deca*-type noun is in the F.SG form.¹² This is not obvious in the nominative form, which is ambiguous between F.SG and N.PL (as with personal pronouns), as shown in 6a. In nonnominative forms, the relative pronoun is unambiguously F.SG, as shown in 6b for the accusative form.

- (6) a. moja deca, **koja** su jako glasna
 my children WH.F.SG/N.PL AUX.PL very noisy.F.SG/N.PL
 ‘my children, who are very noisy’
 b. moja deca, **koju** nije briga nizašta
 my children WH.F.SG NEG.AUX care nothing
 ‘my children, whom nothing worries’ (or ‘who don’t worry about anything’)

The fact that the relative pronoun is unambiguously F.SG in nonnominative forms, but triggers plural agreement on the finite verb as in 6a, is accounted for by W&Z by assuming that relative pronouns have lexically specified concord features and are required to share their index feature set (as pronouns do in general) and their concord gender and number features (like attributive modifiers) with their antecedent. Notice, however, that whereas attributive modifiers share all of the concord features with the head noun, including case, which is assumed to be a concord feature, case has to be excluded from the feature-sharing relation of the relative pronoun and the head noun, because these two elements can be in different case forms. With these assumptions, W&Z explain that, when the head noun is a *deca*-type noun, the relative pronoun is in the F.SG form, but triggers plural agreement on the verb when nominative.

An analysis adopting the 1SAH simply has to assume that relative pronouns show syntactic agreement with their antecedent. This predicts that, with a head noun of the *deca*-type, the relative pronoun will be F.SG. The fact that the nominative form triggers plural agreement on the verb with a *deca*-type head noun follows from the assumption that a finite verb must be in the plural form if at least one of the two feature sets, the syntactic and the semantic, involves a plural value (see 4). Being a pronoun, the relative pronoun has the same referent as its antecedent, which is semantically plural in the case of a *deca*-type noun.¹³

identity in gender and number, the secondary predicate agrees in concord gender and number, but not in case, as the agreement trigger is accusative and the agreement target is instrumental.

¹² In certain case forms, such as genitive, a plural form is possible for some speakers with a *deca*-type noun as its antecedent as an alternative to the F.SG form, with a decrease in acceptability. We have nothing further to say about these plural forms of the relative pronoun, except that, within the analysis proposed here, they show semantic agreement with the head noun.

¹³ We leave aside here the so-called *što*-relatives, another type of relative clause in S-C discussed by W&Z, which include a resumptive pronoun in a nonnominative case form agreeing with the head noun. The resumptive pronoun is morphologically a pronominal clitic and, because it has to be in a nonnominative case form (as relativized subjects either do not involve resumption or involve a null resumptive pronoun), shows semantic agreement with the head noun, in accordance with n. 9.

In this section, we have shown that a theory such as that of W&Z, involving two distinct sets of syntactic features, does not have a broader empirical coverage than a theory using only one such set. In combination with the arguments from parsimony and over-generation, this presents the 1SAH as a much better candidate than the 2SAH.

3. ARGUMENT 3: INCORRECT PREDICTIONS. While the 2SAH framework can account for the facts discussed up to this point, even though certain ad hoc stipulations are required, it fails to account for the facts that follow. Example 7 is a mini-discourse involving two sentences. The second sentence contains a pronoun that is referentially dependent on the form *deci* of the first sentence.

- (7) Pričamo o deci.
 talk.1PL about children
 Ona se danas smatraju gladnom/*gladnim.
 they.N.PL/F.SG SE today consider.PL hungry.INST.F.SG/*INST.PL
 ‘We’re talking about children. They are considered hungry today.’

The pronoun *ona* in the second sentence of 7, although glossed as ambiguous between N.PL and F.SG, has to be N.PL in the analysis of W&Z because pronouns agree in index features with their antecedent. *Deca* is analyzed as having neuter plural index features and, so, these are the features that the agreeing pronoun *ona* has to reflect. However, if *ona* in 7 is neuter plural in index and, by default, also in concord, then the prediction that W&Z make is that the secondary predicate should be in the neuter plural form, given that secondary predicates agree in concord features with their subjects. Therefore, W&Z would incorrectly predict that the F.SG form *gladnom* should be bad as a secondary predicate in 7, and the plural form *gladnim* should be okay.¹⁴

In contrast, the theory sketched here that assumes the 1SAH predicts exactly the correct results without additional assumptions. The pronoun *ona* shows syntactic agreement with its antecedent *deci* and, therefore, both are feminine singular. The secondary predicate shows syntactic agreement with its subject *ona* and, so, is also feminine singular. Notice that the finite verb of the second sentence in 7 shows plural agreement with its subject, and that is because finite verb forms show semantic agreement and *ona*, although syntactically feminine singular, is semantically plural because, being coreferential with *deci*, it refers to a group. The semantic plurality of the pronoun in 7 is not stipulated, but follows from general assumptions about pronouns. Coreference between a pronoun and its antecedent implies that the two expressions have the same referent: if the referent of *deci* is a group (i.e. plural), the referent of the coreferential expression *ona* is also a group, being the same referent.¹⁵

There is a class of nouns, of which *gospoda* ‘gentlemen’ is a representative, that might seem to be problematic for the 1SAH. W&Z claim that the pronoun *ona* cannot take such a noun as its antecedent, as shown in 8 (W&Z’s ex. 40).

¹⁴ A proponent of the 2SAH could attempt to rescue the analysis by stipulating that pronouns copy the concord features of their antecedent except for the case feature. But, clearly, this would be an ugly ad hoc stipulation designed to salvage the theory. The pronoun *ona* would be lexically specified to have third-person N.PL index features (and there would be a homonymous *ona* with third-person F.SG index), and a rule would say that pronouns share not only the index features with their antecedent, but also the concord gender and number features. Curiously, this largely redundant rule is only needed to account for the cases in which the putative N.PL *ona* behaves as if it were its F.SG homonym.

¹⁵ The observation that a syntactically singular pronoun can have a semantically plural referent is unexpected given certain theoretical assumptions. In discourse representation theory (DRT), for example, a singular anaphoric pronoun can only have an antecedent in another sentence if it is an individual discourse referent (Kamp & Reyle 1993:346). This assumption needs to be revised in the light of the S-C facts discussed here.

- (8) Sreo sam gospodu_i.
 met AUX.1SG gentlemen.ACC
 a. *Ona_i su bila jako ljubazna.
 they.N.PL/F.SG AUX.PL were.N.PL/F.SG very kind.N.PL/F.SG
 b. Oni_i su bili jako ljubazni.
 they.M.PL AUX.PL were.M.PL very kind.M.PL
 'I met the gentlemen. They were very kind.'

This claim follows in W&Z's theory from the assumption that *gospoda*-type nouns have the same (i.e. matching) number and gender features in index as in semantics. Since *gospodu*, according to W&Z, is masculine plural in index and in semantics, it follows that it cannot agree with *ona* in either of these dimensions since *ona* is either N.PL or F.SG. Even though *gospoda*-type nouns are F.SG in concord, these features are claimed to be irrelevant for anaphoric relations.

However, a closer examination of the facts reveals a different situation. Most speakers accept the example in 8a as well-formed, as long as the pronoun is intonationally backgrounded.¹⁶ Moreover, all speakers have a strong judgment of the well-formedness of 9, with pro-drop. The null pronoun here clearly bears exactly the features that W&Z argue are excluded on a pronoun agreeing with *gospodu*: it has to be F.SG or N.PL, given the form of the agreeing participle and adjective, and if we also consider the singular form of the auxiliary, we must conclude that it is F.SG.¹⁷

- (9) Sreo sam gospodu. Bila su/je jako ljubazna.
 met AUX.1SG gentlemen were.N.PL/F.SG AUX.PL/SG very kind.N.PL/F.SG
 'I met the gentlemen. They were very kind.'

This turns a potential problem for the 1SAH into an argument in its favor. The homophonous N.PL/F.SG participle and adjective have to be analyzed as F.SG. In the 1SAH framework, this example follows from analyzing *gospodu* as syntactically F.SG: an agreeing (null) pronoun can have these features, which are morphologically realized on the agreeing participle and adjective and are optionally also reflected in the auxiliary. In contrast, W&Z incorrectly predict example 9 to be ill-formed: a (null) pronoun agreeing with a *gospoda*-type noun has to be M.PL, and these features have to show up on the agreeing auxiliary and predicate adjective. The assumptions made by W&Z cannot explain the fact that these words show F.SG agreement.

The claim that *gospoda*, in contrast with *braća*, has M.PL index features leads to another incorrect prediction: on the assumption that primary predicates agree with their subjects in index features, a primary predicate agreeing with *gospoda* should be in the M.PL form. The facts clearly contradict this prediction, as shown in 10.

¹⁶ And, in general, intonation plays an important role, and setting it right improves certain seemingly ungrammatical examples of agreement. Questions like why this is the case and what the relations are here go beyond our aims in this discussion note, but we may briefly speculate that weak pronouns are closer to clitics, which merely express the features necessary for the syntactic computations without really establishing reference, while strong pronouns always also refer. Importantly for our argument, the same observation about prosody holds of the examples involving the noun *braća* as in 3.

¹⁷ Unlike *braća* and *deca*, the noun *gospoda* 'gentlemen', which also displays hybrid agreement patterns, allows a singular finite verb, while *vlastela* 'nobility' requires it to be singular. This suggests that *braća* and *deca* present a separate subclass within the *-a* hybrid agreement nouns in S-C. For our model to capture the asymmetries in number agreement on the finite verb between these nouns, it suffices to specify that the lexical semantics of these nouns allows *gospoda* to establish reference to assemblies both as wholes and as pluralities, *braća* and *deca* only as pluralities, and *vlastela* only as wholes. Whether *gospoda* triggers singular or plural agreement on the verb depends on the type of reference established by the NP headed by that noun: singular if it refers to a whole, plural if it refers to a plurality.

- (10) *Gospoda su vesela*/*veseli.
gentlemen are.PL cheerful.F.SG/N.PL/*M.PL
'(The) gentlemen are cheerful.'

The only option to generate a well-formed expression is to use the form that is ambiguous between F.SG and N.PL. But since even W&Z do not find any grounds to assign *gospoda* a neuter gender feature, the only way to interpret it is as a F.SG form. This now strongly supports our analysis, which takes the adjective agreeing with *gospoda* in 10 to be F.SG rather than N.PL, that is, to simply enter syntactic agreement with its subject.

4. ISSUES FOR FURTHER RESEARCH. Another argument that W&Z use to show that *deca* and *braća* are neuter plural in index is drawn from the behavior of these nouns under coordination, compared with the behavior of regular nouns (i.e. nouns with matching gender and number in syntax and semantics). When coordinated, S-C regular feminine nouns ending in *-a* form plural denotations that trigger feminine plural agreement, but when a *deca*-type noun is coordinated with a regular feminine singular noun, the coordination triggers the default masculine plural agreement, as in 11 below.

- (11) *Jelena i deca su gladni*/*gladne.
Jelena and children are hungry.M.PL/*PL
'Jelena and (the) children are hungry.'

However, the behavior of regular nouns cannot be used to predict the behavior of hybrid nouns in coordination, as shown by the coordination of two hybrid nouns in 12.

- (12) *Braća i deca su smatrana gladnom*^(?)*gladnim*.
brothers and children are considered.F.SG/N.PL hungry.INST.F.SG ^(?)INST.PL
'Brothers and children are considered hungry.'

This example is highly unexpected under W&Z's assumption that *deca*-type nouns trigger plural agreement on their predicates. A coordination of two hybrid nouns with a plural denotation triggers feminine singular agreement. But this is possible because of their overall match, and the coordination still behaves as a hybrid noun: it is semantically plural and syntactically feminine singular.

What happens in 11 is probably that the mismatch in the semantic gender features of the conjuncts triggers breaking them into members and forming the plural from all the members introduced. These members are of a mixed semantic gender: one is feminine and the rest unknown—hence, the aggregate gender is that used for mixed plurals: masculine. Having shown that W&Z's argument does not hold, we refrain from further discussion of agreement in coordination, as it goes beyond the aim of this discussion note.

The claim here that the forms ending in *-a* and agreeing with nouns like *deca* and *braća* are not syntactically neuter plural but feminine singular raises the following question: why is it that precisely and only the bearer of finiteness (verb, auxiliary, or copula) shows semantic agreement with the subject? This is a legitimate research question, which probably deserves a separate paper, but let us try to speculate on the possible answer.

A possible explanation is that these facts instantiate a more general tendency of the exponent of finiteness to express semantically relevant, or interpretable, features of the subject, unlike the agreeing elements internal to the nominal expression or the verb phrase. In S-C, there are four features that are targeted by agreement with a noun: person, number, gender, and case, and different word classes express a different subset of these features. Attributive adjectives, predicates in copular constructions, and participles all agree with the respective noun in three of these four features: number, gender, and case. The bearer of finiteness agrees in person and number. Considering that case is

not interpretable on the noun, that is, not a semantic feature of the noun, a possible generalization is that, whereas word classes that express case express features of the noun that do not have a semantic representation in the noun phrase, the bearer of finiteness agrees only in those features that are interpretable on the noun, that is, features with a semantic representation in the noun phrase, and therefore in semantic number as opposed to syntactic number.

5. CONCLUSION. In summary, W&Z propose a theory of agreement that (i) is extremely complex in that it posits two sets of syntactic agreement features, instead of one, distinct from the semantic features relevant to agreement, for all languages, (ii) does not account for the facts it is designed to account for in a simpler way than a theory that assumes just one set of syntactic agreement features, in addition to the semantic features, and (iii) actually makes some incorrect predictions that the simpler theory does not make. In W&Z's theory, three sets of features relevant for agreement are specified for each noun, and different rules make reference to one or another of these sets of features in order to account for the various agreement phenomena (in a way that is claimed to capture Corbett's (1979) predictions based on the agreement hierarchy). Their arguments crucially depend on the behavior of the nouns *braća* 'brothers' and *deca* 'children', the only nouns that are claimed to have different featural specifications for the three feature sets proposed. The analysis specifies that certain agreeing elements (finite and nonfinite verbs, primary predicates, and optionally personal pronouns), when agreeing with these nouns, show neuter plural features, reflecting the index set of features, different from both the concord (feminine singular) and the semantic (masculine or feminine plural) features of the noun. Suspiciously enough, nominative forms of adjectives, participles, and personal pronouns in neuter plural are always identical to the corresponding feminine singular forms.

Our analysis adopts a simpler framework, with only two sets of features relevant for agreement, the syntactic and the semantic sets, which is the standard and traditional view of agreement. In order to account for the S-C data discussed, in broad outline we assume that all elements show syntactic agreement, except for those bearing finiteness, which are sensitive to the semantic agreement features, and pronouns, which often can show either type of agreement.¹⁸ With this we have shown that the data that was claimed to motivate the idea that syntactic features of agreement had to be split into two feature sets distinct from the corresponding semantic features is best analyzed with just one set of syntactic features of agreement and thus we can return to this simpler view of agreement. We conclude that there is no index set of features distinct from both the syntactic concord set of features and the semantic set.

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¹⁸ Notice that some of the S-C facts, according to the present analysis, are counterexamples to Corbett's (1979, 1991, 2006) predictions based on the agreement hierarchy. According to him, the further right in the hierarchy 'attributive < predicate < relative pronoun < personal pronoun', the more likely semantic agreement is to occur. Given that finite forms in S-C generally show semantic agreement and verbal predicates can be finite, Corbett's theory predicts that relative pronouns and personal pronouns should also show semantic agreement, although, as we have seen, both relative and personal pronouns can show syntactic agreement.

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