
Judge vs. fool: Restrictive use of a noun predicts hybrid agreement

BOBAN ARSENIJEVIĆ, IVANA MITIĆ, ZORICA PUŠKAR-GALLIEN

UNIVERSITY OF GRAZ, UNIVERSITY OF NIŠ, LEIBNIZ-CENTRE GENERAL LINGUISTICS BERLIN

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Introduction

- Empirical focus: nouns in Serbo-Croatian which denote humans of any gender and can control either feminine or masculine agreement, depending on their grammatical gender and/or gender of their referent.

- (1) a. moja knjiga / tetka / krava / **budala**
my.F book / aunt / cow / fool
'my book / aunt / cow / punk'
(singular, feminine only)
- b. moj *knjiga / *tetka / *krava / ??**budala**
my.M book / aunt / cow / fool
'my book / aunt / cow / punk'
- c. moja ?**sudija** / ??**skeledžija** / *deda
my.F judge / ferryman / grandpa
'my judge / ferryman / grandpa'
(singular, feminine possible, variation present)
- d. moj **sudija** / **skeledžija** / deda
my.M judge / ferryman / grandpa
'my judge / ferryman / grandpa'

- Theoretical focus: What factors does the agreement depend on? How can we exactly predict it?

Introduction

Problem:

- These nouns belong to a declension class that comprises mainly grammatically feminine nouns.
- Not enough empirical information on how readily available masculine agreement actually is.
- To date, no systematic predictive classification of the nouns based on the agreement they can trigger.
- Singular-plural contrast: both agreement options available in the singular, plural overwhelmingly feminine (grammatical gender) agreement.

Introduction

- Empirical proposal: a systematic classification of human nouns belonging to declension Class III:
 1. (Class IIIa) *sestra* 'sister'; lexically restricted to female referents: obligatory F agreement
 2. (Class IIIb) *deda* 'grandpa'; lexically restricted to male individuals: obligatory M agreement in Sg
 3. (Class IIIc) gender-generic human: both F and M agreement in Sg
 - (Class IIIc1) *komšija* 'neighbour'; male-restricted + feminine counterpart: M in Sg
 - (Class IIIc2) *judge* 'sudija'; no feminine counterpart: M or F in Sg
 - (Class IIIc3) *budala* 'fool'; epithet-like: F
 4. (Class III d) *riba* 'fish'; gender-generic animals and aspects of humans: obligatory F agreement
- The patterns of Class IIIc nouns confirmed in an experimental study.

Introduction

- Formal proposal:
 - agreement depends on the strength/source of the gender presupposition of a noun,
 - which further depends on the availability of restrictive use (*fool* lacking, *judge* licensing restrictive use), mediated by the respective structural representations.

Data: Class III human-denoting nouns

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- Class IIIa: Nouns restricted to female referents obligatorily trigger feminine agreement, which is both the grammatical and the semantic gender agreement:

(2) dobra sestra / *dobar sestra
 good.F.SG sister good.M.SG sister
 'good sister'

- Lexical gender presuppositions; they denote a set whose characteristic property includes being female.

Data: Class III human-denoting nouns

- Class IIIb: nouns whose lexical meaning is restricted to male individuals obligatorily control masculine agreement in the singular:

(3) dobar	deda	/ *dobra	deda
good.M.SG	grandfather	good.F.SG	grandfather
'good grandfather'			

- Lexical gender presuppositions; they denote a set whose characteristic property includes being male.

Data: Class III human-denoting nouns

Class IIIc hitherto lack a predictive all-encompassing subcategorization.

- Class IIIc1 nouns like *komšija* ‘neighbour’ cannot refer to a woman, but can sometimes figure as generic;
- feminine counterpart *komšinica* ‘female neighbour’ available (4b) (see Merchant 2014, Sudo and Spathas 2019);
- Singular agreement: M.

(4) a. dobar / *dobra komšija
 good.M.SG / good.F.SG neighbour
 ‘good neighbour’

b. dobra / *dobar komšinica
 good.F.SG / good. F.SG. neighbour (F)
 ‘good female neighbour’

- Assumption: they induce a male bias through antipresupposition due to the availability of a derived counterpart triggering a strong female presupposition.

Data: Class III human-denoting nouns

- Class IIIc2 nouns lack a feminine counterpart;
- vary from being degraded to being more easily accepted with F agreement, as with *skeledžija* ‘ferryman’ (5a), and *sudija* ‘judge’ (5b), respectively:

(5) a. ??vesela / veseli	skeledžija	b. (?) vesela / veseli	sudija
cheerful.F.SG / cheerful.M.SG	ferryman	cheerful.F.SG / cheerful.M.SG	judge
‘cheerful ferryman’		‘cheerful judge’	

- They trigger presuppositions whose source is associated with the prototypical referent for the noun.
- (In SC, for all human denoting nouns, by default male, see Arsenijević 2017, but it can be weakened by a cultural biases).

Data: Class III human-denoting nouns

- ClassIIIc3 nouns like *baraba* ‘punk’ and *budala* ‘fool’ are characteristically limited to expressive, or epithet, use and strongly prefer F agreement:

(6) a. pijana budala / baraba b. ??pijani budala / baraba
 drunk.F.SG fool / punk drunk.M.SG fool / punk
 ‘drunk fool / punk’

Data: Class III animate nouns

Class III_d: animate gender-generic nouns (*riba* 'fish', *žirafa* 'giraffe', *osoba* 'person', or *beba* 'baby');

- masculine agreement completely disallowed;
- with male referents, they seem to obscure their gender and establish reference in gender-generic terms.

Data: Class III human-denoting nouns

	Gender presupposition	Presupposed gender	Feminative counterpart	restrictive use	Agreement in Sg
Class IIIa (<i>sestra</i> 'sister')	strong (lexical)	F	Lexical	+	F
Class IIIb (<i>deda</i> 'grandfather')	strong (lexical)	M	Lexical	+	M
Class IIIc1 (<i>komšija</i> 'neighbour')	moderate (lexical antipresupposition)	M	Derived	+	M
Class IIIc2 (<i>sudija</i> 'judge')	weak (cultural presupposition)	M (F)	None	+	M (F)
Class IIIc3 (<i>budala</i> 'fool')	none (non-restrictive)	none	None	-	F
Class III d (<i>riba</i> 'fish')	weak (cultural presupposition)	F	None	+	F

Data: Class III human-denoting nouns

- Our central hypothesis:
 - different sources of gender presuppositions in animate nouns of Class III may trigger conflicting presuppositions, which then need to be resolved – this is what happens in classes IIIb, IIIc1, IIIc2;
 - nouns which cannot be restrictively used, i.e. which cannot head referential nominal expressions, cannot trigger gender presuppositions;
 - without gender presuppositions, no clash emerges, and the derivation with the declension class copied via Agree converges.

Data: Experiment – design

- Hypothesis: lack of restrictive interpretation \Rightarrow lack of M gender agreement

(The (in)ability to receive restrictive interpretations is the property that explains the variation in agreement among the gender-generic nouns.)

- Variables:
 - Independent:
 - 1) Type of noun: Class IIIc2, coded as regular, and Class IIIc3, coded as non-restrictive,
 - 2) Number on the noun: Sg, Pl,
 - 3) Agreeing category: attribute, participle within a verbal predicate,
 - 4) Agreeing value of gender: M and F;
 - Dependent: Likert scale acceptability judgments.

Data: Experiment – design

- Properties of the stimuli:
 - 2 kinds of nouns, 6 per level of the variable Type
 - 6 Class IIIc2 (*knjigovođa* 'bookkeeper', *sudija* 'judge', *pivopija* 'beer-drinker', *psihopata* 'psychopath', *ubica* 'killer', *poslovođa* 'foreman/manager')
 - 6 Class IIIc3 nouns (*uhoda* 'stalker', *lenština* 'idler', *budala* 'fool', *baraba* 'punk', *krvopija* 'bloodsucker', *štetočina* 'pest').
 - Example sentence frame:

- (7) To je iskusna poslovođa. (Agreeing category: attribute)
that IS.AUX.SG experienced.F.SG manager
- 'That is an experienced manager.'
- (8) Ubica je prikrivala strah. (Agreeing category: participle)
murderer is.AUX.SG hidden.F.SG fear
- 'The murderer was hiding the fear.'

Data: Experiment – design

- Stimuli: 192 sentences, 96 critical (per list, with two lists) and 96 fillers
- Participants: Fifty-eight monolingual native speakers of Serbo-Croatian living in Niš or its neighbourhood
- Procedure: read the sentence and judge the degree to which the sentence feels natural (1--bad to 5--good on a Likert scale), as in (9a, b) respectively:

(9) a. Sudija je zaključao sudnicu. b. 0 1 0 2 0 3 0 4 0 5
judge is.AUX.SG locked. M.SG courtroom
'The judge has locked the courtroom.'

Data: Experiment – results

- We fitted the Linear Mixed Model to the Likert scale judgments as the dependent variable, the four fixed effects (gender agreement, number, agreeing category and noun type) and the participants as a random effect.
- `lmer(Judgment ~ Class * Number * Category * Type * (1 | Part), data = AgrLik)`
- All the effects were confirmed to be highly significant (Category was at $p = .0005$, all the others $p < .0001$).
- All the interactions were highly significant too (Category:Class at $p = .008$, all the others $p < .0001$).
- Crucially, both the effect of the variable Type and its interaction with the variable Class (i.e. with the agreement pattern) were at $p < .0001$ ($t = -23.145$, Est. = -1.96 ; $t = 28.005$, Est. = 3.353 , respectively).

Data: Experiment – results

Mean values:

	Adj				V			
	Sg		Pl		Sg		Pl	
	M	F	M	F	M	F	M	F
Regular (<i>judge</i> -type)	<u>4,19</u>	<u>2,96</u>	1,75	4,47	<u>4,48</u>	<u>3,56</u>	2,75	4,53
n-restr. (<i>fool</i> -type)	<u>2,23</u>	<u>4,35</u>	1,65	4,44	<u>3,57</u>	<u>4,51</u>	2,30	4,45

Data: Experiment - Discussion

- Class III nouns denoting humans, and triggering no strong gender presuppositions, come in two distinct subclasses:
 1. Ns that can be used both restrictively in referential expressions and nonrestrictively in predicates and epithet-like constructions, preferring M agreement in the singular,
 2. Ns only in the epithet-like use, preferring F agreement in singular.
- Plural prefers F agreement in general.
- An Agreement Hierarchy effect (Corbett 1979): Agreement with the verb shows weaker acceptability contrasts between M and F; agreement with the verbal participle is generally judged better than with attributive adjectives.

Analysis

Back to gender presuppositions: nouns

Following Arsenijević (2021), we identify 4 possible sources of gender presuppositions:

1. **Lexical semantics** of the noun (i.e. root or other base, as in *deda* 'grandpa' or *vladika* 'bishop', *sestra* 'sister' or *dadilja* 'nanny') – **strong**.
2. Availability of a **feminine counterpart** derived from the noun, triggering a masculine presupposition on the noun (*komšija* 'neighbor' triggers masculine presupposition due to the availability of *komšinica* 'female neighbor') – **strong**.
3. **Cultural construct** – masculine for humans and some animals (*pas* 'dog', *crv* 'worm', *lešinar* 'vulture'), feminine for other animals (*ptica* 'bird', *antilopa* 'antelope', *glista* 'earthworm') – **moderate**.
4. **Declension class** – as all class I animates are lexical masculines, all class II neuters, and class III is open for all genders, classes I and II trigger weak masculine and neuter presupposition, respectively, and class III weak feminine antipresupposition. This source is the weakest and never shows on nouns, but does on adjectives and verbs, which carry no other sources – **weak**.

Gender presuppositions from agreeing items

- Agreement simply copies the relevant features (in this case classifiers that subsequently derive declension class) from the goal.
- Declension class on the agreeing item triggers a gender presupposition for animate referents.
- When a different gender presupposition is available which is strong, a conflict emerges at LF.

moj-a ded-a
my-III **grandpa**-III

decl. class on the adjective triggers a weak feminine and lexical meaning on the noun a strong masculine presupposition

- Rather than a crash of the derivation, this triggers a repair mechanism in the syntax.
- The marking that triggers the weak clashing presupposition (i.e. declension class on the agreeing item) is replaced by the default specification (i.e. class I:

moj-∅ ded-a).
my-I **grandpa**-III
- This is how class IIIb (*grandpa*), class IIIc1 (*neighbour*) and class IIIc2 (*judge*) nouns agree.

Expressivity

- Class IIIc nouns are all expressive (Caha 2021, Arsenijević 2021).
- Class IIIc1 (*neighbour*) and class IIIc2 (*judge*) nouns are either hypocoristic or borrowed (i.e. derived by borrowed suffixes).
- Hypocoristic and borrowed morphemes are adjuncts to category head n – hence these nouns retain animacy / humaneness (see e.g. Kramer 2015 for diminutives).
- Class IIIc3 (*fool-type*) nouns are pejoratives.
- We analyze pejoratives as inanimate renominalizers. When bearing animate or human meanings, they can be used only predicatively, never referentially (unless desemanticized into a (nick)name).
- As non-referential inanimates, these nouns never trigger any presuppositions whatsoever, hence no presupposition conflict is possible, and the copied agreement classifier features converge at LF.

Back to gender presuppositions

	Gender presupposition	Source	Feminative counterpart	restrictive use	Presupposed gender	Agreement in Sg
Class IIIa (<i>sestra</i> 'sister')	lexical	root	Lexical	+	F	F
Class IIIb (<i>deda</i> 'grandpa')	lexical	root	Lexical	+	M	M (repair)
Class IIIc1 (<i>komšija</i> 'neighbour')	lexical antipresupposition	lexical competition	Derived	+	M	M (repair)
Class IIIc2 (<i>sudija</i> 'judge')	functional	human denotation	None	+	M (F)	M (repair) / (F)
Class IIIc3 (<i>budala</i> 'fool')	none (non-animate)	/	None	-	None	F

Summary, conclusions, issues

- Class III nouns in SC comprise several subclasses:
 - Class IIIa: female
 - Class IIIb: expressive hypocoristic
 - Class IIIc1: weak expressive (hypocoristic or borrowed) with a gender counterpart
 - Class IIIc2: weak expressive (hypocoristic or borrowed)
 - Class IIIc3: expressive pejorative
- Unlike other weak (animate, human) expressives, which can agree in Class I (default M), as a repair mechanism caused by a clash of presuppositions of different strength, expressive pejorative nouns are inanimate, trigger no gender presuppositions, and have Class III (F) agreement as the only option.
- Human plurals refer to pluralities, consisting of gendered individuals, with homogeneous or mixed gender values; as such the plural form does not have a fixed gender.
- Similar as in pejoratives, no false presupposition emerges, and repair is not necessary. It is, however, possible, with some degradation, when the male presupposition is part of the common ground.

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