Conjunct Agreement and Gender in South Slavic: From Theory to Experiments to Theory

Jana Willer-Gold, Boban Arsenijević, Mia Batinić, Nermina Čordalija, Marijana Kresić, Nedžad Leko, Franc Lanko Marušič, Tanja Milićev, Nataša Milićević, Ivana Mitić, Andrew Nevins, Anita Peti-Stantić, Branimir Stanković, Tina Šuligoj, Jelena Tušek

Journal of Slavic Linguistics, Volume 24, Number 1, Winter-Spring 2016, pp. 187-224 (Article)

Published by Slavica Publishers
DOI: 10.1353/jsl.2016.0003

Conjunct Agreement and Gender in South Slavic: From Theory to Experiments to Theory

Jana Willer-Gold, Boban Arsenijević, Mia Batinić, Nermina Čordalija, Marijana Kresić, Nedžad Leko, Franc Lanko Marušič, Tanja Milićev, Nataša Milićević, Ivana Mitić, Andrew Nevins, Anita Peti-Stantić, Branimir Stanković, Tina Šuligoj, and Jelena Tušek

Abstract: Agreement with coordinated subjects in Slavic languages has recently seen a rapid increase in theoretical and experimental approaches, contributing to a wider theoretical discussion on the locus of agreement in grammar (cf. Marušič, Nevins, and Saksida 2007; Bošković 2009; Marušič, Nevins, and Badecker 2015). This paper revisits the theoretical predictions proposed for conjunction agreement in a group of South Slavic languages, with a special focus on gender agreement. The paper is based on two experiments involving speakers of Bosnian/Croatian/Serbian (BCS) and Slovenian (Sln). Experiment 1 is an elicited production experiment investigating preverbal-conjunct agreement, while Experiment 2 investigates postverbal-conjunct agreement. The data provide experimental evidence discriminating between syntax proper and distributed-agreement models in terms of their ability to account for preverbal highest-conjunct agreement and present a theoretical mechanism for the distinction between default agreement (which has a fixed number and gender, independent of the value of each conjunct) and resolved agreement (which computes number and gender based on the values of each conjunct and must resolve potential conflicts). Focusing on the variability in the gender-agreement ratio across nine combinations, the experimental results for BCS and Sln morphosyntax challenge the notion of gender markedness that is generally posited for South Slavic languages.

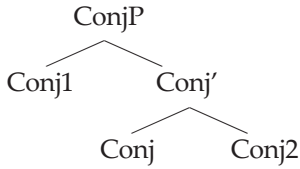
1. Introduction

Recent years have seen an emergence in the number of varied theoretical approaches aiming at modeling conjunct-agreement phenomena in a group of South Slavic languages: Bosnian/Croatian/Serbian (BCS) and Slovenian (Sln). This expanding debate is characterized by a question prominent in a much wider literature on conjunct-agreement phenomena: what is the limit of syntax in computing the observed patterns?

Journal of Slavic Linguistics 24(1): 187–224, 2016.

Syntactic operations apply to hierarchically structured material, and Agree is no exception (Chomsky 2000). Therefore, it comes as no surprise that in subject-verb agreement, the Probe's search domain is restricted to local and c-commanded Goal(s) (Chomsky 2000).[1] Applied to agreement with coordinated subjects in BCS and Sln, the gender and number features on participial inflection are predicted to be valued by matching features on the maximal projection ConjP, as shown in (1). This results in masculine agreement on the participle when both conjuncts are masculine or have mixed gender values, as in (2a) and (3a). This latter pattern is also called default agreement.[2]

(1)



When postverbal ConjP has no gender feature, and the asymmetrical structure for ConjP in (1) is assumed, the hierarchically highest, and the closest, conjunct is predicted to act as the potential Goal, as in (2b)/(3b) (cf. Aoun, Benmamoun, and Sportiche 1994, 1999; Munn 1999; van Koppen 2005; Benmamoun, Bhatia, and Polinsky 2010; Bošković 2009; Bhatt and Walkow 2013; Marušič, Nevins, and Badecker 2015). This widely discussed postverbal closest- and hierarchically highest-conjunct agreement can comfortably find grounding in clausal ellipsis or other standard syntactic mechanisms (e.g., equidistance under particular definitions of c-command and locality).

(2) Sln:

a.	Podražili	so	se	knjige	in	peresa.
	become-more-expensive$_{M.PL}$	AUX$_{PL}$	REFL	books$_{F.PL}$	and	pens$_{N.PL}$
b.	Podražile	so	se	knjige	in	peresa.
	become-more-expensive$_{F.PL}$	AUX$_{PL}$	REFL	books$_{F.PL}$	and	pens$_{N.PL}$

[1] Two terminological pairs are represented in the literature to refer to the two items involved in agreement—the controller and the target of agreement, and the Goal and the Probe of agreement—for the item on which a certain feature is specified, and the item which receives this specification, respectively. Since our paper does not directly depend on the technical aspects of different frameworks, we interchangeably use both pairs of terms.

[2] The term "resolved agreement" is also used, sometimes interchangeably with default agreement. We stick to default agreement in the text until section 4, at which point we make a principled distinction between these two terms (and mechanisms).

(2) c. *Podražila so se knjige in
become-more-expensive$_{N.PL}$ AUX$_{PL}$ REFL books$_{F.PL}$ and
peresa.
pens$_{N.PL}$
'Books and pens have become more expensive.'

(3) BCS:

a. Oglasili su se trube i zvona.
sounded$_{M.PL}$ AUX$_{PL}$ REFL trumpet$_{F.PL}$ and bell$_{N.PL}$

b. Oglasile su se trube i zvona.
sounded$_{F.PL}$ AUX$_{PL}$ REFL trumpet$_{F.PL}$ and bell$_{N.PL}$

c. *Oglasila su se trube i zvona.
sounded$_{N.PL}$ AUX$_{PL}$ REFL trumpet$_{F.PL}$ and bell$_{N.PL}$
'Trumpets and bells resounded.'

In preverbal order, partial agreement (i.e., agreement with a single conjunct) is predicted with the hierarchically highest but not with the linearly closest conjunct, as in (4b)/(5b) and (4c)/(5c), respectively. However, it is exactly this latter option of closest-conjunct agreement[3] that Corbett (1983a) (cf. Corbett 1983b, 1991) first observed in a data sample collected on the basis of BCS and Sln grammars and literary scripts. By showing that closest-conjunct agreement can obtain in preverbal structures where the agreed-with conjunct is not hierarchically highest, he provided evidence for the claim that agreement can be calculated based on the linear order of sequential elements.

(4) Sln:[4]

a. Knjige in peresa so se podražili.
books$_{F.PL}$ and pens$_{N.PL}$ AUX$_{PL}$ REFL become-more-expensive$_{M.PL}$

b. Knjige in peresa so se podražile.
books$_{F.PL}$ and pens$_{N.PL}$ AUX$_{PL}$ REFL become-more-expensive$_{F.PL}$

[3] To maintain consistency in terminology through this paper, we have substituted Corbett's (1983a) original term nearest-conjunct agreement with our closest-conjunct agreement.

[4] This example is adapted from Corbett (1983a: 101, ex. (18)) for the purposes of argumentation.

(4) c. Knjige in peresa so se podražila.
books$_{F.PL}$ and pens$_{N.PL}$ AUX$_{PL}$ REFL become-more-expensive$_{N.PL}$
'Books and pens have become more expensive.'

(5) BCS:

a. Trube i zvona su se oglasili.
trumpet$_{F.PL}$ and bell$_{N.PL}$ AUX$_{PL}$ REFL sounded$_{M.PL}$

b. Trube i zvona su se oglasile.
trumpet$_{F.PL}$ and bell$_{N.PL}$ AUX$_{PL}$ REFL sounded$_{F.PL}$

c. Trube i zvona su se oglasila.
trumpet$_{F.PL}$ and bell$_{N.PL}$ AUX$_{PL}$ REFL sounded$_{N.PL}$
'Trumpets and bells resounded.'

Therefore, as strictly syntactic notion of Agree proves to be insufficient to account for the conjunct agreement possibility documented in (4c)/(5c), agreement with the closest or linearly local conjunct in preverbal contexts forces us to reconsider strictly syntactic accounts of Agree. As a consequence, existing theoretical approaches to conjunct agreement in South Slavic focus on successfully resolving the problem of closest-conjunct agreement in BCS and Sln either by relying on a more enriched set of assumptions about syntactic operations to maintain Agree in narrow syntax—the syntax proper agreement accounts (cf. Bošković 2009; Franks and Willer Gold 2014; Puškar and Murphy 2015)—or by deriving a second step of closest-conjunct agreement in the post-syntactic component—the distributed agreement account (Marušič, Nevins, and Badecker 2015; Aljović and Begović this volume). Interestingly, the status of agreement with the hierarchically highest-conjunct in preverbal order, as in (4b)/(5b) has only recently been addressed (Marušič, Nevins, and Saksida 2007; Marušič, Nevins, and Badecker 2015; Bošković 2009; Franks and Willer-Gold 2014; Puškar and Murphy 2015).

In what follows, we set out to investigate the three patterns of agreement—default, highest-conjunct agreement (HCA), and closest-conjunct agreement (CCA).

At times, variation among native-speaker intuitions can fuel a large array of theoretical accounts and arguably stand in the way of an objective assessment of their power.[5] Within the context of South Slavic and BCS more specifically, disagreements among linguists about the data patterns could potentially have two sources: the specific methodology and stimuli employed to collect

[5] Here we note in particular the variation in degree of acceptance of preverbal highest-conjunct agreement in BCS in data presented in Bošković 2009 compared to Franks and Willer-Gold 2014 (110, fn. 31) and Puškar and Murphy 2015.

the patterns and the specific native language variety of the judgment-providers in question. Therefore, our goal is to hold the methodology constant across locations in order to see the extent to which the phenomenon in question is subject to regional variation, as well as which agreement patterns are attested among nonlinguist speakers of the varieties.

To this aim we report on an experimental study comprised of two elicited production experiments with native speakers of varieties of BCS and Slovenian undertaken at six locations across four countries.[6] This provides a unique opportunity for one of the first large-scale experimental studies on the uniformity of agreement strategies, which will enable us to experimentally confirm the previously reported data and to re-evaluate the nature of conjunct-agreement strategies within a single language family.

We address three issues that are of equal interest to theories of agreement: (i) Can one obtain a dataset for conjunct agreement that is unified and stable across a subset of South Slavic languages? (ii) What is the rate of occurrence of each conjunct-agreement strategy in BCS and Sln, preverbally and postverbally? (iii) How well do experimental data fare with native-speaker judgments in providing evidence to re-evaluate existing theoretical models of conjunct agreement?

In section 2 we present in more detail two contrasting accounts of conjunct agreement in BCS and Sln and the respective data sets they were based on. In section 3 we present the two experiments, their motivation, methodology, and results. In section 4 we discuss these results in light of existing accounts and elaborate on further insights provided by the two experiments as they feedback into further theoretical developments. We present our conclusions in section 5.

2. Existing Accounts of Conjunct Agreement in BCS and Sln

Coordination offers a rich territory for investigating the limits of agreement (see Aoun, Benmamoun, and Sportiche 1994, 1999; Sobin 1997; Munn 1999; van Koppen 2005; van Koppen and Rooryck 2008; Benmamoun, Bhatia, and Polinsky 2010; Bošković 2009; Bhatt and Walkow 2013; Marušič, Nevins, and Badecker 2015). South Slavic languages are especially pertinent to this discussion. Their three-gender system combined with two (or three in Slovenian) values for number allows one to identify the agreement controller by the gender-number combination morphologically marked on the participle. The suffix *-i* marks masculine (plural), *-e* feminine (plural), and *-a* neuter (plural). As we show below, nonmasculine mixed-gender conjuncts allow for an unambiguous differentiation, postverbally and preverbally, of two general

[6] Bulgarian and Macedonian, also South Slavic languages, were not included in the study as they do not show gender distinctions in the plural.

principles guiding conjunct agreement: hierarchical and linear proximity. Therefore, it is not surprising that agreement with conjoined subjects in BCS and Sln has recently seen a rapid increase in theoretical and experimental work (see Bošković 2009; Franks and Willer Gold 2014; Murphy and Puškar 2015; Arsenijević and Mitić this volume; Aljović and Begović this volume [for BCS]; Marušič, Nevins, and Saksida 2007; Marušič and Nevins 2010; Marušič, Nevins, and Badecker 2015 [for Sln]).

We focus on two maximally contrasting accounts of the locus of conjunct agreement, namely, purely syntactic versus distributed approaches. Bošković (2009) refers to universal as well as language-internal constraints on syntactic operations that interact with a particular take on a feature-checking system in order to account for conjunct agreement in BCS. Marušič, Nevins, and Badecker (2015) citing Sln data argue for a morphosyntactic account of conjunct agreement with an emphasis on two-step Agree and a nongender computing Conj head. The language components that the two accounts argue are the locus of conjunct agreement as well as the respective datasets are summarized in Table 1. Checkmarks refer to predicted grammaticality, two checkmarks refer to two intensionally distinct but extensionally converging general principles, Xs refer to predicted ungrammaticality, and question-marks mean their status is not elaborated upon.

Table 1. Locus of Conjunct Agreement: Theoretical Predictions

Locus of Conjunct Agreement	Theoretical Account	Datasets					
		PreverbalConjAgr: SV			PostverbalConjAgr:VS		
		ConjP	Conj1	Conj2	ConjP	Conj1	Conj2
Syntax proper	Bošković	✓	×	✓	?	✓	×
Distributed	Marušič, Nevins, and Badecker	✓	✓	✓	✓	✓✓	×

In the next two subsections we provide a more detailed overview of these two accounts.

2.1. Bošković (2009)

Bošković argues for a syntax-proper account of conjunct agreement based on BCS data. In this account gender agreement is driven by an adapted feature-checking system and is restricted by language-internal constraints on Move: Left-Branch Extraction (LBE) interacting with the Coordinated-Structure Constraint (CSC). In this model preverbal and postverbal distant-

conjunct agreement is reported to be ungrammatical, as in (6a) and (6a′), while preverbal and postverbal default agreement is reported not to have the same status; compare (6b) and (6b′), respectively.

(6) a. *Sva sela i sve varošice su (juče)
all$_{N.PL}$ villages$_{N.PL}$ and all$_{F.PL}$ towns$_{F.PL}$ AUX$_{PL}$ yesterday
uništena.
destroyed$_{N.PL}$

a′. *Juče su uništene sva sela i
yesterday AUX$_{PL}$ destroyed$_{F.PL}$ all$_{N.PL}$ villages$_{N.PL}$ and
sve varošice.
all$_{F.PL}$ towns$_{F.PL}$

b. Sva sela i sve varošice su (juče)
all$_{N.PL}$ villages$_{N.PL}$ and all$_{F.PL}$ towns$_{F.PL}$ AUX$_{PL}$ yesterday
uništeni.
destroyed$_{M.PL}$

b′. ?Juče su uništeni sva sela i
yesterday AUX$_{PL}$ destroyed$_{M.PL}$ all$_{N.PL}$ villages$_{N.PL}$ and
sve varošice.
all$_{F.PL}$ towns$_{F.PL}$
'All villages and all towns were destroyed yesterday.'

c. Sva sela i sve varošice su (juče)
all$_{N.PL}$ villages$_{N.PL}$ and all$_{F.PL}$ towns$_{F.PL}$ AUX$_{PL}$ yesterday
uništene.
destroyed$_{F.PL}$

c′. Juče su uništena sva sela i
yesterday AUX$_{PL}$ destroyed$_{N.PL}$ all$_{N.PL}$ villages$_{N.PL}$ and
sve varošice.
all$_{F.PL}$ towns$_{F.PL}$
'All villages and all towns were destroyed yesterday.'

Bošković aims to unify the derivation of what he refers to as last-conjunct agreement (LCA) and first-conjunct agreement (FCA) in syntax proper, shown in (6c) and (6c′), respectively, by having the domain of Agree within syntax. Following Chomsky (2000), Bošković assumes Agree consists of Probing, Matching, and Valuation. Note that Matching subsumes two conditions: feature identity and locality under c-command.

Postverbal FCA results when the probe ParticipleP (PartP) searching for a goal to value its number and gender features finds an active number feature

on ConjP/BoolP (specified only for number) and an active gender feature on the first conjunct (asymmetrically c-commanding the second conjunct). Accordingly, FCA is the result of a disjoint valuation, where the number and gender features are valued by two independent but equidistant local XPs, i.e., by the maximal projection ConjP and by Conj1, respectively. These two valuators, which are the output of Primary Agree in instances of postverbal FCA, as we show next, are the cause of the failure to derive preverbal FCA, as in (5b).

To derive preverbal LCA, Bošković assumes Move triggered by EPP features on PartP to apply after Primary Agree. Bošković follows Chomsky in assuming that Move is decomposed into Match, Value, and Pied-Pipe (Match and Value overlap in the case of Agree and Move). Crucially for Bošković, unlike Agree, Move does not tolerate a split phi-probe, hence Move cannot apply if the output of Agree produces two options for movement, the entire ConjP and Conj1 alone. Resorting to LBE independently claimed for BCS, Bošković argues that Conj1 and ConjP are equidistant from PartP, and thus both are potential targets for pied-piping under Move. To avoid failure and for Move to apply to a single unambiguous target, the gender features of Conj1 must become invisible (deleted) in order for Agree to apply for the second time and successfully match and value the gender feature of Conj2. Conj2 cannot be extracted out of ConjP—it would induce a CSC violation—and so this time there is no ambiguity, leaving ConjP to be the unique target for movement. The resulting conjunct agreement is preverbal LCA, as in (5c).

In sum, Bošković puts the locus of conjunct agreement in syntax proper. The complexity of his account lies in the aim to restrict preverbal-conjunct agreement to LCA (henceforth CCA). To account for the putative failure of preverbal FCA (henceforth HCA), Bošković makes reference to language-specific constraints on Move and, to account for preverbal LCA, to an adapted feature-checking system and application of Secondary Agree as an ultimate escape route to avoid a derivational crash under ambiguous pied-piping motivated by the EPP on the participle.

2.2. Marušič, Nevins, and Badecker (2015)

In their experimental study on conjunct-agreement grammars, Marušič, Nevins, and Badecker elicit the production of agreement from native speakers of Slovenian in five different experiments. The study draws on this rich gender system to create a 3×3×2 factorial design of uniform and mixed-gender conjuncts in two word orders, consequently providing production data for all nine possible gender combinations, M + M, F + F, N + N, M + F, M + N, F + M, F + N, N + M, N + F, in preverbal and postverbal subject position. The results of gender agreement with conjoined subjects in the Slovenian study provide data for HCA and CCA in preverbal and postverbal order, in as (4b) and (4c) and (2b) respectively. In addition they find evidence of preverbal and postver-

bal default agreement, as in (4a) and (2a). They model the observed intra- and interindividual optionality in terms of three distinct grammars (or grammatical strategies), each of which delivers a potentially different agreement result.

Marušič, Nevins, and Badecker argue that the Conj head can on the basis of its two conjuncts compute its own number but not necessarily its gender. As ConjP has no gender features, the derivation has the following two options: default gender is inserted at the ConjP level, or Agree looks inside ConjP to find a suitable Goal. Compare (4a)/(5a) to (4b)/(5b) and (4c)/(5c).

Default agreement results from a "no-peeking" grammar, whereby the Probe, in its first attempt to Agree and be valued by its Goal's gender features, agrees with ConjP. As ConjP has value for number but not for gender, the default gender value is inserted on ConjP before it is copied onto the Goal.

To accommodate the coexistence of HCA and CCA grammars with native speakers of Slovenian, Marušič, Nevins, and Badecker assume a two-step Agree operation: Agree-Link, which operates in syntax, and Agree-Copy, which can operate in syntax or in the postsyntactic component (see also Arregi and Nevins 2012 and Bhatt and Walkow 2013). The two partial conjunct agreements result from "no-default" grammars, whereby after ConjP fails to provide a gender-feature value, the Probe continues its search for a Conjunct$_{1/2}$ Goal inside the ConjP. HCA complying with hierarchical proximity is found if both Agree-Link and Agree-Copy are fully processed in syntax proper over hierarchically structured ConjP material. CCA is a result of the two-step Agree operation, whereby Agree-Copy operates in a postsyntactic component over sequential material after the coordinated subject has been linearized—thereby justifying the distributed-agreement account. As such, the difference between HCA and CCA boils down to whether Agree-Copy takes place within syntax (where hierarchical but not linear locality is present) or within PF (where linear locality is available and preferred).

Two outcomes of a two-step Agree account can be observed. Firstly, by allowing for the second step of Agree to operate in two distinct components over hierarchical and linear material, the notion of feature Copy can be simplified to a context-sensitive operation that copies gender-feature values from the most available conjunct. Secondly, this account not only derives Corbett's dataset for Sln and BCS but also includes the availability of preverbal agreement with Conj1.

In summary, by assuming two-step Agree and allowing for Agree-Copy to take place in the postsyntactic component, Marušič, Nevins, and Badecker provide a simpler unified account of the most prominent conjunct-agreement strategy (CCA) by remaining neutral with respect to word order, while Bošković's account benefits from phenomena independently postulated for these languages. With respect to gender computation, Bošković and Marušič, Nevins, and Badecker argue for a Conj head that can but does not

have to compute its own gender features, thereby allowing the Probe to peek inside ConjP.

Our goal here is to overcome the problem of different empirical bases of the analyses presented above (see Table 1) and to establish an experimentally verified dataset as a unified baseline against which to re-evaluate this varied theoretical and data-driven debate. In what follows we report on an elicited-production study with native speakers of BCS and Sln. We replicate Marušič, Nevins, and Badecker's Experiment 1 and 2 in an on-line task in order to verify the distribution of hierarchical (HCA), linear (CCA), and default agreement preverbally and postverbally in BCS and Sln. The accounts presented here are consequently re-evaluated against the results in section 4, and in turn lead to a refinement of the theoretical questions themselves.

3. Elicited Production Study

Our large-scale experimental study investigating conjunct agreement in BCS and Sln consisted of two on-line elicited-production experiments conducted at six research institutions located across four countries. Experiment 1 and Experiment 2 were designed to compare the variation in the array of agreement controllers when the exact coordination is placed preverbally (Experiment 1) and postverbally (Experiment 2). Experiments 1 and 2 replicate Marušič, Nevins, and Badecker's (2015) 3×3 factorial design, using the uniform and mixed-gender subject coordination paradigm in Table 2, to elicit agreement on the verb in a sentence-completion task.

Table 2. 3×3 Factorial design

NP1 \ NP2	M	F	N
M	MM	MF	MN
F	FM	FF	FN
N	NM	NF	NN

Note that the independence of two conjunct controllers (Conj1 and Conj2) can be confirmed only where neither of the two controllers contributes to default gender agreement on the participle, i.e., masculine (plural). Hence, the maximally rich array of agreement controllers in preverbal and postverbal position is expected to occur in the nonmasculine mixed-gender (FN and NF) condition.

3.1. Method and Materials

3.1.1. Research Institutions

Experiment 1 and Experiment 2 were carried out at six research institutions chosen for their geographically comparable distances from one another: the University of Niš and the University of Novi Sad, Serbia; the University of Nova Gorica (tests were conducted also in Ljubljana), Slovenia; the University of Sarajevo, Bosnia and Herzegovina; the University of Zadar and the University of Zagreb, Croatia. The experimental design and procedure were uniform across all six research institutions. However, materials for Sln varied from those for BCS (see below).

3.1.2. Language

The language variety chosen for Experiment 1 was the research institutions' local standard. A single set of materials was first created in the local standard variety of Zagreb Croatian, to be consequently adapted to the target language variety, i.e., those of Zadar, Sarajevo, Niš, and Novi Sad. The adaptations were mostly lexical and due to variation in gender of the local lexical items. A parallel set of materials was created for Slovenian avoiding any gender mismatches that could have resulted from literal translation. To ensure strict uniformity across research locations, adaptations were minimal and did not diverge from the experimental conditions in the primary set of materials.

3.1.3. Participants

Thirty first-year students (mean age = 18.65) participated in the experiments at each of the six research institutions, totaling 180 (sex: F = 75%, M = 25%). They were all native speakers of the local language variety, had attended the local secondary school, and were not pursuing a university degree in the study of the local language. Their participation was either voluntary or they received course credits for their participation.

3.1.4. Design and Materials

3.1.4.1. Stimuli

Three genders were entered in a 3×3 factorial design with Conj1 (three levels: masculine, feminine, and neuter) and Conj2 (three levels: masculine, feminine, and neuter) as factors. This resulted in nine possible coordinated

conjunct combinations. A set of six items per condition was created, amounting to a total of 54 stimulus items. The nouns used in coordinations were all inanimate plural nouns; no mass nouns were used. Plural number in both conjuncts was kept constant to ensure control over the number feature while manipulating gender. The choice of inanimates was to avoid any difference between neuter and nonneuter genders in terms of the real-world contributions of semantic or biological gender that would arise if animates had been used. The nouns in the conjunction were chosen from the same semantic field and each was compatible with the predicate in the model sentence in which the agreement would be expressed. None of the nouns formed idiomatic coordinations or collocations with the verb or each other. The stimuli appeared as (conjoined) substitute phrases for the subject in the model sentence (see section 3.1.5 below).

A set of six model sentences (preambles) for each of the nine stimulus conditions was paired with the stimuli, amounting to a total of 54 model sentence items. Model sentences used as primes for the stimuli-replacement phrases contained a simple nonconjoined masculine singular noun with a zero suffix so as to reduce potential morphological priming by the model subject's affix. All model sentences contained an equal number and type of constituents: Noun/Subject, Aux + Participle, Preposition + Noun. The order of the five constituents differed in Experiment 1 and Experiment 2. In Experiment 1, the subject noun phrase preceded the predicate: [Subject Aux + Participle Preposition + Noun]. In Experiment 2, the subject noun phrase followed the predicate: [Preposition + Noun Aux + Participle Subject]. Prepositional phrases (adjuncts) were added at the beginning or the end of the model sentence to fill in the slot in the intonation contour taken by the subject in the preverbal condition and to make the postverbal condition sound natural. The adverbials were added in such a way that the linear adjacency between the subject and the predicate was not disrupted.[7] Gender and number agreement was always expressed by the participle suffix. Number agreement was also expressed by the auxiliary. The mean length in characters of the model sentence was the same across all nine conditions (Mean: 28 characters with spaces/10 syllables). The mean length in characters of the conjunction was the same across all nine conditions (Mean: 18 characters with spaces/8 syllables).

[7] Positioning the adverb so that it disrupts the adjacency of the subject and the verb would have provided further insight and potentially a clear-cut argument for the distributed approach. However, as the aim of this experiment was to obtain baseline data, only two factors were manipulated, the gender value and subject-verb order. Therefore, we leave the position of the adverbial for future experiments. See Peti-Stantić and Tušek 2016 for research in this direction.

3.1.4.2. Fillers

Model sentences used as preambles for filler-replacement phrases contained simple nonconjoined subjects of all number and gender combinations: masc. sg., masc. pl., fem. sg., fem. pl., neut. sg., and neut. pl., in order to counterbalance the percentage of masc. sg. in model sentences paired with stimuli. A set of nine model sentences was created for each of the six combinations. The total of 54 model sentences were paired, i.e., crossed and counterbalanced, with a set of three filler constructions. The three chosen filler constructions that appeared as replacement phrases for the subject in the model sentence (see section 3.1.5 below) were (i) paucals (2, 3, 4) with the head noun in masculine singular (as Slovenian does not have paucal number, the numerals 2, 3, and 4 were used with regular dual and plural morphology on the noun), (ii) a hybrid feminine singular noun, and (iii) an object relative clause with a head noun in neuter singular. In total, 54 model sentence-filler replacement phrase pairs were added to the list. A total of 108 model sentences paired with stimulus or filler replacement phrases were created for Experiment 1 and Experiment 2 for the six research locations.

3.1.4.3. Comprehension Questions

Eighteen comprehension questions appeared after the replacement phrase in order to keep participants engaged (see section 3.1.5 for more detail). The number of comprehension questions was balanced across conditions.

3.1.4.4. Randomization

Two pseudorandomization orders were created for the two sets of 108 items for Experiment 1 and Experiment 2. The two orders were counterbalanced across 30 participants and two experimental sessions for Experiment 1 and Experiment 2. In each experiment, each participant saw all 108 items. However, of the 30 participants at each location, 15 participants were tested on the first randomization order in the first experimental session, and the other 15 were tested on the second randomization order in the second session. The same randomization orders were used at all six research locations.

3.1.4.5. Task Description

A variant of a sentence-completion task was used in which the subject of the model sentence or preamble was substituted by a replacement phrase (stimulus or filler) when the entire sentence is reproduced aloud. A model sentence with a subject NP in bold was presented on the screen. Participants were asked

to read the sentence out loud, to remember it, and then to advance by pressing a button. A replacement phrase in bold would then appear on the next screen. In Experiment 1, the replacement phrase with sentence capitalization was followed by a line (underscores) and a period to motivate the completion of the response sentence (based on the model sentence). In Experiment 2, the line preceded and the period followed the replacement phrase in lowercase letters to induce the same effect. The task was to complete the sentence based on the model sentence, i.e., to produce a response in which the subject of the model sentence was substituted by the replacement phrase presented on the screen and made to agree accordingly with the participle. After producing the response sentence, the participant advanced to the next item by pressing the same button. The presentation of the model sentence and stimulus for Experiment 1 is exemplified in (7). The examples in (7) are indicative of the degree of dialectal variation.

(7) a. **Niš**

Model sentence:

Prevod	je	overen	kod	beležnika.
translation$_{M.SG}$	AUX$_{SG}$	authenticated$_{M.SG}$	at	registrar

Replacement phrase:

Molbe	**i**	**uputstva**	_____.
requests$_{F.SG}$	and	instructions$_{N.SG}$	

Produced response:

Molbe	i	uputstva	su	overeni/
requests$_{F.SG}$	and	instructions$_{N.SG}$	AUX$_{PL}$	authenticated$_{M.PL}$/
overena/		overene	kod	beležnika.
authenticated$_{N.PL}$/		authenticated$_{F.PL}$	at	registrar

b. **Novi Sad**

Model sentence:

Prevod	je	overen	pečatom.
translation$_{M.SG}$	AUX$_{SG}$	authenticated$_{M.SG}$	by.seal

Replacement phrase:

Molbe	**i**	**uputstva**	_____.
requests$_{F.PL}$	and	instructions$_{N.PL}$	

Produced response:

Molbe	i	uputstva	su	overeni/
requests$_{F.PL}$	and	instructions$_{N.PL}$	AUX$_{PL}$	authenticated$_{M.PL}$/

overena/ overene pečatom.
authenticated$_{N.PL}$/ authenticated$_{F.PL}$ by.seal

(7) c. **Sarajevo**

Model sentence:

Prevod je ovjeren pečatom.
translation$_{M.SG}$ AUX$_{SG}$ authenticated$_{M.SG}$ by.seal

Replacement phrase:

Molbe i rješenja _____.
requests$_{F.PL}$ and solutions$_{N.PL}$

Produced response:

Molbe i rješenja su ovjereni/
requests$_{F.PL}$ and solutions$_{N.PL}$ AUX$_{PL}$ authenticated$_{M.PL}$/

ovjerena/ ovjerene pečatom.
authenticated$_{N.PL}$/ authenticated$_{F.PL}$ by.seal

d. **Zadar and Zagreb**[8]

Model sentence:

Prijevod je ovjeren pečatom.
translation$_{M.SG}$ AUX$_{SG}$ authenticated$_{M.SG}$ by.seal

Replacement phrase:

Molbe i rješenja _____.
requests$_{F.PL}$ and solutions$_{N.PL}$

Produced response:

Molbe i rješenja su ovjereni/
requests$_{F.PL}$ and solutions$_{N.PL}$ AUX$_{PL}$ authenticated$_{M.PL}$/

ovjerena/ ovjerene pečatom.
authenticated$_{N.PL}$/ authenticated$_{F.PL}$ by.seal

e. **Nova Gorica**

Model sentence:

Obrok je skuhan v menzi.
meal$_{M.SG}$ AUX$_{SG}$ cooked$_{M.SG}$ in kitchen

Replacement phrase:

Malice in kosila _____.
snacks$_{F.PL}$ and lunches$_{N.PL}$

[8] These two locations minimally varied in model sentence items.

Produced response:

Malice	in	kosila	so	skuhani/	skuhana/
$\text{snacks}_{F.PL}$	and	$\text{lunches}_{N.PL}$	AUX_{PL}	$\text{cooked}_{M.PL}$/	$\text{cooked}_{N.PL}$/
skuhane	v	menzi.			
$\text{cooked}_{F.PL}$	in	kitchen			

Each pair of items was separated by a blank screen. Every sixth model sentence-replacement phrase pair was followed by a comprehension question. Participants advanced by pressing the null (0) key on the keyboard or the left button on the mouse. The experiment was split into three parts separated by two pauses; each part contained 36 paired items. To familiarize participants with a procedure, a practice block of six items and two comprehension questions was presented before the experiment. The practice items were structured like the stimuli and fillers used in the experiment.

3.1.5. Procedure

Participants were tested individually. Each participant was seated in a soundproof or quiet room. Examples were displayed on a monitor in black on a white background in 12-point font size. Materials were presented on the screen using IbexFarm, a free online experimental tool and platform (Drummond 2011). Instructions specified the need for a loud and clear pronunciation produced at a natural pace. Responses were recorded by Audacity, using a built-in microphone, on the computer in a .wav format. The consent form and a comprehensive biographic questionnaire were administered off-line in order to obtain information about the participants' native language variety. On average an experimental session, which included the introduction, task description, experiment, and administration of the biographic questionnaire and consent form, lasted between 30 and 40 minutes per participant. Each participant was tested individually on Experiment 1 and Experiment 2 in two experimental sessions one week apart, with the exception of Slovenian, for logistical reasons having to do with participant recruitment.

3.1.6. Transcription

The digitally recorded responses were hand-coded by native speakers according to their agreement endings and agreement features. Responses were coded as correct responses when the model sentence was correctly repeated and contained the inflected participle, the exact participle used in the model sentence, or a semantically similar one. Any second production of an inflected participle that differed from the first as a result of autocorrection was transcribed, but these were not considered in the analysis. Responses were coded

as agreement errors when the sentence met all the above criteria for correct responses but the agreement was unintelligible or not predicted by the gender of the two conjuncts (e.g., NN = F). Responses were coded under miscellaneous responses when incorrect words were produced, the sentence was interrupted, word order was changed, or when no response was made. Only unique correct responses were considered in the analysis.[9]

3.2. Results

The first round of statistical analysis was executed in R using the lme4 package's glmer function to fit Generalized Linear Mixed-Effects Model by maximum likelihood, with country (SLO, BOS, CRO, SRB) and research institutions (NG, NI, NS, SA, ZD, ZG) as predictors and conjunct-gender combination and word order as fixed variables for determining the degree of diversity for conjunct-agreement phenomena in the four countries and at the six locations. No statistically significant difference was found for data collected at the five BCS locations (NI, NS, SA, ZD, ZG), and therefore the results from these five locations for Experiment 1 and Experiment 2 have been aggregated to create a single data set on which further analysis, presented below, was conducted. A statistically significant difference was found when SLO ($p < .01$ in Experiment 1 and $p < .05$ in Experiment 2) and NG ($p < .01$ in Experiment 1 versus all sites, and $p < .05$ in Experiment 2 versus all sites) was taken as the baseline. Since this difference can be accounted for by the parallel sets of materials created for Sln and BCS and the minimal difference in agreement strategies (see below), and the similarity in the observed availability of agreement strategies (see section 3.2.3), the two datasets have been aggregated and are henceforth referred to as BCS+S.

In sections 3.2.1 and 3.2.2 we assess and compare the ratio by which each of the three controllers contributes to the agreement on the predicate and show the results for each agreement controller for each of the preverbal and postverbal conditions in terms of percentages. P-values for two-tailed, two-sample unequal variance t-tests are provided for statistically significant results.

3.2.1. Experiment 1 Results

The combined results for agreement on the participle with preverbal subject coordination with uniform and mixed-gender conjuncts are presented in Figure 1 on page 204. The percentage for each data point is given in Table 3.

[9] Responses for item 6 in the FM Condition and item 1 in the NM Condition in Experiments 1 and 2 for 5 BCS locations had to be discarded due to stimulus error. These responses were coded as no-response and as such were not included in the statistical analysis.

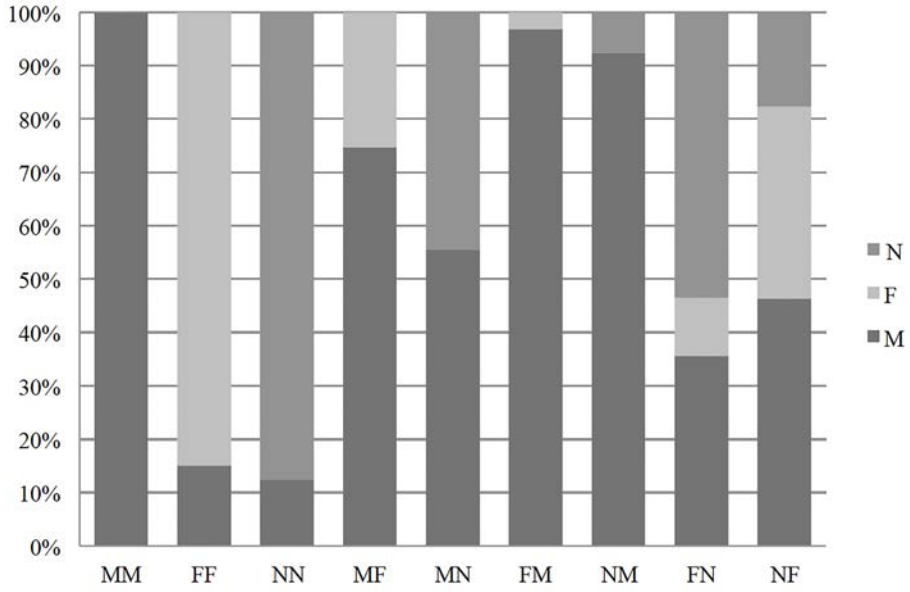


Figure 1. Experiment 1: Preverbal-Conjunct Agreement

Table 3. Experiment 1: Preverbal-Conjunct Agreement

SV	M	F	N
MM	100%	0%	0%
FF	15%	85%	0%
NN	12%	0%	88%
MF	75%	25%	0%
MN	55%	0%	45%
FM	97%	3%	0%
NM	92%	0%	8%
FN	36%	11%	53%
NF	46%	36%	18%

3.2.1.1. ConjP: Default Agreement

Default agreement, i.e., masculine agreement on the predicate, occurs in conditions where neither of the two conjuncts is masculine—FF (M = 15%), NN (M = 12%), FN (M = 36%), and NF (M = 46%). A t-test shows a statistically significant difference between default agreement in uniform and nonmasculine mixed conjuncts ($p < .001$). Further comparison of the proportion of ConjP agreement

observed for uniform and mixed-gender conditions suggests a high preference for uniform-gender conjunct (FF and NN) to elicit agreement that corresponds to the gender of the two conjuncts (F = 85% and N = 88%) over default agreement. In mixed-gender conditions, while the NF condition shows that agreement is more often controlled by ConjP than the closest conjunct (M = 46% and F = 36%, respectively), the FN condition shows a stronger preference for CCA over default agreement (N = 53% and M = 36%, respectively), a difference significant in a t-test ($p < .001$). Therefore the combination with a stronger preference for default agreement is the NF condition. We return to the ratio of default agreement in the FF/NN and FN/NF conditions in section 4.2, where we raise the issue of the status of masculine on ConjP in these nonmasculine conjunct conditions and elaborate on two distinct mechanisms—default and resolved agreement.

3.2.1.2. Conj2: Closest-Conjunct Agreement

CCA, i.e., gender of Conj2 on the predicate in the SV order of Experiment 1, can be clearly observed in mixed-gender conditions where the second conjunct is not masculine: MF (F = 25%), MN (N = 45%), FN (N = 53%), and NF (F = 36%). First, we observe that unlike ConjP, Conj2 is a more stable controller as it is more equally distributed across all four conditions. Second, we observe an increase in the preference for Conj2 to control agreement on the predicate when the first conjunct is not masculine; compare MF/MN (25%/45%) and NF/FN (36%/53%). A t-test shows that there is a statistically significant difference between CCA conditions with a masculine and nonmasculine first conjunct ($p < .001$). Finally, we can observe that N is a better predictor of CCA than F; compare MF–NF (F = 25%–36%) and MN–FN (N = 45%–53%), ($p < .01$) and ($p < .01$), respectively. A t-test shows a statistically significant difference between CCA when conditions with Conj2 F and N are compared ($p < .001$). Overall, the predictor with a stronger positive effect on closest-conjunct agreement is N gender. We address this variation in agreement with N and F in section 4.3.

3.2.1.3. Conj1: Highest-Conjunct Agreement

HCA, i.e., gender of Conj1 on the predicate, can be clearly observed in mixed-gender conditions where the first conjunct is not masculine—FM (F = 3%), NM (N = 8%), FN (F = 11%), and NF (N = 18%). Overall Conj1 is the weakest controller of the three (ConjP, Conj1, and Conj2). In conditions where Conj2 is masculine, Conj1 is a weaker controller than ConjP in uniform-gender conditions at a statistically significant rate ($p < .001$). In addition, a t-test shows there is a statistically significant difference between HCA conditions with a masculine and a nonmasculine first conjunct ($p < .001$). Also, we can observe that

N is a stronger predictor of HCA than F; compare FM–FN (F = 3%–11%) and NM–NF (N = 11%–18%), ($p < .001$) and ($p < .001$), respectively. A t-test shows a statistically significant difference between HCA when Conj1 F and N are compared ($p < .001$). Therefore the predictor with a stronger positive effect on HCA is N gender in nonmasculine mixed-gender conditions. The results for the debated status of HCA are discussed in section 4.1, and the prominence of N in section 4.3.

3.2.1.4. (Non)Default Masculine Agreement

(Non)default masculine agreement, i.e., masculine gender on one of the conjuncts, contributes to masculine-gender agreement on the predicate—MF (M = 75%), MN (M = 55%), FM (M = 97%), and NM (M = 92%). We see that Conj2 M is a more stable and stronger contributor to masculine agreement on the predicate than Conj1 M. A t-test comparing MF–MN (M = 75%–55%) and FM–NM (M = 97%–92%) obtained a statistically significant difference ($p < .001$). It is worth noting that a t-test comparing masculine gender in MF and MN proved to be statistically significant ($p < .001$), which is not the case for masculine in FM and NM ($p > .1$). We return to the issue of the provenance of (non)default masculine agreement in section 4.2.

The observations based on Experiment 1 are summarized in (i–iii):

(i) ConjP is a likely controller in nonmasculine mixed conjuncts, but less so in uniform-gender conjuncts.

(ii) Conj2 is a stronger controller than Conj1.

(iii) M is the strongest controller, while N is consistently a stronger controller than F.

In sum, the experimental data provide support for the models that posit default, CCA, and HCA preverbally in BCS and Sln.[10] Furthermore, the data raise the question of distinguishing two sources of default agreement when accounting for masculine agreement in nonmasculine conjuncts, as in (i). In addition, the data demonstrate that not all agreement controllers have equal agreement potential across all nine conditions. Therefore, in addition to the variation in the agreement potential of the three agreement controllers, as in (ii), the potential of each controller can in turn be further boosted by the value of its gender feature, as in (iii).[11] Consequently, any model of BCS and Sln con-

[10] The total number of unambiguous instances for the data presented are CCA (Conj2) = 1709 (59%), Def (ConjP) = 774 (26%), and HCA (Conj1) = 409 (14%).

[11] The total number of unambiguous instances for data presented are masculine = 5416 (57%), neuter = 2286 (24%), and feminine = 1718 (18%).

junct agreement has to account not only for the variation in the array of the agreement controllers with respect to their structural position in ConjP and their gender value but also account for its interaction with the other conjuncts' gender values.

3.2.2. Experiment 2 Results

The results for agreement on the participle with postverbal coordinated subjects with uniform and mixed-gender conjuncts are presented in Figure 2 on page 208. The percentage for each data point is given in Table 4.

Table 4. Experiment 2: Postverbal-Conjunct Agreement

VS	M	F	N
MM	100%	0%	0%
FF	3%	97%	0%
NN	2%	0%	98%
MF	100%	0%	0%
MN	98%	0%	2%
FM	10%	90%	0%
NM	5%	0%	95%
FN	5%	91%	4%
NF	5%	2%	93%

3.2.2.1. ConjP: Default Agreement

Default agreement, i.e., masculine agreement on the predicate, clearly occurs only where neither of the two conjuncts is masculine (otherwise it is confounded with masculine agreement with one of the conjuncts)—FF (M = 3%), NN (M = 2%), FN (M = 5%), and NF (M = 5%).

3.2.2.2. Conj2: Distant-Conjunct Agreement

Distant conjunct agreement, i.e., gender of Conj2 on the predicate, occurs in mixed-gender conditions where the second conjunct is not masculine—MF (F = 0%), MN (N = 2%), FN (N = 4%), and NF (F = 2%).

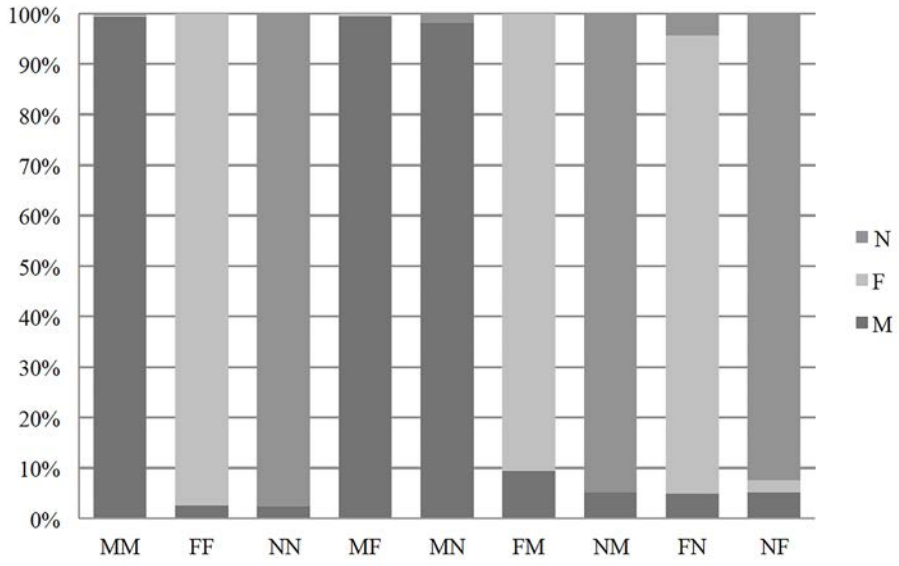


Figure 2. Experiment 2: Postverbal-Conjunct Agreement

3.2.2.3. Conj1: Closest- and Highest-Conjunct Agreement

CCA and HCA, i.e., gender of Conj1 on the predicate, occurs in mixed-gender conditions where the first conjunct is not masculine—FM (F = 90%), NM (N = 95%), FN (F = 91%), and NF (N = 93%).

3.2.2.4. Ambiguous Masculine Agreement

Ambiguous masculine agreement, i.e., where it may be the result of either the default agreement or single-conjunct agreement—MF (M = 100%), MN (M = 98%), FM (M = 10%), and NM (M = 5%). A t-test shows that there is a statistically significant difference between masculine agreement when Conj1 versus Conj2 is masculine ($p < .001$), with a weak effect of masculine in the distant or last-conjunct position.

Considered together, the results of the experiment on conjunct-agreement production in postverbal position show a decrease in ConjP and Conj2's potential to control the gender agreement on the predicate and consequently a higher and more stable overall dominance of the linearly closer conjunct (in this case Conj1) as the controller. While the low potential of the Conj2 controller in postverbal order is predicted by all accounts, the asymmetry in stability of ConjP as controller across two word orders is unexpected and will

be addressed in section 4.2. Moreover, these data strongly argue in favor of analyzing agreement with Conj1 in the postverbal position as the result of two agreement strategies: highest-conjunct agreement and closest-conjunct agreement, which display an additive effect, as observed for feminine in FM (F = 90%) and neuter in NM (N = 95%). The decrease in ConjP's agreement potential in postverbal position has to be incorporated in any comprehensive account of conjunct agreement. Finally, in the postverbal environment we do not observe the interaction of agreement controllers with different gender values. However, the dominance of linear agreement in postverbal position could be disguising the contribution of a conjunct's gender value in boosting agreement in mixed-gender conditions.

3.2.3. Results across Locations

Returning to whether there is any qualitative difference across locations with different regional varieties, in fact the overall patterns are largely similar across all six locations. In Figures 3a–b, on page 210, and 4a–b, on page 211, we show the proportion of agreement strategies for FN combinations preverbally (where N agreement is widely found, but the other two strategies are as well) and NF combinations preverbally (where F agreement is widely found, with the other strategies found as well). In Slovenian (NG on the graph), however, we notice an overall lower rate of default agreement, compensated by CCA, a point we discuss in section 4.2.

In postverbal position CCA predominates in both NF and FN. The fact that the furthest conjunct is not a possible controller is understandable because both HCA and CCA converge on the same controller. The considerable decrease in default agreement is a point we return to in section 4.2.

In what follows we interpret our results in terms of the possibilities of HCA, CCA, and default agreement as strategies, the nature of default agreement, and the interpretation of the differences in N and F gender.

4. Discussion

The results of Experiment 1 and Experiment 2 prove fruitful for discussing the theory of conjunct agreement and the gender system in South Slavic in particular. In section 4.1 we re-evaluate the predictions of the theories discussed above and address their experimental potential and viability. In section 4.2 we offer an explanation of why masculine agreement, which is robust in preverbal NF and FN conditions, decreases so much postverbally, losing the distinction between default and resolution values. In section 4.3 we further consider the difference in gender effects between N and F and offer an

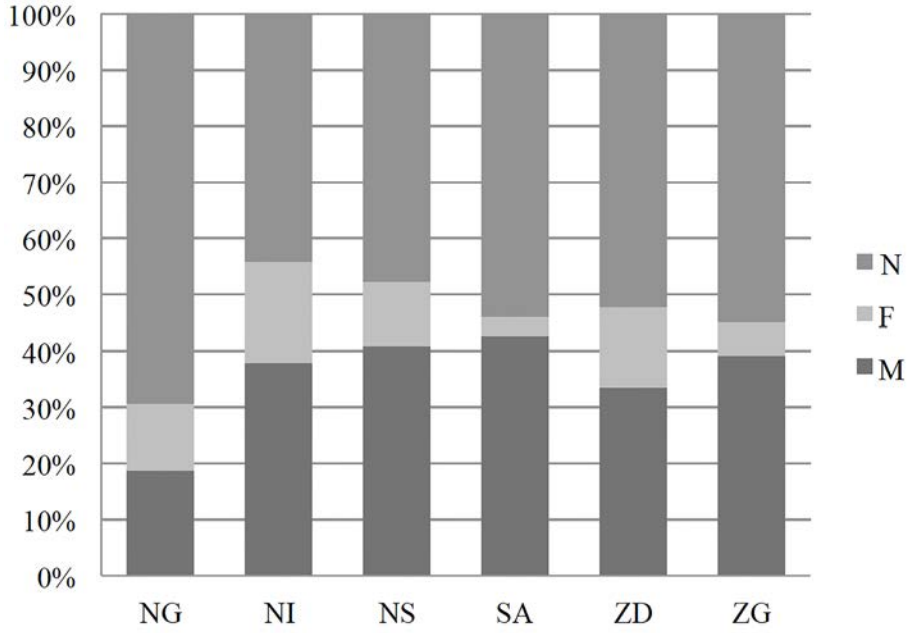


Figure 3a. Preverbal Conjunct Agreement: NF

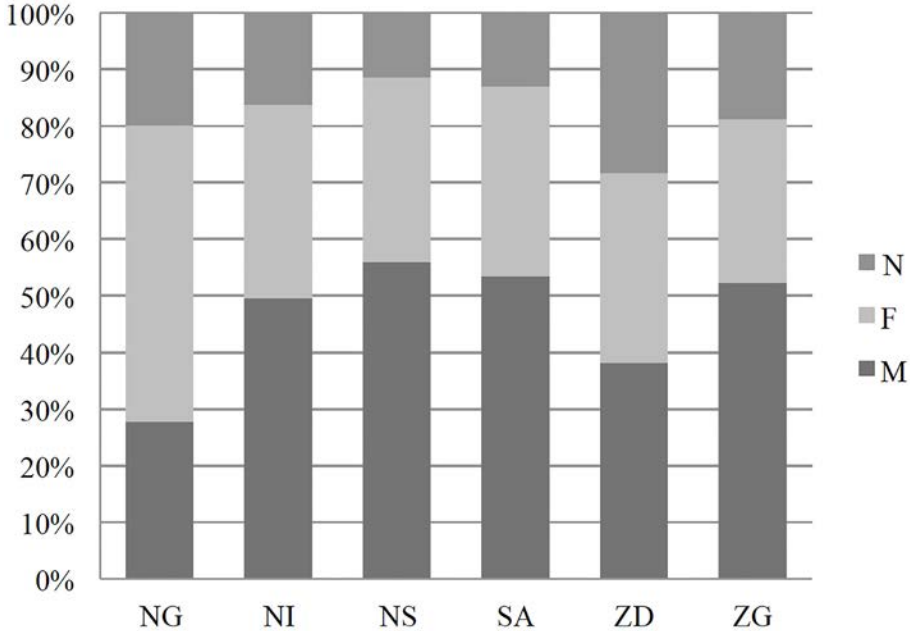


Figure 3b. Preverbal Conjunct Agreement: FN

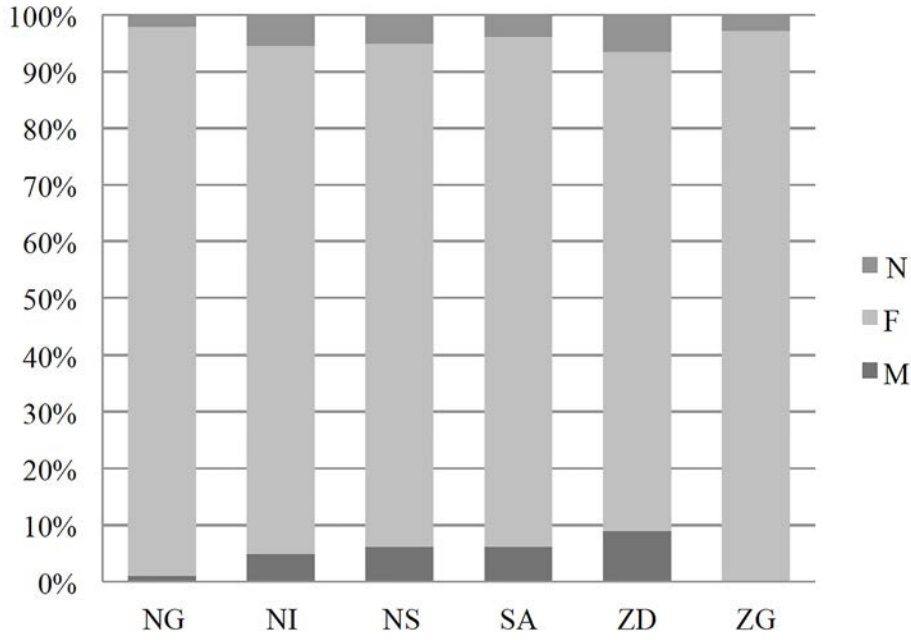


Figure 4a. Postverbal Conjunct Agreement: FN

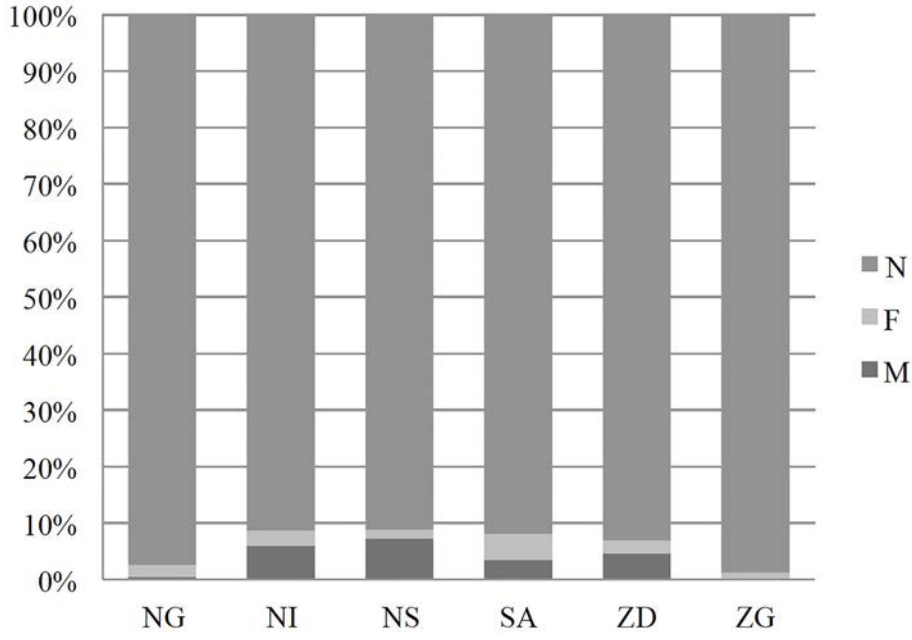


Figure 4b. Postverbal Conjunct Agreement: FN

outline of a gender system that would interact with the agreement controllers in the observed way.

4.1. Theoretical Baseline: BCS and Sln Conjunct-Agreement Dataset

Current reseach has focused on the variability in agreement strategies within various theoretical possibilities. The aim of Experiment 1 and Experiment 2 was to provide a baseline dataset for any future theoretical models. The results confirm that the three agreement strategies—default agreement, CCA and HCA—are used by native speakers of BCS and Sln. They accentuate the high availability of linear agreement as opposed to default or hierarchical agreement. We therefore argue that linear agreement—a critical phenomenon—is not an instance of production or attraction error but a fully stable conjunct-agreement strategy and one that to varying degrees is even preferred to default agreement. The fact that Slovenian has the lowest rate of default agreement may be a matter of prescriptive enforcement, or perhaps of the higher degree of syncretism in Slovenian, which also has dual number, and the role of syncretism in facilitating partial agreement. It may also be related to the way two singulars are typically conjoined, triggering dual agreement in Slovenian but generally masculine plural in BCS when the conjuncts are masculine or of different gender. The clearest contrast comes from instances with neuter singular conjuncts, where in BCS Nsg+Nsg yields Mpl (Npl is ungrammatical) but in Slovenian yields Ndu.

Our data are in line with those of Corbett (1983a), Marušič, Nevins, and Badecker (2015), Franks and Willer-Gold (2014: 110, fn. 31), and Puškar and Murphy (2015) and are more comprehensive than the dataset considered by Bošković (2009). Bošković bases his model solely on what surfaces as linear-conjunct agreement. He regards preverbal last-conjunct agreement and postverbal first-conjunct agreement as grammatical. As we discussed in section 2, Bošković accounts for the failure of preverbal HCA purely in terms of syntactic agreement, making reference to independently available language-specific phenomena (LBE and CSC) interacting with a three-step Move (Move-Match, Move-Value, Move-Pied-pipe). This decomposed Move proves to be one of the two key factors in predicting the strictly linear conjunct-agreement pattern. The second factor is a more elaborate system of gender feature-checking. According to Bošković, valued and interpretable gender features can be either deleted or ignored at LF. Based on his intuitions regarding (8a), Bošković argues that the latter option is what happens when Conj1 is masculine and that CCA in preverbal MN combinations is therefore ungrammatical and underattested. The claim is that due to its default nature in BCS the masculine feature is ignored at LF and hence escapes deletion. This has a direct effect on Secondary Agree in Gender with Conj2 and Movement of ConjP to a preverbal position (driven by EPP features on T), as both operations are blocked. Bošković

makes a similar claim for interpretable (biological) genders in BCS, masculine and feminine, as in (8b).

(8) a. ?*Svi gradovi i sva sela su
all$_{M.PL}$ towns$_{M.PL}$ and all$_{N.PL}$ villages$_{N.PL}$ AUX$_{PL}$
(juče) uništena.
yesterday destroyed$_{N.PL}$
'All towns and all villages were destroyed yesterday.'

b. *Sve žene i sva djeca su
all$_{F.PL}$ women$_{F.PL}$ and all$_{N.PL}$ children$_{N.PL}$ AUX$_{PL}$
(juče) došla.
yesterday came$_{N.PL}$
'All women and all children came yesterday.'

Although we cannot directly evaluate the latter claim because we used only inanimate nouns in our experiment, the results of Experiment 1 and Experiment 2 clearly provide strong evidence for linear agreement in general, including the preverbal subject conditions and the MN condition (N = 45%) in particular. This makes us question Bošković's elaborate motivation for feature evaluation and the analytic inventory of Secondary Agree, which potentially undermines this type of derivational account, which is based on movement and feature valuation in the case of preverbal last-conjunct agreement. Bošković's account, building on his proposed feature evaluation system, where feminine and neuter inanimate nouns' gender features are unvalued and/or uninterpretable, would predict advancement of deletion and application of Secondary Agree, with Movement of ConjP to SpecPart and, consequently, correctly predict a comparatively higher rate of preverbal closest-conjunct agreement, cf. MN (N = 45%) and FN (N = 53%).[12] In summary, Bošković's account diverges from the current results on two data points, which has been evident in nonmasculine mixed-gender conditions. Firstly, it predicts contrary to fact that we should not observe preverbal HCA. Secondly, a high percentage of neuter in preverbal CCA in the MN condition suggests a reconsideration of the conditions for the application of Secondary Agree.

Moreover, although Marušič, Nevins, and Badecker (2015) in general make valid predictions about the patterns of conjunct agreement in BCS and Sln, their account does not have the specific modelling power to explain the

[12] Though we do not discuss in more detail the blocking or facilitating effects of masculine in Conj1 or Conj2 position on agreement with the other conjunct, we refer the reader to recent work on gender mismatches under NP ellipsis (Bobaljik and Zocca 2010; Nunes and Zocca 2014; Merchant 2014; Sudo and Spathas to appear) as one line of possible inquiry into this issue.

quantitative variation among the patterns of all nine conditions. It seems insufficient to assume that the ratio of this potential is solely predicted and restricted by general hierarchy and locality conditions, as it equally seems to be sensitive to the gender combination of the two (competing) conjuncts and the potential default gender value on ConjP. In the next section we discuss the preverbal versus postverbal asymmetry in terms of the availability of default agreement, and in section 4.3, we provide an outline of a gender system that would deliver the relevant asymmetry between F and N genders.

4.2. The Decrease in Default Postverbally: Default vs. Resolution

Given its relative robustness in preverbal position, the significant decrease of default agreement in the postverbal condition (e.g., NF and FN conditions) is somewhat unexpected. In the model of Marušič, Nevins, and Badecker (2015), this is simply because two of the three strategies, HCA and CCA, work together to yield the same result, and this overpowers the potential for default agreement. However, this alone would not explain the sharp decrease in default agreement postverbally, assuming an equal distribution of the three strategies. This is because Marušič, Nevins, and Badecker do not predict the restriction of default to preverbal conditions; see Table 1.

One possibility that immediately arises is that VS structures with conjoined NP subjects always involve ellipsis of two clausally conjoined TPs. If so, there would be a drop-off of masculine agreement in NF and FN conditions because what looks like CCA or HCA is simply agreement of a verb with its single argument plus conjunction reduction (and hence deletion of the second verb). This possibility can be addressed empirically by looking at collective predicates that are incompatible with clausal coordination sources. In the second phase of our current Experimental Morphosyntax of South Slavic (EMSS) project, we are testing this possibility using a picture-matching task. Pilot results suggest that it cannot be the case that all VS agreement with coordination comes from a clausal-coordination source. But the experiment has not been concluded, so we put this line of discussion aside.

To explain the pattern of reduced M agreement in FN and NF cases postverbally (i.e., the asymmetry with its robust rate preverbally), we begin with the following proposal: there are two sources for masculine agreement with MF combinations—default and resolution. Default is literally the value masculine as a property of the Conj head (though this can apparently vary cross-linguistically, as it is neuter in Icelandic even when MF are conjoined). Resolution, alternatively, involves inspecting the contents of the conjuncts and based on each of their gender computing a resolution value. What is the proof that default and resolution are distinct? A conjunction of Fsg+Fsg can yield either Fpl or Mpl. By hypothesis, Fpl is resolution and Mpl is default. Resolution results from unification (be it, say, via Multiple Agree by the Conj head with

both of its arguments and subsequent conflict resolution in case of clashing values), while default is, simply, always a fixed value for ConjP.

Why is masculine agreement overall found less in Slovenian? If ConjP's default were masculine plural in Slovenian as it is in BCS, we should find some masculine plural agreement when two singulars conjoin. However, as mentioned above, we do not; it is masculine dual. On the other hand, the resolution value, which inspects the features of its conjuncts, will be dual (and whatever gender arises as a property of resolution, in this case masculine). Combinations of two singulars in Slovenian therefore lead to incompatibility with the default value for number. Perhaps in Sln there is no default value for number on ConjP at all, although there is a default value for gender. This conflict may lead to an overall dispreference for plural as the result of default in Slovenian and thus to a dispreference for masculine as the result of default, even in contexts where dual is not an issue. By contrast, both default and resolution can be employed with identical results in BCS, where in fact default masculine plural is sometimes prescribed for all mixed conjuncts.[13]

Once we have grasped the difference between CCA and HCA as partial-agreement strategies on the one hand and default and resolution as ConjP-based strategies on the other hand, we see that in cases of FM either default or resolution will yield masculine. To account for the lower rate of masculine overall postverbally, we hypothesize that in postverbal position only resolution is available and not default. If so, there is only one source for masculine agreement and hence an overall lower rate. (In fact, the prediction, not tested within the current experiment, is that Fsg+Fsg should not yield Mpl/du postverbally, as the resolution value is Fpl.)

It now suffices to explain why only resolution and not default is available if ConjP is chosen as a controller postverbally. Taking the terms default and resolution as features of ConjP, we propose they can be likened to index agreement and concord agreement, respectively, where index agreement (as found in works such as Wechsler and Zlatić 2003, Landau 2015, and Smith 2013) is a fixed value of masculine for ConjP (referred back to by coreferent pronouns, for example), but concord agreement is the result of a ConjP-internal computation and is more local and morphosyntactically based. In Smith 2013, *committee* nouns in British English are said to have an index feature of plural and a

[13] We have not looked at all available prescriptive grammars but want to suggest that prescriptivists typically go for the clarity and uniformity of their rules, and as two singulars of different genders yield agreement in masculine plural (or dual in Slovenian), this rule often gets generalized to govern coordinations of any two noun phrases of different genders (see *Slovenska slovnica* 1947: 270 and Remic-Jager 1980: 122), especially if combinations of two plurals are not specifically mentioned in such grammars (as is the case in, e.g., Barić et al. 1997). However, there are prescriptive works which generalize linearly closest-conjunct agreement as the preferred option in both orders (Maretić 1899) or only with preverbal subjects (Stevanović 1974).

concord feature of singular. For this reason in an utterance like *This committee are/is here. They are ready*, the very local determiner shows concord agreement, the very long-distant coreferent pronoun shows index agreement, and the local verb shows either index or concord agreement. What Smith shows, interestingly, is that the possibility of index agreement on the verb must vanish as soon as the subject is postverbal. Thus **There are a committee in the room* is ungrammatical for the same speakers who allow *A committee are in the room*. Following and extending observations made by Sauerland and Elbourne (2002), Smith (2013) proposes that the controller of index agreement, being LF relevant, must c-command the target (an instance of surface Upward-Agree).[14]

Adopting Smith's proposal, VS configurations with conjoined subjects in South Slavic, as they no longer allow index agreement, will no longer allow default masculine. Only CCA, HCA, or resolution is possible. In fact, we can now return to M agreement in the postverbal FM and NM conditions in Figure 2. These would be resolution and not default agreement (and certainly not last-conjunct agreement), and indeed there is less of it in NM than in FM. We have said above that resolution delivers M for MF and FM configurations but not what resolution delivers for FN and NF. We turn to this in the next section.

4.3 Towards a Gender System for Conjunct Agreement

Due to its resolution role in coordination, masculine is assumed to be the unmarked (or least marked) gender in conjunct-agreement contexts. However, aside from coordination, default M is found in similar contexts where the referent is underspecified for gender or the referent's gender is irrelevant. For example, masculine plural agreement is used when pronouns refer to an exclusively male group or to a mixed group composed of both males and females (*mi smo/vi ste/oni su došli* 'we/you/they AUX$_{PL}$ came$_{M.PL}$'), while feminine agreement can be used only when the group referred to is homogeneously female. Based on this observation many have argued that masculine gender is semantically underspecified for a referent. Importantly though, this does not entail that M is the least marked gender in the BCS and Sln gender systems in general (see Corbett 1983a, 1983b and van Koppen and Rooryck 2008). This is discussed below.

A pattern of results that was much less expected and for which an explanation must be offered is the prominence of N controllers eliciting a higher percentage of linear and hierarchical agreement than F controllers across all paired conditions (MF versus MN, FM versus NM, and in NF and FN). This is interesting because N is the least frequent gender, most constrained in its

[14] See also Willer-Gold 2016 for a recent claim that LF-interpretable gender features must c-command their agreement target.

productivity, and notorious for its general morphological markedness.[15] Interestingly, however, while N has a similar default potential as M outside of coordinated contexts, occuring in impersonal sentences, in inanimate-subject questions, and for gender-underspecified animate nouns (*djeca* 'children'), it does not seem that N is underspecified for gender in the same manner as M. If it were, we would expect N to have at least an equal potential as M in gender resolution—which is not the case. Another differentiating property is that N, but not M, is used as the agreement value when agreement is controlled by an element that fully lacks a gender feature, e.g., a complement clause, an adverbial, or a numeral (see, for example, Marušič and Nevins 2010). Consequently, while we take M to be the least semantically marked gender (and hence the Index Value for ConjP), we take N to be the syntactically least marked or syntactically underspecified gender (cf. Kramer 2015; Franks and Willer-Gold 2014; Tsimpli and Hulk 2013). The syntactic underspecification of N can be also related to its semantic underspecification for biological gender, in contrast to lexical M or F in nouns that can be specified for biological gender.

In Marušič, Nevins, and Badecker 2015, it is suggested that the notion of default gender is relative to the specific context of number: in the context of singular number, neuter is the unmarked gender, whereas in the context of nonsingular (e.g., dual or plural) number, masculine is the unmarked gender. (Indeed, the extreme paucity of animate neuter plurals in South Slavic points to the fact that gender markedness must be considered within the context of number.) Given this context-sensitive markedness and the existence of neuter singular in impersonal and nonagreeing contexts, the subject position in South Slavic pairs together these two unmarked features, whereas in plural contexts (e.g., mixed referents, conjunct agreement), masculine is the default. Nonetheless, this explanation alone cannot fully account for the asymmetries in the NF and FN conditions in our experiments in which both conjuncts were plural.

Let us then relate the two genders to F. To present the BCS and Sln gender systems in more formal terms, we adapt Kramer's (2015) feature model for three-gender systems in (9). Kramer argues for un/interpretable (u/i) gender features (which are interpretable only when they make a semantic contribution, as with animate nouns) to be syntactically located on an *n-* head that serves to nominalize category-neutral roots.[16] Neuter, by hypothesis, is a bare

[15] See Arsenijević 2016 for new insights into the nature of neuter gender in South Slavic.

[16] Smith's (2013) theory of semantically interpretable features also relies on a distinction between iF and uF.

n- head with no value for [±fem], where [±fem] defines which feature is interpretable/uninterpretable:[17]

(9) a. *n*- [+fem] Feminine
b. *n*- [–fem] Masculine
c. *n*- Neuter

To account for why there is more N in FN than there is F in NF, we propose that the additional neuter responses come from resolution. Specifically we propose:

(10) Resolution outcomes:

M&F, F&M	→	M
M&N, N&M	→	N
F&N, N&F	→	N

If N is the resolution value for FN/NF, the additional N responses come not only from HCA/CCA but also from resolution. Similarly, there is more N found in NM/MN than there is F in MF/FM. Why does resolution deliver N here? We propose that resolution involves deleting the features on one of the conjuncts in order to avoid a mismatch. Assuming the features are as shown in (9), this means that in MF/FM combinations the more marked [+fem] will be deleted, leaving only [–fem] and yielding a resolution value of masculine for ConjP. Specifically, if [+fem] is deleted from the node that contributes F, then only the [–fem] feature on the M node will be present, and this will be the resolution value acquired by ConjP. On the other hand, in MN/NM/NF/FN combinations, either specified value of the nonneuter conjunct, i.e., [±fem], will be deleted (on either an M or F source) to avoid mismatch, thereby yielding an empty [ ] on all conjuncts and thus a resolution value of neuter for ConjP.[18]

Dalrymple and Kaplan (2000) propose a set-theoretic union operations for deriving resolution rules, whereby Fem is represented as an empty set ={ }, coupled with a resolution rule through which {M} ∪ { } = {M}. But this representation does not square with the markedness relations in South Slavic. For three-gender languages with the resolution pattern of Icelandic, they propose that Neuter is composed of a set {M,F}, which captures the fact that Masc+Fem (i.e., {M} ∪ {F} = {M,F}) will yield Neuter. Unlike Icelandic, in South Slavic MF

[17] In addition, Franks and Willer-Gold (2014: 108-09) argue that neuter is the absence of a value for gender in their analysis of feature resolution with conjoined subjects.

[18] We leave open whether the deletion rules implementing resolution are achieved via the impoverishment operation of Distributed Morphology or a set of constraint-based neutralizations.

yields M as derived by the features we propose in (9) and (10)—which have two outcomes (or levels) of resolution depending on the values of the conjuncts involved. There is no way to achieve a two-level theory of resolution like ours (where M&F = M but M/F & N = N) with privative features and set-theoretic union. For Slovenian they argue, based on Corbett 1983: 186, that N&N = M.[19] The results in Figure 2 show little support for this, as N&N also yields N (and much more so than M). On the other hand, set-intersection (instead of union) would also founder, as N&N would yield N only and not allow M. Recall that under our model the latter pattern is actually not resolution (as Dalrymple and Kaplan would have it), but default. Dalrymple and Kaplan (2000) in fact suggest, on the basis of parallel patterns with noun class resolution in Lama (Yu 1988), that the coordination head itself provides an additional gender value.

Neuter being the least marked gender, it shows up as the result of HCA and CCA *or* as the result of resolution—these two distinct strategies having an additive effect. Its higher rate of partial agreement as a first conjunct in preverbal NF (compared to the rate of preverbal HCA in FN) and as a closest conjunct in FN (compared to the rate of preverbal CCA in NF) is understandable. However, we leave open the possibility that the higher overall rate of neuter agreement may in part be an artifact of our experimental design (one that nonetheless still has theoretical relevance): the fact that the subjects of the model sentences in elicited production were always masculine. Masculine and neuter show a high degree of syncretism across South Slavic, presumably reflecting the shared lack of a [+fem] specification. Assuming that there can be priming among genders not only for gender categories but even among decomposed gender features (see, e.g., Opitz et al. 2013), the presence of a nonfeminine prime in the model sentence (namely, a masculine) could have led to increased preference for a nonfeminine response for FN and NF. Investigating this source of neuter could be addressed in future experiments.

To conclude, the three genders not only stand in an asymmetric relation to each other with respect to their own potential to control agreement, they also interact with each other's potential when placed in coordination, where agreement is further regulated by the general constraints rating certain agreement patterns over others (preverbally: linear, default, resolution, hierarchical; postverbally: linear/hierarchical, resolution).

5. Conclusion

Conjunct agreement has played an important role in fine tuning theoretical models of agreement, leading to subtle predictions requiring experimental

[19] Dalrymple and Kaplan's discussion of Slovenian N&N is limited to the conjunction of two singulars, but as there is no mechanism for number-sensitivity in their gender resolution operation, it must generalize to conjoined plurals as well.

arbitration. As multiple models have emerged from inconsistent datasets in South Slavic languages, we set out to experimentally provide a baseline against which to assess them. The results from the two elicited-production experiments with native speakers of BCS and Sln find preverbally a high rate of CCA, a somewhat lower rate of default agreement, and a low but nonnegligible rate of HCA and postverbally a high rate of CCA/HCA and low rate of default agreement. Going beyond these configurational factors, we have observed that the ratio of each agreement strategy can vary with respect to the gender of the controller and the gender combination of the two conjuncts. While there is a clear preference for agreement strategies with respect to their controller potential (CCA > Default > HCA), their interaction with the gender system becomes evident when we compare the ratio of the two genders in paired conditions (masculine > neuter > feminine). The experimental data thus suggest an asymmetric interaction of the three values of the gender system with the agreement strategies. This calls for more refined theoretical developments in analyzing gender markedness and of the distinction between default and resolved agreement in BCS and Sln coordination structures.

References

Aljović, Nadira and Muamera Begović. (this volume) "Morphosyntactic aspects of first-conjunct agreement". *Journal of Slavic linguistics* 24(1).

Aoun, Joseph, Elabbas Benmamoun, and Dominique Sportiche. (1994) "Agreement, word order, and conjunction in some varieties of Arabic". *Linguistic inquiry* 25(2): 195–220.

————. (1999) "Further remarks on first-conjunct agreement". *Linguistic inquiry* 30(4): 669–81.

Arregi, Karlos and Andrew Nevins. (2012) *Morphotactics: Basque auxiliaries and the structure of spellout.* Dordrecht: Springer.

Arsenijević, Boban. (2016) "Gender as a grammaticalized classifier system: The case of the Serbo-Croatian neuter". Unpublished ms., University of Potsdam.

Arsenijević, Boban and Ivana Mitić. (this volume) "The logic of agreement: How agreement interacts with negation, disjunction, and quantification". *Journal of Slavic linguistics* 24(1).

Barić, Eugenija, Mijo Lončarić, Dragica Malić, Slavko Pavešić, Mirko Peti, Vesna Zečević, and Marija Znika. (1997) *Hrvatska gramatika.* Zagreb: Školska knjiga.

Benmamoun, Elabbas, Archna Bhatia, and Maria Polinsky. (2010) "Closest-conjunct agreement in head-final languages". *Linguistic variation yearbook* 2009: 67–88.

Bhatt, Rajesh and Martin Walkow. (2013) "Locating agreement in grammar: An argument from agreement in conjunctions". *Natural language and linguistic theory* 31(4): 951–1013.

Bobaljik, Jonathan and Cynthia Zocca. (2010) "Gender markedness: The anatomy of a counter-example". *Morphology* 2010: 1–26.

Bock, Kathryn and Carol A. Miller. (1991) "Broken agreement". *Cognitive psychology* 23: 45–93.

Bošković, Željko. (2009) "Unifying first- and last-conjunct agreement". *Natural language and linguistic theory* 27: 455–96.

Chomsky, Noam. (2000) "Minimalist inquiries". Roger Martin, David Michaels, and Juan Uriagereka, eds. *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*. Cambridge, MA: MIT Press, 89–155.

Citko, Barbara. (2004) "On headed, headless, and light-headed relatives". *Natural language and linguistic theory* 22: 95–126.

Corbett, Greville. (1983a) *Hierarchies, targets, and controllers: Agreement patterns in Slavic.* London: Croom Helm.

————. (1983b) "Resolution rules: Agreement in person, number, and gender". Gerald Gazdar, Ewan Klein, and Geoffrey Pullum, eds. *Order, concord, and constituency*. Dordrecht: Foris, 175–206. [*Linguistic Models*, 4.]

————. (1991) *Gender.* Cambridge: Cambridge University Press.

Dalrymple, Mary and Ronald M. Kaplan. (2000) "Feature indeterminacy and feature resolution". *Language* 76(4): 759–98.

Drummond, Alex. (2011) *IbexFarm*. Version 0.2.7. Available at http://spellout.net/ibexfarm/.

Franck, Julie. (2011) "Reaching agreement as a core syntactic process: Commentary of Bock and Middleton 'Reaching Agreement'". *Natural language and linguistic theory* 29(4): 1071–86.

Franck, Julie, Ulrich H. Frauenfelder, and Luigi Rizzi. (2007) "A syntactic analysis of interference in subject-verb agreement". *MIT working papers in linguistics* 53: 173–90.

Franck, Julie, Glenda Lassi, Ulrich. H. Frauenfelder, and Luigi Rizzi. (2006) "Agreement and movement: A syntactic analysis of attraction". *Cognition* 101: 173–216.

Franks, Steven and Jana Willer-Gold. (2014) "Agreement strategies with conjoined subjects in Croatian". Sylwester Jaworski and Jacek Witkoś, eds. *New insights into Slavic linguistics.* Frankfurt am Main: Peter Lang, 91–115.

Kramer, Ruth. (2015) *The morphosyntax of gender.* Oxford: Oxford University Press.

Landau, Idan. (2015) "DP-internal semantic agreement: A configurational analysis". *Natural language and linguistic theory*. Published online: DOI 10.1007/s11049-015-9319-3.

Maretić, Tomislav. (1899) *Gramatika i stilistika hrvatskoga ili srpskoga književnog jezika*. Zagreb: Kugli.

Marušič, Franc and Andrew Nevins. (2010) "Two types of neuter: Closest-conjunct agreement in the presence of '5&Ups'". Wayles Browne, Adam Cooper, Alison Fisher, Esra Kesici, Nikola Predolac, and Draga Zec, eds. *Formal approaches to Slavic linguistics: The second Cornell meeting.* Ann Arbor: Michigan Slavic Publications, 301–17.

Marušič, Franc, Andrew Nevins, and Bill Badecker. (2015) "The grammars of conjunction agreement in Slovenian". *Syntax* 18(1): 39–77.

Marušič, Franc, Andrew Nevins, and Amanda Saksida. (2007) "Last-conjunct agreement in Slovenian". Robert Compton, Magda Goledzinowska, and Ulyana Savchenko, eds. *Formal approaches to Slavic linguistics: The Toronto meeting.* Ann Arbor: Michigan Slavic Publications, 210–27.

Merchant, Jason. (2014) "Gender mismatches under nominal ellipsis". *Lingua* 151: 9–32.

Munn, Alan. (1999) "First-conjunct agreement: Against a clausal analysis". *Linguistic inquiry* 30(4): 643–68.

Opitz, Andreas, Stefanie Regel, Gereon Müller, and Angela D. Friederici. (2013) "Neurophysiological evidence for morphological underspecification in German strong adjective inflection". *Language* 89(2): 231–64.

Peti-Stantić, Anita and Jelena Tušek. (2016) "First comes first or proximity for all in Croatian: Gender agreement". 20th Biennial Conference on Balkan and South Slavic Linguistics, Literature, and Folklore, Salt Lake City, UT, USA, 28–30 April 2016.

Puškar, Zorica and Andrew Murphy. (2015) "Closest-conjunct agreement in Serbo-Croatian: A rule-ordering account". Anke Assmann, Sebastian Bank, Doreen Georgi, Timo Klein, Phillipp Weisser, and Eva Zimmermann, eds. *Topics at InfL*. Leipzig: Institut für Linguistik der Universität Leipzig, 441–82. [*Linguistische Arbeitsberichte (LAB)*, 92.] Available at http://www.uni-leipzig.de/~asw/lab/lab92/LAB92_15_puskar_murphy.pdf.

Remic-Jager, V. (1980) *Slovenski jezik*. 7th ed. Maribor: Založba Obzorja.

Slovenska slovnica. (1947) Ljubljana: Državna založba Slovenije.

Smith, Peter. (2013) "Collective (dis)agreement: On a 3/4 pattern of British English collective NPs." Enrico Boone, Martin Kohlberger, and Maartje Schulpen, eds. *Proceedings of ConSOLE XX*. Leiden: Universiteit Leiden. Available at http://www.hum.leiden.edu/lucl/research/sole/proceedings/console-xx-proceedings.html.

Sobin, Nicholas. (1997) "Agreement, default rules, and grammatical viruses". *Linguistic Inquiry* 28: 318–43.

Stevanović, Mihailo. (1974) *Savremeni srpskohrvatski jezik*. Belgrade: Naučna knjiga.

Sudo, Yasutada and Giorgos Spathas. (to appear) "Nominal ellipsis and the interpretation of gender in Greek". To appear in *Proceedings of Sinn und Bedeutung 20*.

Tsimpli, Ianthi Maria and Aafke Hulk (2013) "Grammatical gender and the notion of default: Insights from language acquisition". *Lingua* 137: 128–44.
van Koppen, Marjo. (2005) *One probe—two goals: Aspects of agreement in Dutch dialects*. LOT Dissertation.
van Koppen, Marjo and Johan Rooryck. (2008) "Resolving resolution: Underspecification and the law of coordination of likes". Unpublished ms., available at http://ling.auf.net/lingbuzz/000760.
Wechsler, Stephen and Larissa Zlatić. (2003) *The many faces of agreement.* Stanford, CA: CSLI.
Willer-Gold, Jana. (2016) "Obilježja imenice koja podliježe uklapanju u diskurs". *Jezikoslovlje*.
Yu, Ella Ozier. (1988) "Agreement in left dislocation of coordinate structures". *Chicago Linguistic Society* 24(2): 322–36.

Jana Willer-Gold, Andrew Nevins
University College London
Chandler House
2 Wakefield Street
London, WC1N 1PF
United Kingdom
j.willer-gold@ucl.ac.uk, a.nevins@ucl.ac.uk

Nermina Čordalija
University of Groningen (IDEALAB)
Center for Language & Cognition
Oude Kijk in 't Jatstraat 26
9712 EK Groningen
The Netherlands
(Formerly University of Sarajevo)
n.cordalija@rug.nl

Boban Arsenijević, Ivana Mitić, Branimir Stanković
University of Niš
Filozofski fakultet u Nišu
Ćirila i Metodija 2
18000 Niš
Serbia
b.arsenijevic@gmail.com, ivana.mit88@gmail.com, branimir.stankovic@filfak.ni.ac.rs

Received: November 2015
Revised: April 2016

Mia Batinić, Marijana Kresić
University of Zadar
Odjel za lingvistiku
Trg kneza Višeslava 9
HR-23000 Zadar
Croatia
mbatinic@unizd.hr, mkresic@unizd.hr

Nedžad Leko
University of Sarajevo
Faculty of Philosophy
Franje Račkog 1
71000 Sarajevo
Bosnia and Herzegovina
nedzad.leko@ff.unsa.ba

Franc Lanko Marušič, Tina Šuligoj
University of Nova Gorica
Center for Cognitive Science of Language
Vipavska cesta 13
5000 Nova Gorica
Slovenia
franc.marusic@ung.si, tina.suligoj29@gmail.com

Tanja Milićev, Nataša Milićević
University of Novi Sad
Dr Zorana Đinđića 1
Novi Sad 21000
Serbia
tanjamilicev@yahoo.com, natasa.milicevic459@gmail.com

Anita Peti-Stantić, Jelena Tušek
University of Zagreb
Laboratory for Psycholinguistic Research
Zvonimirova 8
10000 Zagreb
Croatia
anita.peti-stantic@ffzg.hr, jtusek@ffzg.hr