The wrong two faces

Stephen Wechsler, Larisa Zlatić

Language, Volume 88, Number 2, June 2012, pp. 380-387 (Article)

The wrong two faces

STEPHEN WECHSLER

University of Texas

LARISA ZLATIĆ

University of Texas and
Larisa Zlatic Language Services

1. INTRODUCTION. Alsina and Arsenijević (2012, henceforth A&A) argue against the Wechsler & Zlatić 2000, 2003 account of hybrid agreement with certain Serbo-Croatian (S-C) nouns, claiming that their alternative account is simpler and more empirically adequate.[1] But neither their analysis of these particular nouns nor their approach to agreement is viable. We defend the CONCORD-INDEX theory, arguing that it remains the better approach to agreement.

2. A&A'S SUPPOSITIONS ABOUT AGREEMENT IN S-C. A&A's analysis of mixed agreement with *deca*-type nouns rests on the following suppositions about S-C grammar.

(1) a. Supposition 1: Adjectives, possessives, and participles show syntactic agreement. (pp. 373, 378)

   b. Supposition 2: Finite forms agree both syntactically and semantically: '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.' (p. 373, ex. 4)

   c. Supposition 3: 'A singular personal pronoun in a case other than nominative cannot have a plural referent.' (p. 373, n. 9)

   d. Supposition 4: Pronouns can show either type of agreement. (p. 378)

Armed with these suppositions, together with the simple assumption that nouns like *deca* 'children' and *braća* 'brothers' are feminine singular, A&A claim to account for the hybrid agreement of these collective nouns.

But there are serious problems with A&A's proposal: suppositions 1 and 2 are falsified by much of the language, including very common, ordinary locutions, and supposition 3 is an unmotivated stipulation that obscures damaging counterevidence. A look at these problems helps illustrate the broader theoretical issues. Let us consider each of A&A's suppositions in turn.

According to A&A, adjectives, possessives, and participles show syntactic agreement (supposition 1). First- and second-person subjects, which are very common in speech, all falsify supposition 1. Adjective forms reflect the trigger's semantics, and not a syntactic feature.

(2) a. Ja sam   gladn-a.
       I AUX.1SG hungry-F.SG
       'I am hungry.' (spoken by a female)

   b. Ja sam   gladan.
       I AUX.1SG hungry.M.SG
       'I am hungry.' (spoken by a male)

---

(3) a. Ti   si   gladn-a.
     you AUX.2SG hungry-F.SG
      'You are hungry.' (spoken to a female)

   b. Ti   si   gladan.
     you AUX.2SG hungry.M.SG
      'You are hungry.' (spoken to a male)

With participles, too, the inflectional form reflects the sex of a first- or second-person controller.

Adjectival modifiers of (nonnominative) personal pronouns also contradict A&A's first supposition, as shown by honorific uses of the second-person pronoun (Wechsler 2004:272, ex. 38).

(4) [Vas   jadnu/jadnog/jadne]   niko   ne poštuje.
    you.ACC.PL poor.ACC.{F.SG/M.SG/PL} nobody NEG respect
     'Nobody respects poor you.'
     i. *jadnu* 'poor.ACC.F.SG': one female (formal) addressee
     ii. *jadnog* 'poor.ACC.M.SG': one male (formal) addressee
     iii. *jadne* 'poor.ACC.PL': multiple addressees

Gender and number on the adjective are semantically interpreted, as shown above.

Not only first- and second-person, but also many third-person subjects have this property. These include all proper names (examples in §4 below), as well as certain common nouns such as *sudija* 'judge' (Wechsler & Zlatić 2003:180, ex. 36).

(5) a. Taj   stari sudija je   dobro sudio.
     that.M old.M judge AUX.3SG well judged.M
      'That old (male) judge judged well.'

   b. Ta   stara sudija je   dobro sudila.
     that.F old.F judge AUX.3SG well judged.F
      'That old (female) judge judged well.'

The inflectional forms of the determiner, adjective, and participle all depend upon the sex of the judge, and not a syntactic gender feature.

Summarizing, many common varieties of S-C sentences contradict supposition 1, since the forms of possessives, adjectives, and participles are determined by the meaning and not the syntactic features of the trigger. At the same time, other triggers do determine syntactic agreement on these target types, as shown by some of A&A's examples.

Turning next to finite forms, A&A state in summary that they 'are sensitive to the semantic agreement features' (p. 378). That is how they explain the plural agreement with collectives like *deca* 'children'. But pluralia tante like *makaze* 'scissors' also determine plural on finite forms, in apparent syntactic agreement (p. 373, n. 10), as does the second-person pronoun *Vi*, even when used honorifically to refer to a single addressee. To allow for such cases, A&A propose that finite forms agree both syntactically and semantically, and designate the plural form as the 'elsewhere' or 'otherwise' finite form (A&A's supposition 2 in 1b above). According to supposition 2, S-C grammar places both a syntactic and a semantic condition on the singular form, and 'otherwise, a plural finite verb must be used' (p. 373, ex. 4).

But making the plural form the 'elsewhere' form leads A&A into deep water, when we consider the bigger picture. Subjectless sentences appear in singular, not plural (Wechsler & Zlatić 2003:Ch. 7, ex. 74). Also, infinitival and clausal subjects appear

with singular, not plural, finite forms (6a). The problem for A&A is that the subject is not SYNTACTICALLY singular (Wechsler & Zlatić 2003:Ch. 7, ex. 86).

(6) a. Mariju   je   iznenadilo [što je   on dao ostavku].
       Mary.ACC AUX.3SG surprised.N.SG that AUX.3SG he gave resignation
          'That he resigned surprised Mary.'

    b. …*Ali, ono   je   bilo   neminovno.
       … but it.N.SG AUX.3SG was.N.SG inevitable.
          'But it was inevitable.' (it = that he resigned)

Nor could A&A avoid this problem by positing a syntactic singular number feature on infinitives and clauses. By supposition 1, the neuter singular participle in 6a shows syntactic agreement, so if the clausal subject has syntactic phi-features then they must be neuter singular. Then by supposition 4, it should be possible to reference them with neuter singular pronouns. But this is impossible, as seen by the failed discourse continuation in 6b.[2] This contrasts with a nominal like the subject of 7a (Wechsler & Zlatić 2003:Ch. 7, ex. 86).

(7) a. Njegovo otpuštanje je   iznenadilo Mariju.
       his.N.SG firing.N.SG AUX.3SG surprised.N.SG Mary.ACC
          'His firing surprised Mary.'

    b. … Ali, ono   je   bilo   neminovno.
       … but it.N.SG AUX.3SG was.N.SG inevitable.
          'But it was inevitable.' (it = his firing)

So supposition 2 is falsified by clausal and infinitival subjects.

   Another problem for supposition 2 is the singular finite agreement with quantified noun phrases (QNPs) like *mnogo dobrih knjiga* 'many good books' (see Wechsler & Zlatić 2003:Ch. 7).

(8) Mnogo dobrih   knjiga   je/?su   na prodaju.
    many   good.GEN.PL books.GEN.PL AUX.3SG/?3PL on sale

    i. … One   su   sada jako skupe.
       … they.F.PL AUX.PL now very expensive.F.PL

    ii. … *Ono je   sada jako skupo.
        … it.N.SG AUX.SG now very expensive.N.SG
           'Many good books_i are on sale. They_i are now very expensive.'

Quantifiers with this property include quantity words like *mnogo* 'many', *malo* 'few', *pola* 'half', *dosta* 'plenty', and all of the numerals *pet* 'five' and higher. QNPs introduced by such quantifiers satisfy neither of A&A's conditions for singular agreement: they are neither syntactically nor semantically singular. As shown in 8.ii, such a QNP cannot be referenced with a neuter singular pronoun (Wechsler & Zlatić 2003:159). Yet the singular form of the finite verb is preferred.

   Like their rule for adjectives and participles, A&A's rule for finite verbs, supposition 2, seems to be incorrect. A&A have made the plural the 'elsewhere' form for finite elements, but in fact finite verbs lacking a syntactic trigger take singular, not plural, form.

   3. A&A's ACCOUNT OF HYBRID AGREEMENT WITH *deca*-TYPE NOUNS. A&A account for the hybrid agreement of *deca*-type nouns (*braća* 'brothers', *deca* 'children', etc.) by

---

[2] One can refer back to a clausal antecedent using the neuter singular demonstrative pronoun *to* 'that'. But the features of the demonstrative are not determined by agreement with the antecedent. The form *to* can refer to virtually any contextual or linguistic entity, including masculine, feminine, or neuter nominals.

positing that they have the syntactic features feminine singular. So nonfinite forms are feminine singular (by supposition 1), while the finite verb is plural since singular requires that the subject be semantically as well as syntactically singular (by supposition 2). For A&A the subject pronoun *ona*, when referring back to such a noun, must also be feminine singular (see their examples 3b and 7). We saw that suppositions 1 and 2 are false. But even if they were true, A&A's analysis would not work.

In a detailed study, Corbett (1983:Ch. 5) concluded that *deca*-type nouns determine neuter plural agreement on predicates, and that *ona* referring back to such a noun is a neuter plural pronoun. (Recall that feminine singular and neuter plural forms, including pronouns, are homophonous in the nominative case.) Wechsler & Zlatić 2000, 2003 followed Corbett, finding his reasoning convincing. A&A remark that 'As we see below, this conclusion is driven purely by theoretical considerations, not by empirical evidence' (p. 372). But what they represent as our theory-internal 'argumentation' (p. 372) was not really our argument, nor could it be Corbett's, since he did not assume our theory.[3] Corbett's conclusion, and ours, was driven by empirical evidence that we now review.

Corbett (1983:Ch. 5) gave several reasons for treating *ona*, when referring to *deca* 'children', as neuter plural, not feminine singular. First, it explains the plural agreement on the finite verb (A&A, ex. 3b and 7). A&A's rule for finite verbs (supposition 2) seems to avoid this problem, but we already saw the problems with this rule in the previous section. Second, coordination resolution points to a neuter plural analysis of *deca* (Corbett 1983:78). We omit discussion of coordination for lack of space.

Corbett also pointed out that pronouns in accusative, dative, genitive, locative, or instrumental case, when coreferential with a collective like *deca* 'children', are unambiguously plural; singular pronouns cannot be used (Corbett 1983:80, ex. 15; A&A, n. 9, ex. (i)). On Corbett's (1983) analysis, the nominative pronoun *ona* is plural, just like pronouns in all the other cases. So the generalization is that a personal pronoun with a plural referent must be plural.[4] But on A&A's analysis, the one glaring exception is nominative case—the only case where pronouns are ambiguous between feminine singular and neuter plural. A&A have a problem: if, as they claim, singular NOMINATIVE pronouns can refer to 'children', then why not singular pronouns in other cases?[5] In reaction to this problem, A&A stipulate that pronominal reference depends on case in a particular way (supposition 3): 'A singular personal pronoun in a case other than nominative cannot have a plural referent' (p. 373, n. 9). In short, supposition 3 obscures the facts that contradict A&A's analysis of hybrid agreement.

By contrast, in A&A's example 7 *ona* apparently triggers singular agreement on the secondary predicate. We are left with a dilemma, with the evidence presented above on one horn, and their example 7 on the other. A&A have made a valuable contribution to the data set and posed an interesting puzzle, but they have not solved it, in our opinion. Nor do we solve it here, although we intend to return to this problem in the future.

Summarizing so far, A&A's grammar, which was designed to capture hybrid agreement with one unusual class of collective nouns, gives the wrong results for much of the

---

[3] A&A do not cite page numbers. They may have misinterpreted a passage in our paper where we indicated which aspects of the analysis are forced by the theory.

[4] Note that QNPs like *mnogo knjiga* 'many books' cannot be referenced with singular pronouns in any case, including nominative, as shown in 8 above.

[5] Case can affect agreement, but this will not help here, since personal pronouns of all cases show either syntactic agreement (index agreement, on our theory) or semantic agreement.

rest of the language, and even for hybrid agreement a dubious stipulation obscures counterevidence. We conclude that their account is not viable.

4. Two ways to bifurcate agreement targets. On A&A's approach to agreement, the grammar of S-C splits its grammatical agreement targets into (i) syntactic agreement targets (adjectives, participles, possessives); and (ii) syntactic-plus-semantic agreement targets (finite forms). But we have seen that the facts are otherwise: syntactic and semantic agreement cut across all these target categories.

We do not believe that the grammar determines a bifurcation between syntactic and semantic (or syntactic-plus-semantic) agreement targets. Instead, target inflections of all kinds, in their status as grammatical formatives prior to syntactic composition, have semantic content related to phi-features: 'female' for feminine gender, 'aggregate' for plural, and so on. Whether that content is interpreted or not depends upon properties of the agreement TRIGGER. For example, as a grammatical formative the feminine singular inflection on the adjective form *stara* 'old.F.SG' carries the semantic content of 'female'. Thus when it modifies a person's name, which lacks grammatical gender, the referent is understood to be female, hence *stara Miki* 'old.F.SG Miki' is a woman while *stari Miki* 'old.M.SG Miki' is a man. By contrast, when it modifies a noun with the syntactic features feminine singular, as in *stara knjiga[F.SG]* 'old book', then the female semantic content remains uninterpreted. The AGREEMENT MARKING PRINCIPLE states that if the trigger is not specified for a feature F, then one should semantically interpret a feature F that is marked on the target (Wechsler 2011, Wechsler & Hahm 2011).

This allows us to explain the facts in §2 that were problematic for A&A. First- and second-person pronouns are not marked for gender, so according to the agreement marking principle, the gender features on the adjectives in 2 and 3 must be semantically interpreted. The other examples require more explanation than we have room for here (see Wechsler & Zlatić 2003:Ch. 7), but the main point is that it is properties of the trigger, and not just a preordained bifurcation of targets, that determine whether we find syntactic or semantic agreement.

So we reject A&A's bifurcation of targets into syntactic and semantic ones. Still, not all agreement targets are created equal: some are derived historically from incorporated pronouns, while others are not (Wechsler & Zlatić 2003:15). Pronoun incorporation is the only known historical source of person agreement, so a target of the former type, which we call an index target, can include the feature of person, while the latter type, which we call a concord target, cannot. Given this split, hybrid agreement results from uneven marking of the trigger (see below).

A&A (p. 371, n. 6) claim that our bifurcation of targets creates a complexity problem while their bifurcation of targets does not. They conclude that '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' (n. 6). We do not understand this argument. Both theories involve a bifurcation of agreement targets. The two proposals differ not in their complexity but rather in their plausibility. Let us compare them.

First consider our division of agreement targets. Why do agreement targets bifurcate into two types, index and concord? The 'diachronic explanation' for this division that they attribute to Wechsler 2011—namely that only some agreement inflections are derived from pronoun incorporation—was already mentioned in Wechsler & Zlatić 2003:5. But more important is the immense scholarly foundation for this division. The discovery that person agreement develops from the incorporation of personal pronouns

was one of the earliest insights of comparative grammar (Bopp 1842). Agreement inflections derive from not only personal pronouns, but also other sources such as classifiers, weak demonstratives, and differential object marking (Greenberg 1966, 1978, Givón 1976, Bresnan & Mchombo 1987, Lehmann 1988, Reid 1997, Ariel 2000, Grinevald & Seifart 2004, Siewierska 2004, Fuss 2005, Wechsler et al. 2010, Luraghi 2011). This research reveals a major division between personal pronouns and all other sources (Lehmann 1988, Wechsler et al. 2010, inter alia).

Hybrid agreement follows naturally from this bifurcation of targets. The referential dependence of a pronoun on its antecedent means that they share a semantic variable, called the REFERENTIAL INDEX; hence anaphoric agreement consists of phi-feature marking of that index (Pollard & Sag 1994). If an affixal pronoun loses its referentiality over time, anaphoric agreement is reanalyzed as grammatical agreement (Bresnan & Mchombo 1987, Coppock & Wechsler 2010). Unless there are other changes, then the new agreement inflection remains sensitive to the phi-features of the trigger's referential index—not to some other aspect of the trigger. Meanwhile, agreement inflections that develop from nonpronominal sources such as classifiers are sensitive not to the trigger's index, but to other features of the trigger. As long as the triggering noun satisfies the CONCORD-INDEX CONSTRAINT (Wechsler & Zlatić 2000, 2003), the features of all targets match each other. But if the markedness or marking of the noun's index diverges from that of its other features, then the result is hybrid agreement.[6]

Now let us ask the same question about A&A's proposal. Why do agreement targets bifurcate into their two types, syntactic versus syntactic-plus-semantic targets? In a section of the discussion note appropriately entitled 'Issues for further research', A&A write that while this question 'probably deserves a separate paper', they nonetheless 'try to speculate on the possible answer' (p. 377). Their speculation is not an explanation so much as a statement of an unexplained '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' (p. 377). Anyway, from what we saw in §2 above, this putative tendency is dubious. All agreeing elements are semantically interpretable as long as the trigger is unmarked for the feature.

5. COMPLEXITY IN THE STUDY OF AGREEMENT. A&A claim that our hypothesis requires 'massive complication', while theirs is much simpler. If we are correct in concluding that they lack a working account altogether, then a fortiori they lack a simpler one than ours. Moreover, our theory, as applied to S-C, was designed to capture the broad, normal patterning of declension classes, agreement features, and semantic properties of S-C nouns, while also making implicational predictions about possible irregular nouns that violate those normal patterns. A&A do not address these issues at all. It is hard to assess their claim that our hypothesis was unnecessarily complex, in the absence of an alternative account of the complex facts that our theory was formulated to address.

6. CONCLUSION. A&A attack both our analysis a specific problem from S-C and our more general theory. Regarding the former, A&A's alternative analysis of *deca*-type nouns is not viable. It depends on incorrect agreement rules, and an implausible stipulation that is specific to *deca*-type nouns. Those incorrect agreement rules also play a cru-

---

[6] Wechsler & Zlatić 2000, 2003 posit some nouns specified for different index and concord values, such as *deca*, but more often it suffices to leave one value unspecified.

cial role in their more general theoretical argument that 'there is no index set of features distinct from both the syntactic concord set of features and the semantic set' (p. 378). A&A would replace our split between index and concord targets with their split between targets subject to syntactic agreement rules and those subject to semantic-plus-syntactic agreement rules. But their rules turned out to be incorrect.

Our concord-index theory builds upon two scholarly foundations: Pollard and Sag's (1994) important insights into the role of the referential index in agreement; and a long tradition of research on the diachronic origins of agreement inflections. We are encouraged by the work of scholars embracing some version of the 'dual syntactic agreement hypothesis' (see A&A and this reply for references, to which we add Kuhn & Sadler 2007, Hahm 2010, Danon 2011). Much remains to be done, and we look forward to future explorations of this hypothesis.

REFERENCES

ALSINA, ALEX, and BOBAN ARSENIJEVIĆ. 2012. The two faces of agreement. *Language* 88. 369–79.
ARIEL, MIRA. 2000. The development of person agreement markers: From pronouns to higher accessibility markers. *Usage-based models of language*, ed. by Suzanne Kemmer and Michael Barlow, 197–260. Stanford, CA: CSLI Publications.
BOPP, FRANZ. 1842. *Vergleichende Grammatik des Sanskrit, Zend, Griechischen, Lateinischen, Litthauischen, Gothischen und Deutschen*. Berlin: F. Dümmler.
BRESNAN, JOAN, and SAM A. MCHOMBO. 1987. Topic, pronoun, and agreement in Chichewa. *Language* 63.4.741–82.
COPPOCK, ELIZABETH, and STEPHEN WECHSLER. 2010. Less-travelled paths from pronoun to agreement: The case of the Uralic objective conjugations. *Proceedings of the LFG '10 Conference*, 165–85. Online: http://cslipublications.stanford.edu/LFG/15/lfg10.toc.html.
CORBETT, GREVILLE G. 1983. *Hierarchies, targets and controllers: Agreement patterns in Slavic*. London: Croom Helm.
DANON, GABI. 2011. Agreement with quantified nominals: Implications for feature theory. *Empirical Issues in Syntax and Semantics* 8.75–95. Online: http://www.cssp.cnrs.fr/eiss8/.
FUSS, ERIC. 2005. *The rise of agreement: A formal approach to the syntax and grammaticalization of verbal inflection*. Amsterdam: John Benjamins.
GIVÓN, TALMY. 1976. Topic, pronoun and grammatical agreement. *Subject and topic*, ed. by Charles N. Li, 149–88. New York: Academic Press.
GREENBERG, JOSEPH. 1966. *Language universals with special reference to feature hierarchies*. (Janua Linguarum series minor 59.) The Hague: Mouton.
GREENBERG, JOSEPH. 1978. How does a language acquire gender markers? *Universals of human language, vol. 3: Word structure*, ed. by Joseph H. Greenberg, Charles A. Ferguson, and Edith A. Moravcsik, 47–82. Stanford, CA: Stanford University Press.
GRINEVALD, COLETTE, and FRANK SEIFART. 2004. Noun classes in African and Amazonian languages: Towards a comparison. *Linguistic Typology* 8.2.243–85.
HAHM, HYUN-JONG. 2010. *A cross-linguistic study of syntactic and semantic agreement: Polite plural pronouns and other issues*. Austin: University of Texas dissertation.
KUHN, JONAS, and LOUISA SADLER. 2007. Single conjunct agreement and the formal treatment of coordination in LFG. *Proceedings of the LFG '07 Conference*, 302–22. Online: http://cslipublications.stanford.edu/LFG/12/lfg07-toc.html.
LEHMANN, CHRISTIAN. 1988. On the function of agreement. *Agreement in natural language—Approaches, theories, descriptions*, ed. by Michael Barlow and Charles Ferguson, 55–65. Stanford, CA: CSLI Publications.
LURAGHI, SILVIA. 2011. The origin of the Proto-Indo-European gender system: Typological considerations. *Folia Linguistica* 45.2.435–64.
POLLARD, CARL, and IVAN A. SAG. 1994. *Head-driven phrase structure grammar*. Chicago: University of Chicago Press.

REID, NICHOLAS. 1997. Class and classifier in Ngan'gityemerri. *Nominal classification in Aboriginal Australia*, ed. by Mark Harvey and Nicholas Reid, 165–228. Amsterdam: John Benjamins.

SIEWIERSKA, ANNA. 2004. *Person*. Cambridge: Cambridge University Press.

WECHSLER, STEPHEN. 2004. Number as person. *Empirical Issues in Syntax and Semantics* 5.255–74. Online: http://www.cssp.cnrs.fr/eiss5/.

WECHSLER, STEPHEN. 2011. Mixed agreement, the person feature, and the index/concord distinction. *Natural Language and Linguistic Theory* 29.4.999–1031.

WECHSLER, STEPHEN; PATIENCE EPPS; and ELIZABETH COPPOCK. 2010. The origin and distribution of agreement features: A typological investigation. Project description, National Science Foundation grant application. Austin: University of Texas at Austin.

WECHSLER, STEPHEN, and HYUN-JONG HAHM. 2011. Polite plurals and adjective agreement. *Morphology* 21.247–81.

WECHSLER, STEPHEN, and LARISA ZLATIĆ. 2000. A theory of agreement and its application to Serbo-Croatian. *Language* 76.4.799–832.

WECHSLER, STEPHEN, and LARISA ZLATIĆ. 2003. *The many faces of agreement*. Stanford, CA: CSLI Publications.

Department of Linguistics
University of Texas
1 University Station B5100
Austin, TX 78712-0198
[wechsler@mail.utexas.edu]
[larisaz@lztranslation.com]