A theory of (pro)nominal structure and its consequences on resolving morphosemantic mismatches

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> **Goal:** A formal description of the morphological distinctions, distribution, form-meaning mismatches and agreement properties of pronouns in Bosnian/Croatian/Montenegrin/Serbian (BCMS), and a unified model of the form, locus and function of their ϕ- and case features.
>
> **Claim:** The seemingly unrelated properties of pronominal elements can be accounted for as a consequence of a unified approach to (pro)nominal syntactic structure. Key notion: *hierarchy*. (i) Within the pronominal extended projection: base > ϕ-features > case; (ii) within ϕ-features: person > number > gender (iii) within case: unmarked (NOM) > dependent (ACC, GEN) > oblique (DAT) > prepositional (INST, LOC). Hierarchies structurally encoded in the syntax. Distribution of nominal features and the locality domains they define have consequences on morphology, interpretation, ability to move and control agreement.

1 Introduction

Distinctions between (pro)nominal elements:

- three oppositions: (i) strong pronouns vs. clitics and (ii) local-person pronouns vs. third person pronouns (iii) pronouns vs. nouns.
- **Morphological properties:**
  - (i) Strong pronouns vs. clitics (reduced forms of strong pronouns);
  - (ii) Local-person pronouns vs. third person pronouns (resemble nouns in some aspects).
- **Form-meaning mismatches:**
  - (i) Strong pronouns license only animate referents and strict identity readings unless in a PP or focused vs. clitics (no restrictions);
  - (ii) local-person pronouns (only animate/human) vs. third-person pronouns (both animate and inanimate) and local-person do not allow sloppy readings, while third-person may do.
- **Information structure:** strong pronouns focused, clitics topical.
- **Agreement:** local-person pronouns can control (natural) gender agreement (despite the lack of overt gender distinctions), third-person pronouns control grammatical gender agreement (with their overt gender).

Questions that this talk will address:

- Given this disparate set of distributional properties, is there a way to unite them under a single analysis?

- What do the properties outlined above look like in further detail?
- What would a proposal on a unified syntactic representation look like?
- Outstanding issues and further detailed analyses.

Main results:
- Local-person pronouns differ from third-person pronouns in whether they encode grammatical gender; clitics and strong pronouns share the same structure, but clitics crucially lack the NP.
- All pronominal types may encode features [ANIMATE] and [HUMAN] within their NP, as a part of natural gender.
- All pronominal types may act as bound variables if they lack natural gender (specifically features [HUMAN] and [ANIMATE]).

2   Morphosyntactic properties of pronouns in BCMS

2.1   Morphological shape

- First and second person pronouns: (i) number suppletion SG vs. PL, (ii) case suppletion nominative vs. non-nominative environments (1st person), (iii) share case endings, (iv) realise their base (comprising of π (person) and # (number)) separately from their case features.
- Third person pronouns: (i) case suppletion nominative vs. non-nominative, (ii) adjectival inflection, (iii) realise base separate from gender, number and case.

	1SG	2SG	1PL	2PL	3SGM/N	3SGF	3PL
NOM	*ja*	*ti*	*mi*	*vi*	*on-∅/-o*	*on-a*	*on-i/-e/-a*
GEN	*m-en-e*	*t-eb-e*	*na-s*	*va-s*	*nje-ga*	*nj-e*	*nj-ih*
DAT	*m-en-i*	*t-eb-i*	*na-ma*	*va-ma*	*nje-mu*	*nj-oj*	*nj-ima*
ACC	*m-en-e*	*t-eb-e*	*na-s*	*va-s*	*nje-ga*	*nj-u*	*nj-ih*
INST	*m-n-om*	*t-ob-om*	*na-ma*	*va-ma*	*nj-im*	*nj-om*	*nj-ima*
LOC	*m-en-i*	*t-eb-i*	*na-ma*	*va-ma*	*nje-mu*	*nj-oj*	*nj-ima*

Table 1: Personal pronouns in BCS

2.2   Pronouns vs. clitics

2.2.1   Morphological shape

- Clitics: available in genitive, accusative and dative; local-person pronoun clitics spell out the person, number and case features without the support morpheme; third-person clitics spell out the gender, number and case suffix, without the pronominal base *on-/nje-*.

	1SG	2SG	1PL	2PL	3SGM/N	3SGF	3PL
NOM	*ja*	*ti*	*mi*	*vi*	*on-∅/-o*	*on-a*	*on-i/-e/-a*
GEN	***m**-en-**e***	***t**-eb-**e***	***na-s***	***va-s***	*nje-**ga***	*nj-**e***	*nj-**ih***
DAT	***m**-en-**i***	***t**-eb-**i***	***na-ma***	***va-ma***	*nje-**mu***	*nj-**oj***	*nj-**im**a*
ACC	***m**-en-**e***	***t**-eb-**e***	***na-s***	***va-s***	*nje-**ga***	*nj-**u***	*nj-**ih***
INST	*m-n-om*	*t-ob-om*	*na-ma*	*va-ma*	*nj-im*	*nj-om*	*nj-ima*
LOC	***m**-en-**i***	***t**-eb-**i***	*na-ma*	*va-ma*	*nje-mu*	*nj-oj*	*nj-ima*

Table 2: Personal pronouns in BCS

2.2.2   Distribution and interpretation

Animacy
- Strong pronouns must refer to animate/human entities, clitics do not show any animacy restrictions:

(1) *Clitics vs. pronouns, animacy/humanness (Despić 2011:240)*

    a. Čuo   sam | je |.   [+human] [-human]
       heard.M.SG AUX.1.SG | CL.3.F.SG.ACC |
       'I heard her.'

    b. Čuo   sam | nju |.   [+human] *?[-human]
       heard.M.SG AUX.1.SG | 3.F.SG.ACC |
       'I heard her.'

- The exception to this are PPs and focus contexts.
- In a PP, it is not possible to realise a clitic, instead a strong pronoun is necessary (2) (see also Abels 2012; Milićev and Bešlin 2019).[1]

(2) *Clitics vs. pronouns in a PP*

    a. Maša hoda pored | mene/*me |.
       Masha walks beside 1.SG.ACC/CL.1.SG.ACC
       'Masha is walking next to me.'

    b. Maša   kupuje poklon za | njega/*ga |.
       Masha buys   present for 3.M.SG.ACC/CL.3.M.SG.ACC
       'Masha is buying a present for him.'

- Such a strong pronoun in a complement of P position can in fact refer to an inanimate entity.

(3) *Strong pronouns as complements of P*

    a. Dok vozi, Ljubica uglavnom koristi svoj telefon za
       while drives Ljubica mostly   uses her phone for
       navigaciju, a Tamara se   dobro snalazi i   [PP bez
       navigating but Tamara REFL good manages and   without
       | njega |].
       3.SG.M.GEN
       'While driving, Ljubica mostly uses her phone for navigating and Tamara manages well without it.' (genitive, inanimate)

b. Jelena mnogo voli svoj novi posao, a   Jovana oseća
   Jelena a.lot   loves self's new job   but Jovana feels
   izrazitu odbojnost [PP prema | njemu |].
   distinct revulsion   towards 3.M.SG.DAT
   'Jelena likes her new job a lot and Jovana finds it repulsive.' (dative, inanimate)

c. Mladen je prošao kroz   svoja pitanja za kontrolni, a
   Mladen is went   through self's questions for test   but
   i   Saša je takođe prošao [PP kroz | njih |].
   and Sasha is also   went   through 3.N.PL.ACC
   'Mladen went through his questions for the test and Sasha went through them too.' (accusative, inanimate)

- Furthermore, instrumental and locative strong pronouns (without clitic counterparts), show the same behaviour (see also Stegovec 2019 for Slovenian). I will use this to argue that these cases are in fact PPs.

(4) *Strong pronouns in instrumental and locative*

    a. Slavica uglavnom putuje bez   svog velikog ruksaka,
       Slavica mostly   travels without self's big   backpack
       a   Jovan obavezno putuje [PP s | njim |].
       but Jovan necessarily travels   with 3.F.SG.INS
       'Slavica mostly travels without her big backpack, but Jovan necessarily travels with it (Slavica's/Jovan's backpack).' (instrumental, inanimate)

    b. Lena se   rado igra u svojoj sobi, a   Matija samo
       Lena REFL gladly play in self's room but Matija only
       uči   [PP u | njoj |].
       studies   in 3.F.SG.LOC
       'Lena likes to play in her room and Matija only studies in it (Lena's/Matija's room).' (locative, inanimate)

- Finally, if focused, a strong pronoun may also be inanimate, c.f. (1):

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[1] See Stegovec (2019) for a tripartite distinction between Slovenian strong, clitic and P-pronouns.

(5) *Focused inanimate pronoun (Despić 2011:246)*

Čuo   sam čak i | nju |.   [+human] [−human]
heard.M.SG 1.SG even and 3.F.SG.ACC
'I heard even her.'

Reference and sloppy readings:

- Strong pronouns may only strictly refer to their antecedent; clitics can license sloppy identity readings (in addition to strict ones) (6)-(7).
- Availability of sloppy identity readings affected by: animacy, modification of the antecedent and regional variant (Franks 2013) vs. appropriate context (Runić 2014; see also Ruda 2021*a,b*).[2]

(6)   *Pronouns and sloppy readings (Runić 2014:99,124)*

Jovan je pozvao svoju devojku na slavu,   a
Jovan is invited his   girlfriend on family.celebration and

| nju | je pozvao i   Danilo.
3.SF.F.ACC is invited also Danilo
'Jovan invited his girlfriend to the family patron saint's celebration, and Danilo invited her (Jovan's/*Danilo's girlfriend) too.'

(7) *Clitics and sloppy readings (Runić 2014:97-98, Franks 2013:76)*

   a. Nikola je   vidio film, a   vidio | ga | je
      Nikola AUX.3.SG saw   film and saw   CL.3.M.SG.ACC AUX.3.SG

      i   Danilo.
      and Danilo
      'Nikola saw a movie and Danilo saw it/one too.'
   b. Goran ima smeđi kaput i   Zoran | ga | također ima.
      Goran has brown coat   and Zoran CL.3.M.SG.ACC also   has

'Goran has a brown coat and Zoran also has *it/one.'

   c. Goran ima pametnu ženu i   Zoran | je | također ima.
      Goran has smart   wife and Zoran CL.3.F.SG.ACC also   has
      'Goran has a smart wife and Zoran also has *it/one.'

- Interestingly, strong pronouns in complement of P may also allow for sloppy readings, as the examples repeated in (8) show.

(8) *Strong pronouns as complements of P*

   a. Dok vozi, Ljubica uglavnom koristi svoj telefon za
      while drives Ljubica mostly   uses   her phone for
      navigaciju, a   Tamara se   dobro snalazi i   [PP bez
      navigating but Tamara REFL good manages and   without
      | njega |].
      3.SG.M.GEN
      'While driving, Ljubica mostly uses her phone for navigating and Tamara manages well without Ljubica's phone/Tamara's phone.'
   b. Jelena mnogo voli svoj novi posao, a   Jovana oseća
      Jelena a.lot loves self's new job   but Jovana feels
      izrazitu odbojnost [PP prema | njemu |].
      distinct revulsion   towards 3.M.SG.DAT
      'Jelena likes her new job a lot and Jovana finds it (Jelena's job/Jovana's job) repulsive.'
   c. Mladen je prošao kroz   svoja pitanja   za kontrolni, a
      Mladen is went   through self's questions for test   but
      i   Saša je takođe prošao [PP kroz | njih |].
      and Sasha is also   went   through 3.N.PL.ACC
      'Mladen went through his questions for the test and Sasha went through them (Sasha's/Mladen's questions) too.'

- The same holds for instrumental and locative, see (4) above.

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[2]The context for sloppy reading in (7a):
Nikola and Danilo are best friends. They have many interests in common except their taste in movies is completely different. Specifically, Nikola likes comedies, whereas Danilo likes horror movies. In their town, a movie festival of all film genres takes place every summer. A comedy and a horror movie played at the same time in two different buildings. Given their very different tastes, Nikola and Danilo saw two different movies.

Information structure

- An additional, information-structure conditioned difference between strong pronouns and clitics in BCMS: strong pronouns are associated with focus, clitics are topical.
- In BCMS, only strong pronouns may express new-information or contrastive focus (or require an antecedent that carries focus, see Despić 2011; Jovović 2022).

(9) Who did you see?

     a. #Video   sam | ga |.
        seen.M.SG AUX.1.SG CL.3.M.SG
        'I saw him.'

     b. Video   sam | njega |.
        seen.M.SG AUX.1.SG 3.M.SG
        'I saw him.'   (Despić 2011:245)

- Clitics require antecedents that express discourse-given information (Jovović 2022).

(10) *Clitics as bound variables (Despić 2011:243)*

     a. Svaki predsednik$_i$ misli da | ga$_i$/??njega$_i$ | svi   vole.
        Every president   thinks that him.CL/him   everyone love
        'Every president$_i$ thinks that everybody loves him$_i$.'

     b. Svaki predsednik$_i$ misli da je *pro$_i$*/??on$_i$ najpametniji.
        Every president   thinks that is pro/he   smartest
        'Every president$_i$ thinks he$_i$ is the smartest'

2.2.3 Agreement

- Local-person pronouns control natural gender agreement.

(11) a. Ja   sam   došla   / došao.
        1.SG AUX.1.SG came.F.SG / came.M.SG
        'I (female referent) came.'

     b. Mi   smo   došle   / došli.
        1.PL AUX.1.PL came.F.PL / came.M.PL
        'We (female referents) came.'

- Neuter cannot be used in agreement with first and second person.

(12)*Ja   sam   došlo.   (13)*Mi   smo   došla.
     1.SG AUX.1.SG came.N.SG   1.PL AUX.1.PL came.N.PL
     'I (neuter) came.'   'We (neuter) came.'

- Third-person pronouns control agreement depending on their grammatical gender.

(14) a. On   je   b. Ona   je
        3.SG.M AUX.3.SG   3.SG.F AUX.3.SG
        došao.   došla.
        came.M.SG   came.F.SG
        'He came.'   'She came.'

- Third-person neuter pronouns trigger neuter agreement; highly degraded with animate referents (Arsenijević 2018:23) (15). An overt antecedent necessary.

(15)#Ona su   neumorna.
     3.SG be.3.PL tireless.N.PL
     'They are tireless.'

3 Notes on theoretical background

Some issues raised by the paradigms above:

- Categorial status of pronouns vs. nouns in BCMS:
(Progovac 1998; Cardinaletti and Starke 1999; Despić 2011; Arsenijević 2014*a*; Runić 2014; Puškar-Gallien 2019*b*; Ruda 2021*a*; Bešlin in press; Jovović 2022)

- Are they NPs or DPs? Arguments have been advanced in favour of both, or for a parametrised view.
- Déchaine and Wiltschko (2002) argue that pronouns come in three sizes, NP, PhiP and DP, but the tests they apply are inconclusive for BCMS (strong pronouns may be modified by lexical material, which would qualify them as DPs, but this has been questioned by Arsenijević 2017, 2014*b*; a Pro-DP behaves as an R-expression, while a Pro-PhiP behaves as a bound variable, and we have seen above that strong pronouns may also license sloppy readings; a Pro-DP cannot be used as a predicate, but only as an argument, yet strong pronouns show both behaviours, while clitics can't be predicates).
- Cardinaletti and Starke (1999) argue for a tripartite distinction between strong, weak and clitic pronouns; their tests also insufficient – we could treat argument pronouns as strong and PP pronouns (3) as weak (since they allow for inanimate referents, unlike strong pronouns in argument position), but they should also disallow coordination (see Bešlin in press for counterexamples).
- An intermediate position: it is irellevant as long as there is another head in the syntactic structure that can introduce referential index/individuation.

- Structural encoding of phi-features and case features on (pro)nouns and their realisation?
(Progovac 1998; Franks 2013; Despić 2017; Stegovec 2019; Caha 2021; Ruda 2021*a*)
  - The consensus is mostly on NP>PhiP>Case, which I will follow, with some adjustments.
- Structural encoding of properties such as *human* and *animate* such that they can be present in local-person pronouns and optional in clitics? (Puškar-Gallien 2019*b*; Arsenijević 2021)
  - They are tied to referential/individuation specification and also connected to natural and grammatical gender and number distinction, as well as person.

- Problematic for the Y-model of syntax.
- The effect of pronominal structure on their syntactic distribution and information-structural properties (e.g. no clitics in instrumental and locative, topicality requirement on clitics, expression of focus)? (Despić 2011; Abels 2012; Runić 2014; Milićev and Bešlin 2019; Bešlin in press; Jovović 2022)
  - It comes down to NP-DP distinction and locality constraints.
- Gender on pronouns?
  - Why do local-person pronouns lack overt gender distinctions if they do bear gender features? Impoverishment (Nevins 2011*a*; Nevins and Parrott 2010; Parrott 2015; Despić 2017) is a possible, but an unlikely answer, see Puškar-Gallien (2019*a*) for detail.
  - Peculiarities of neuter gender and its incompatibility with local person? It is not a gender, but a classifier in BCMS (Arsenijević 2018).
- All in all, previous accounts have tackled aspects of the issues represented above without capturing the full set of properties that pronouns and clitics share and in which they differ.

How I will account for these:
- Unified syntactic structure with well-defined locality domains.

Plan for the rest of the talk:
- Present a proposal for the syntactic representation of (pro)nouns.
- Morphological realisation (general idea)
- Ramifications for movement
- Effects on agreement (Appendix)

4 Internal structure of nouns and pronouns

4.1 General idea

- Three layers in the structure of a (pro)noun in BCMS: nP > ϕP > KP;

- – ϕP: → PersP > NumP > ClassP
- – KP: → unmarked > dependent > oblique > PP
- Pronouns differ from nouns in lacking a lexical root.

4.2 Base

- The base of the noun consists of a nominal root and a nominalizing head *n* (Marantz 2001, 2007; Arad 2003, 2005; Kramer 2015).
- Pronominal base crucially differs from that of nouns in lacking a lexical root (see Moskal 2015*a*,*b*; Smith et al. 2018).
- The pronominal *n*P thus consists solely of the categorizing head *n* (van Urk 2018, building on Postal 1969; Elbourne 2005; but also Déchaine and Wiltschko 2002; van Koppen 2012).
- *n*P is the source of individuation features and referential index. This can also potentially be implemented by employing an additional syntactic projection above the *n*P to do this job, e.g. RefP (Caha 2021), σP (Sichel and Toosarvandani 2022), or PersP (Ruda 2021*b*,*a*).

4.3 ϕ-Features:

- General idea: ϕ-features have complex internal structure in the form of hierarchically organised sub-features (Harley and Ritter 2002).

(16) Structural hierarchy of ϕ-features (Harley and Ritter 2002:486):
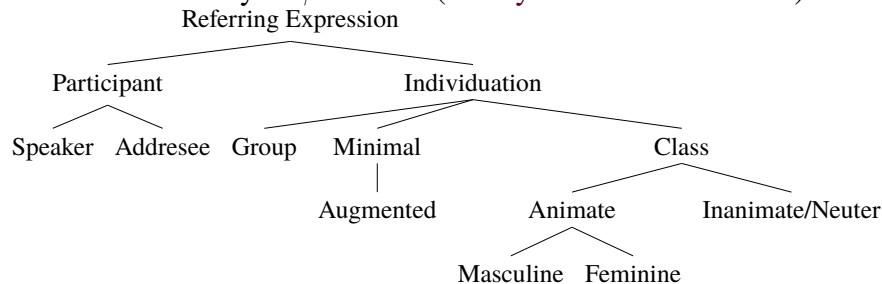
- Accounts distributing these features across the nominal spine have mostly focused on two types of features, π and #, or # and γ (see Béjar and Řezáč 2009; van Koppen 2012; Puškar 2018; Puškar-Gallien 2019*b*; Caha 2021).
- I will offer a unified proposal for structural encoding of the hierarchy in (16) within the nominal phrase.

4.3.1 Internal structure of ϕ-features

- I will reipterpret RefP as *n*P.
- **Person**: Person features can be further decomposed such that the complexity of representation increases from the 3rd (19) towards the 1st person (17) (McGinnis 2005; Georgi 2012, 2013; Nevins 2007; Béjar and Řezáč 2009; Preminger 2014; Deal 2015; Kalin 2019).
- The root node π can also be absent, resulting in a lexical noun. Thus the main difference between pronouns and nouns is in the presence of π features.

(17) 1st person
$$\begin{bmatrix} \pi \\ | \\ \text{Prtcpnt} \\ | \\ \text{Spkr} \end{bmatrix}$$

(18) 2nd person
$$\begin{bmatrix} \pi \\ | \\ \text{Prtcpnt} \end{bmatrix}$$

(19) 3rd person
$$[\pi]$$

(20) Lexical noun
$$[\varnothing]$$
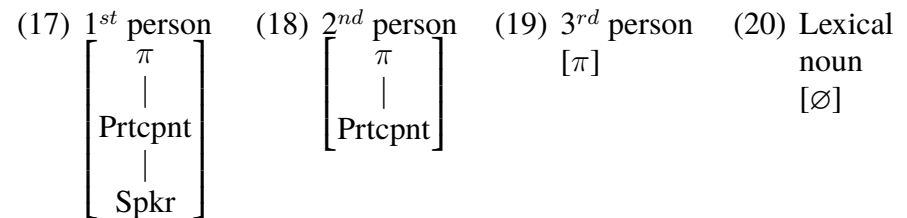
- **Number:** I will adopt the representation of the plural number proposed by Preminger (2014), as in (21).[3]

(21) $$\begin{bmatrix} \# \\ | \\ \text{pl} \end{bmatrix}$$

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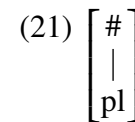
[3]This is for the purposes of familiarity on the one hand and avoiding confusion by tying Individuation strictly to number, on the other, but see Caha (2021) for the representation of number in terms of features [Individuation] and [Group], based on Harley and Ritter (2002) Hierarchy.

- Singular number is the absence of number, hence the absence of #P (Kratzer 2007; Nevins 2011*b*; Pesetsky 2013; Despić 2017).
- **Gender:** Feminine is the most marked gender in BCMS, masculine semantically and neuter syntactically unmarked (Willer Gold et al. 2016, Arsenijević 2018).
- I propose that gender in BCS is represented in terms of a general gender node CLASS, a marked feminine value [F] and an animacy and humanness specification, represented as an [ANIM] and [HUM] nodes, as in (22) (see also Hammerly 2018; Foley and Toosarvandani 2019; Caha 2021; Adamson and Anagnostopoulou 2022, to appear for similar proposals for French, Zapotec, Czech and Greek).
- Proposed hierarchy for gender:

(22)
```
        CL
       /  \
    ANIM   F
      |
     HUM
```
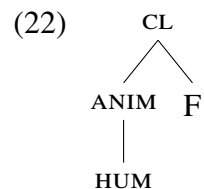
- **Benefits:** Direct link between gender and features [ANIM] and [HUMAN] as subparts of its specification.

    – [CL]: Root nodel always present when representing gender.
    – [F]: Activated with feminine nouns.
    – [CL[F]]: Feminine grammatical gender.
    – [CL[ANIM[HUM]][F]]: Feminine natural gender.
    – [CL[ANIM[HUM]]]: Masculine natural gender (for all human-denoting nouns, a prototypical referent is by default male; Arsenijević et al. 2022).
    – [CL] alone: grammatical masculine gender.
    – no [CL]: no gender, hence neuter.

- Differences between natural and grammatical gender fall out from their internal feature structure.

- Markedness of gender may be expressed in terms of the number of nodes it contains: feminine natural gender the most marked one, grammatical masculine the least.

4.3.2 Distribution of features across nominal spine

Basic assumption: A syntactic projection for each feature type. Ordering of ϕ-features based on:

(23) *Implicational hierarchy of ϕ-features (Greenberg 1963; Noyer 1992)*:
    Person > Number > Gender

- Person is lower than number: Noyer (1992); Trommer (2002); Harbour (2007, 2008, 2016); Arregi and Nevins (2012) argue that person affixes strongly tend to be linearised towards the left, and number affixes to the right; Mirror Theory (Baker 1985; Brody 2000; Brody and Szabolcsi 2003) suggests a lower base position of person with respect to number;
- Harbour (2016): person higher than number makes wrong predictions for possible and impossible pronoun inventories (under his approach to person encoding).
- Following van Urk (2018); Smith et al. (2018), I assume π to be local to the pronominal base, however I take it to head its own projection, πP, above the *n*P. Number heads a further projection, #P.
- Grammatical gender heads its own projection CLP above #P.
- GENDER as a category can be dispersed across the nominal spine (Steriopolo and Wiltschko 2010; Pesetsky 2013; Landau 2016; Kučerová 2018; Steriopolo 2018*a*,*b*; Fassi Fehri 2018, but see Arsenijević 2021 for an alternative view).
- Here, CLP will host the morphologically realised GENDER.
- Natural gender is encoded on *n* (Kramer 2015; Puškar 2018).

(24) NP so far:

```
              CLP
             /    \
           CL     #P
                 /   \
               #      πP
                     /   \
                    π     nP
```
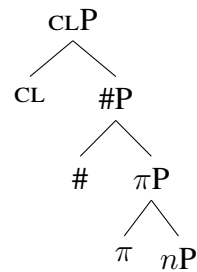
- The distribution of gender will have further consequences on the agreement of nouns, see Appendix.

4.4   Case

- Case is introduced by a separate projection K(P) (Bittner and Hale 1996; Caha 2009; Neeleman and Szendröi 2007; Moskal 2015*a*,*b*; Smith et al. 2018)
- K can have a complex structure that encodes the *Case Hierarchy*: NOMINATIVE > ACCUSATIVE > GENITIVE > DATIVE > INSTRUMENTAL > COMMITATIVE (Caha 2009).
- Smith et al. (2018) implement this by assuming a distinction between the *dependent case* (DEP; here encompassing ACC and GEN) and the *oblique case* (OBL, here DAT).
- Prepositional case will include INST and LOC (see Milićev and Bešlin 2019 for instrumental in BCMS).

(25)

```
              PP
             /    \
           P      K_OBL P
                 /      \
            K_OBL       K_DEP P
                       /      \
                  K_DEP       K_UNM P
                             /      \
                       K_UNM        CLP
                                   /    \
                                 CL     #P
                                       /   \
                                      #     πP
                                           /   \
                                          π     nP
```
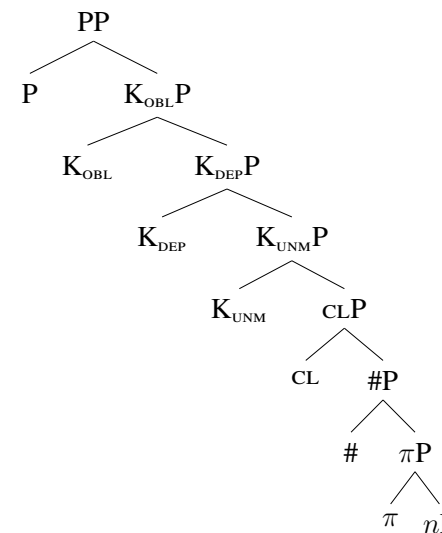
- McFadden's (2018) addendum (built on Bittner and Hale 1996; McFadden and Sundaresan 2009, i.a.): NOM is the absence of case, i.e the absence of the case-bearing projection(s). This elliminates K_{UNM}.

4.4.1   Interim summary

- To sum up, (26) represents the complete structure of a BCMS nominal phrase in the most complex case.
- This structurally encodes the hierarchy from (23) above, with an additional benefit of providing a way to distribute the Harley and Ritter (2002) hierarchy across the pronominal spine (see van Koppen 2012; Fassi Fehri 2000).

(26)

```
                PP
              /    \
            P      K_OBL P
                  /      \
              K_OBL      K_DEP P
                        /      \
                    K_DEP      CLP
                             /     \
                          ⎡CL⎤     #P
                          ⎢ | ⎥   /   \
                          ⎣ F ⎦ ⎡#⎤    πP
                                ⎢|⎥   /   \
                                ⎣pl⎦ ⎡ π ⎤  nP
                                     ⎢ | ⎥  ⎡   CL   ⎤
                                     ⎢Prtcpnt⎥ ⎢  /  \  ⎥
                                     ⎣ Spkr ⎦  ⎢ANIM  F ⎥
                                               ⎢  |     ⎥
                                               ⎣ HUMAN  ⎦
```

(27) Singular 1st-person pronoun:

```
        πP
      /    \
   ⎡ π ⎤   nP
   ⎢ | ⎥   ⎡   CL   ⎤
   ⎢Prtcpnt⎥ ⎢  /  \  ⎥
   ⎣ Spkr ⎦  ⎢ANIM  F ⎥
             ⎢  |     ⎥
             ⎣ HUM    ⎦
```

(28) Plural 1st-person pronoun:

```
        #P
      /    \
   ⎡#⎤     π
   ⎢|⎥    /  \
   ⎣pl⎦ ⎡ π ⎤  nP
        ⎢ | ⎥  ⎡   CL   ⎤
        ⎢Prtcpnt⎥ ⎢  /  \  ⎥
        ⎣ Spkr ⎦  ⎢ANIM  F ⎥
                  ⎢  |     ⎥
                  ⎣ HUM    ⎦
```
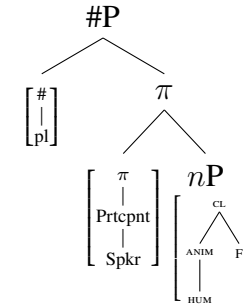
(29) Singular 2nd-person pronoun:

```
        πP
      /    \
  ⎡ π ⎤    nP
  ⎣Prtcpnt⎦ ⎡   CL   ⎤
            ⎢  /  \  ⎥
            ⎢ANIM  F ⎥
            ⎢  |     ⎥
            ⎣ HUM    ⎦
```
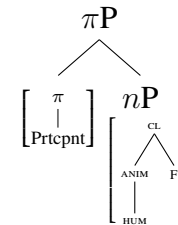
(30) Plural 2nd-person pronoun:

```
        #P
      /    \
   ⎡#⎤     π
   ⎢|⎥    /  \
   ⎣pl⎦ ⎡ π ⎤  nP
        ⎣Prtcpnt⎦ ⎡   CL   ⎤
                  ⎢  /  \  ⎥
                  ⎢ANIM  F ⎥
                  ⎢  |     ⎥
                  ⎣ HUM    ⎦
```

4.5 The representation of pronouns

- The complete structure of a pronoun given in (26) offers possibilities for parametrisation, as not all pronouns will require all the available nodes.
- Local-person pronouns lack CLP in general – models the lack of grammatical gender.
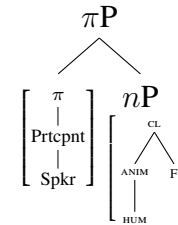- Their singular forms also lack #P. The πP is projected, since they must have at the minimum the [Prtcpnt] feature.
- The structures in (27)–(30) represent the local-person pronouns in the nominative case (hence the lack of KP).

- The proposed structures for 3rd-person pronouns are presented in (31)–(32).
- As number is absent, in the singular their *n*P will be dominated by πP and CLP, which bears the [F] node for grammatically feminine nouns or just the [CL] node for masculine ones.
- In the plural, the CLP will be projected above the #P. The combination of these two phrases will define the inflectional affixes of the pronouns.
- The *n*P lacks features if the pronoun denotes an inanimate entity. With an animate (or human) referent, the *n*P will bear natural gender and number in the same manner it does with local-person pronouns.

(31) Singular 3rd-person pronoun:

(32) Plural 3rd-person pronoun:

person pronouns, as well as case-driven suppletion of third person pronouns.

(33) Local person:
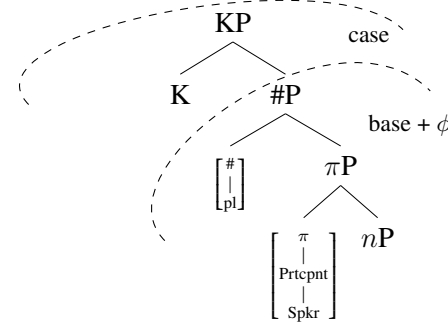
(34) 3rd person:
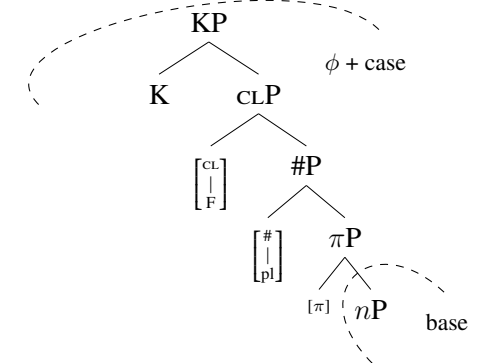
5 Morphological realisation

- Here is a reminder on the paradigm of BCMS pronouns and clitics:

	1SG	2SG	1PL	2PL	3SGM/N	3SGF	3PL
NOM	*ja*	*ti*	*mi*	*vi*	*on-∅/-o*	*on-a*	*on-i/-e/-a*
GEN	*m-en-e*	*t-eb-e*	*na-s*	*va-s*	*nje-ga*	*nj-e*	*nj-ih*
DAT	*m-en-i*	*t-eb-i*	*na-ma*	*va-ma*	*nje-mu*	*nj-oj*	*nj-ima*
ACC	*m-en-e*	*t-eb-e*	*na-s*	*va-s*	*nje-ga*	*nj-u*	*nj-ih*
INST	*m-n-om*	*t-ob-om*	*na-ma*	*va-ma*	*nj-im*	*nj-om*	*nj-ima*
LOC	*m-en-i*	*t-eb-i*	*na-ma*	*va-ma*	*nje-mu*	*nj-oj*	*nj-ima*

Table 3: Personal pronouns in BCS

- The morphological realisation of the structures proposed in Section 4.5 is compatible with any realisational approach (spanning, contextual allomorphy, fusion).
- General intuition: Spell-Out rules for local-person pronouns target the base + ϕ-features together, realising case separately; with 3π, the base is spelled out separately from the inflectional affixes, c.f. (33)-(34).
- In addition to accounting for this, any approach would have to account for number-conditioned suppletion of the pronominal stem of local

- **Difference between strong pronouns and clitics** that can be captured by the given structures:
- Assumption: pronominal nP in BCMS is a locality domain (e.g. a phase), if it does not undergo spellout at the same time as the rest of the structure, the remnant of the structure is spelled out as a clitic.
- We will see that omitting nP together with its human and animate features is what enables a certain amount of flexibility to clitics that strong pronouns do not have.

(35) Local person clitic singular:

(36) Local person clitic plural:

(37) 3rd person clitic singular:

```
        KP
       /  \
      K    CLP
          /   \
       [CL]    πP
             -ga/-mu/-je/-joj/-ju
```
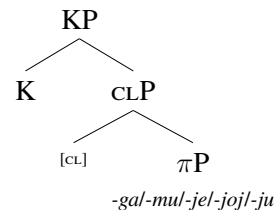
(38) 3rd person clitic plural:

```
        KP
       /  \
      K    CLP
          /   \
       [CL]    #P
              /  \
          [# |   πP
           pl]  -ih/-im
```
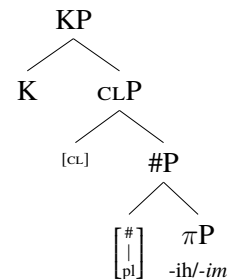
- Thus, what unifies clitics in general is that they lack an *n*P.

6   Syntactic consequences: PPs and Focus

6.1   Pronouns as complements of PPs

- Recall that if a P precedes a pronoun, no clitics are allowed (39).

(39) *Clitics vs. pronouns in a PP*
Maša   hoda   pored   mene/*me .
Masha walks beside 1.SG.ACC/CL.1.SG.ACC
'Masha is walking next to me.'

- Furthermore, strong pronouns in the complement of PP show clitic-like behaviour: they may be inanimate and allow for sloppy readings:

(40) *Strong pronouns as complements of P*
a.   Dok   vozi, Ljubica uglavnom koristi svoj telefon za
while drives Ljubica mostly   uses   her phone for
navigaciju, a   Tamara se   dobro snalazi i [$_{PP}$
navigating but Tamara REFL good manages and
bez   njega].
without 3.SG.M.GEN

'While driving, Ljubica mostly uses her phone for navigating and Tamara manages well without Ljubica's phone/Tamara's phone.'

b.   Jelena mnogo voli svoj novi posao, a   Jovana oseća
Jelena a.lot   loves self's new job   but Jovana feels
izrazitu odbojnost [$_{PP}$ prema njemu].
distinct revulsion   towards 3.M.SG.DAT
'Jelena likes her new job a lot and Jovana finds it (Jelena's job/Jovana's job) repulsive.'

c.   Mladen je prošao kroz   svoja pitanja   za kontrolni,
Mladen is went   through self's questions for test
a i   Saša je takođe prošao [$_{PP}$ kroz   njih].
but and Sasha is also   went   through 3.N.PL.ACC
'Mladen went through his questions for the test and Sasha went through them (Sasha's/Mladen's questions) too.'

- Main assumption: clitic-like behaviour of pronouns in a PP is due to a ban on movement out of the PP.
- Unlike nouns, pronouns in BCMS have been argued to move outside of the VP, c.f. (41a)–(41b).[4]
- A lexical NP may move, with an effect on its interpretation (moved instance of *Jovan* in (41b) is topical, while the postverbal *in-situ* one is contrastively focused; Bešlin in press).
- Clitics in BCMS are also known to undergo movement to the second position in a sentence (41b) (see Bošković 2001, 2004; Talić 2018).

(41) *Pronoun movement* (Stojanović 1997:307; Bešlin in press)
a.   Marija {njega}   sreće {?*njega} svaki dan.
Marija 3.M.SG.ACC meets 3.M.SG.ACC every day.
'Marija meets him every day.'

---

[4]As Bešlin (in press:3) suggests, a potential context for (ia) could be something like *When will Mary meet John next?*

b. Marija {Jovana} sreće {Jovana} svaki dan.
   Marija Jovan   meets Jovan   every day.
   'Marija meets him every day.'

c. Marija {ga}   sreće {*ga}   svaki dan.
   Marija CL.3.M.SG.ACC meets CL.3.M.SG.ACC every day.
   'Marija meets him every day.'

- Landing site: somewhere between *v*P and TP (42b), based on the position of pronoun relative to adverbs and negation (Bešlin in press):

(42) *Pronoun movement (Bešlin in press:6)*

a. Marko (juče)   ni-je   NJU/nju mudro savetovao.
   Marko yesterday NEG-AUX NJU/her wisely advised
   'Yesterday, Marko did not advise her/her in a wise manner.'

b. [$_{TP}$ yesterday [$_{TP}$ NEG-AUX [$_{XP}$ HER/her$_i$ [$_{vP/VP}$ wisely [$_{vP/VP}$ advised t$_i$]]]]]

- Movement trigger: semantically-triggered object shift (moving out of the VP to avoid existential closure and receive definite interpretation; Stojanović 1997), categorially-driven movement (pronouns, unlike lexical nouns, are DPs and as such have to move to Spec, AgrOP, Bešlin in press); I will assume that pronouns move in order to license case.

Proposal:

- Movement operations target KP (hence only objects move).
- I will adopt van Urk's (2018) proposal for pronoun copying.
  - ① MOVE: Applies to the KP, which results in copying the entire pronoun, but not all parts of the copied KP need to be spelled-out.
  - ② PARTIAL DELETION: *n*P may be a phase (a parameter); as such it can undergo *partial deletion* (that includes the phase head as well, see van Urk 2018:968-969).
  - As a result only the structure between *n*P and KP gets realised, but not the *n*P itself.
  - In our system this amounts exactly to a realisation of a clitic.

(43) Pronoun movement, resulting in a clitic (here e.g. 3.F.SG)

- Consequences for pronouns in a PP:
⇒ P will block the movement of the KP, thereby enforcing the spellout of the full pronoun.
- Why is movement blocked? Antilocality, assuming PP is a phase (Abels 2012; Milićev and Bešlin 2019).

(44) PP blocking movement

- Result: The preposition lacks stress, a clitic remains without a host (see e.g. Talić 2018) or the possibility to move.
- The spellout of a strong pronoun may be thought of as a last-resort strategy.
- As a result, the *n*P must be realised, and exactly in these contexts the pronoun can also be inanimate and have a sloppy reading (8) (i.e. formally a strong pronoun may functionally be a clitic).
- Further application: If instrumental and locative are treated as PPs instead of KPs (e.g. Milićev and Bešlin 2019 for instrumental, or Stegovec 2019 for Slovenian), the behaviour of their complement pronouns gets derived for free.

(45) *Strong pronouns in instrumental and locative*

    a. Slavica uglavnom putuje bez   svog velikog ruksaka,
        Slavica mostly   travels without self's big   backpack

        a   Jovan obavezno   putuje [PP s   njim].
        but Jovan necessarily travels   with 3.F.SG.INS

'Slavica mostly travels without her big backpack, but Jovan necessarily travels with it (Slavica's/Jovan's backpack).' (instrumental, inanimate)

    b. Lena se   rado igra u svojoj sobi, a   Matija samo
        Lena REFL gladly play in self's room but Matija only

        uči   [PP u njoj].
        studies   in 3.F.SG.LOC
        'Lena likes to play in her room and Matija only studies in it (Lena's/Matija's room).' (locative, inanimate)

Two major results

(i) A clitic need not be animate or human, since those features remain stranded on the *n*P base and undergo deletion with it;

(ii) a clitic may act as a bound variable since the projections that may be responsible for establishing reference are missing (see also Ruda 2021*b*,*a* for a claim that PersP is responsible for specificity and definiteness, which is absent in pronouns with non-specific reading; on reference not requiring D in BCMS, see Trenkić 2004; Stanković 2014*b*,*a*; Arsenijević et al. 2022).

Additional benefits:

- The position of the DP in the structure is not crucial for the analysis.
- The analysis may be extended to clitic doubling (e.g. as an alternative to a 'Big-DP' analysis, Roberts 2010).
- In a clitic-doubling language, both the remaining *n*P of the object and the moved π-#-γ-K projections get spelled out, while in languages without clitic-doubling, lower-copy pronunciation does not apply. The causes and restrictions are subject to ongoing research, but one of the parameters may be whether or not *n* is a phase in a language or the given context.

6.2 Pronouns in focus positions

- In BCMS, only strong pronouns may express contrastive focus (or require a focused antecedent, see Despić 2011; Jovović 2022).

  (46) Who did you see?
  - a. #Video   sam   ⬚ga⬚.
       seen.M.SG AUX.1.SG CL.3.M.SG
       'I saw him.'
  - b. Video   sam   ⬚njega⬚.
       seen.M.SG AUX.1.SG 3.M.SG
       'I saw him.'   (Despić 2011:245)

- Clitics are topical, or require antecedents that express discourse-given information (Jovović 2022). However in the presence of contrastive focus, a strong pronoun must be used (47b).

(47) *Clitics as bound variables (Despić 2011:243)*
  - a. Svaki predsednik$_i$ misli da ⬚ga$_i$/??njega$_i$⬚ svi   vole.
       Every president   thinks that him.CL/him   everyone love
       'Every president$_i$ thinks that everybody loves him$_i$.'
  - b. Svaki predsednik$_i$ misli da samo njega/*ga svi   vole.
       Every president   thinks that only him/him.CL everyone love
       'Every president$_i$ thinks that everyone loves him$_i$.'

- Despić (2011:244): Strong pronoun in (48)–(49) is in its essence a clitic.
- Focus in BCMS requires prosodic prominence, which clitics always lack ⇒ banned in a focus position.
- If a focused pronoun is present where clitic would otherwise be licit, such a pronoun is merely a clitic that has to be spelled out as a strong pronoun due to the phonological requirements on focused constituents. As such, it should be able to behave like clitics – to allow for inanimate reference (48), appear with focus particles (49), and act

as a bound variable (47b).

(48) *Focused inanimate pronoun (Despić 2011:246)*
     Čuo   sam čak i ⬚nju⬚.   [+human] [-human]
     heard.M.SG 1.SG even and 3.F.SG.ACC
     'I heard even her.'

(49) *Focused inanimate pronoun (Despić 2011:247)*
     Malo ko   obilazi muzeje   oko   gradske crkve$_i$. Nju$_i$
     Few who visits   museums around city   chuch 3.F.SG.ACC
     *(samu), opet   dnevno poseti oko   50 turista.
     alone   again daily   visits around 50 tourists
     'A few people visits museums around the city church. (As for the church itself), an average of 50 tourists visits it a day.'

- Under our account, the presence of focus on the pronoun would prevent the deletion of the *n*P or enforce its phonological realisation.
- One way to implement this is to assume that a pronominal phrase may include an additional functional layer, an FP, which may serve as a landing site for movement of the clitic. van Alem (2022) justifies this by the existence of nouns with focus particles in Dutch, which can be accounted for under this kind of structure (see also Despić 2011:2017 for a similar proposal on nominals modified by intensifiers).
- FP essentially adds focus to the DP and provides an escape hatch for the clitic to move through. If the Spec-FP is already occupied by the focus material, the clitic cannot move out. Instead it has to be pronounced *in situ*, which has different effects in different Dutch dialects.
- In our case, the existence of an FP above KP would introduce focus material, like an intensifier *sam* (49), which would disable the movement of the KP. As focus environment, just like a PP, requires a strong pronoun, the *n*P will have to be pronounced as last resort.
- Note that in the absence of a DP, movement of the KP to Spec, FP would independently be banned due to antilocality (Abels 2012).

(50) FP blocking movement
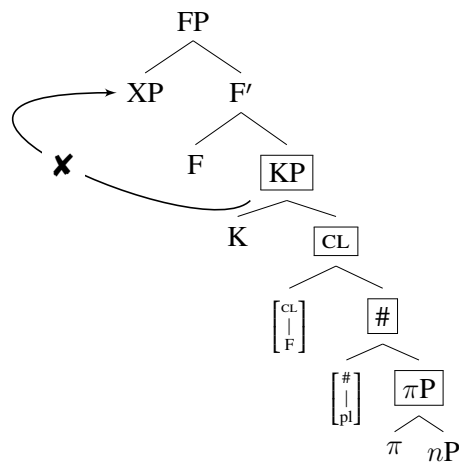
7   Summary and Outlook

- Pronouns have a complex internal syntactic structure that can account for their morphological properties, encoding of animacy and humanness, ability to act as bound variables and control agreement.
- Regarding their morphology, local-person pronouns differ from third-person pronouns in whether they encode grammatical gender; clitics and strong pronouns share the same structure, but clitics crucially lack the *n*P.
- All pronominal types may encode features [ANIMATE] and [HUMAN] within their *n*P, as a part of natural gender.
- All pronominal types may act as bound variables if they lack natural gender (and thereby features [HUMAN] and [ANIMATE]).
- Further research should work out the details of the realisation of the proposed structures, morphosemantic mismatches, feature co-occurence restrictions, and crosslinguistic applicability of the model.

References

Abels, Klaus (2012): *Phases: An Essay on Cyclicity in Syntax*. de Gruyter, Berlin.

Adamson, Luke James and Elena Anagnostopoulou (2022): Gender features andcoordination resolution: Evidence from Greek and other three-gendered languages. MS, Rutgers University and University of Crete.

Adamson, Luke James and Elena Anagnostopoulou (to appear): Interpretability and Gender Features inCoordination: Evidence from Greek. In: *Proceedings of WCCL39*. .

Arad, Maya (2003): 'Locality constraints on the interpretations of roots: The case of Hebrew denominal verbs', *Natural Language and Linguistic Theory* **4**(21), 737–779.

Arad, Maya (2005): *Roots and patterns: Hebrew morpho-syntax*. Springer, Dordrecht.

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

Arsenijević, Boban (2014*a*): 'The agreement of adjectives with the honorific pronoun in Serbo-Croatian', *Philologia Mediana* **VI**(6), 39–50.

Arsenijević, Boban (2014*b*): 'The agreement of adjectives with the honorific pronoun in Serbo-Croatian', *Philologia Mediana* **VI**(6), 39–50.

Arsenijević, Boban (2017): What the prosody of Serbian short and long form adjectives tells us about the nominal structure. *In:* G. Djigić and S. Miloradović, eds, *Godišnjak za srpski jezik [Yearbook for Serbian Language]*. Faculty of Philosophy, University of Niš, Niš, pp. 9–21.

Arsenijević, Boban (2018): Gender, like classifiers, specifies the type of partition: Evidence from Serbo-Croatian. In: *Proceedings from the Annual Meeting of the Chicago Linguistic Society*. Vol. 52, Chicago Linguistic Society, pp. 21–37.
    URL: *https://ling.auf.net/lingbuzz/002848*

Arsenijević, Boban (2021): 'No Gender in 'Gender Agreement': On Declension Classes and Genderin Serbo-Croatian', *Balcania et Slavia* **1**(1), 11–46.

Arsenijević, Boban, Ivana Mitić and Zorica Puškar-Gallien (2022): *Judge* vs. *fool*: Restrictive use of a noun predicts hybrid agreement. Slides from a talk presented at the Formal Approaches to Slavic Linguistics 31, 22.06.2022.

Assmann, Anke, Doreen Georgi, Fabian Heck, Gereon Müller and Philipp Weisser (2015): 'Ergatives move too early: On an instance of opacity in syntax', *Syntax* **18**(4), 343–387.

Baker, Mark (1985): 'The Mirror Principle and Morphosyntactic Explanation', *Linguistic Inquiry* **16**, 373–415.

Béjar, Susana (2003): Phi-syntax: A theory of agreement. PhD thesis, University of Toronto, Toronto.

Béjar, Susana and Milan Řezáč (2003): Person licensing and the derivation of PCC effects. *In:* A. T. Perez-Leroux and Y. Roberge, eds, *Romance linguistics: Theory and acquisition*. John Benjamins, Amsterdam, pp. 49–62.

Béjar, Susana and Milan Řezáč (2009): 'Cyclic Agree', *Linguistic Inquiry* **40**, 35–73.

Bešlin, Maša (in press): 'DP in a model NP language: Evidence from Serbo-Croatian personal pronouns', *MIT Working Papers in Linguistics* .

Bittner, Maria and Ken Hale (1996): 'The structural determination of case and agreement', *Linguistic Inquiry* **27**, 1–68.

Bobaljik, Jonathan and Susi Wurmbrand (2005): 'The domain of agreement', *Natural Language and Linguistic Theory* **23**, 809–865.

Bobaljik, Jonathan and Susi Wurmbrand (2013): Suspension across domains. *In:* O. Matushansky and A. Marantz, eds, *Distributed Morphology Today – Morphemes for Morris Halle*. MIT Press, Cambridge, MA, pp. 185–198.

Bošković, Željko (2001): *On the Nature of the Syntax-Phonology Interface: Cliticization and Related Phenomena*. Vol. 60 of *North Holland Linguistic Series: Linguistic Variations*, Elsevier, A.

Bošković, Željko (2004): 'Clitic placement in South Slavic', *Journal of Slavic Linguistics* **12**, 37–90.

Bošković, Željko (2014): 'Now IŠm a phase, now IŠm not a phase: On the variability of phases with extraction and ellipsis', *Linguistic Inquiry* **45**(1), 27–89.

Brody, Michael (2000): 'Mirror Theory: Syntactic Representation in Perfect Syntax', *Linguistic Inquiry* **31**, 29–56.

Brody, Michael and Anna Szabolcsi (2003): 'Overt scope in Hungarian', *Syntax* **6**, 19–51.

Caha, Pavel (2009): The nanosyntax of case. PhD thesis, University of Tromsø.

Caha, Pavel (2021): 'Modeling declensions without declension features. The case of Russian', *Acta Linguistica Academica* **68**(4), 385–425.

Cardinaletti, Anna and Michal Starke (1999): The typology of structural deficiency. A case study of the three classes of pronouns. *In:* H. van Riemsdijk, ed., *Clitics in the Languages of Europe*. Mouton de Gruyter, Berlin, pp. 145–233.

Deal, Amy Rose (2015): Interaction and satisfaction in ϕ-agreement. *In:* T. Bui and D. Özyildiz, eds, *Proceedings of NELS 45*. Vol. 1, Graduate Linguistic Student Association, University of Massachusetts, Amherst, pp. 179–192.

Deal, Amy Rose (2020): Interaction, satisfaction, and the PCC. Ms, University of California, Berkeley.

Déchaine, Rose-Marie and Martina Wiltschko (2002): 'Decomposing pronouns', *Linguistic Inquiry* **33**(3), 409–442.

Despić, Miloje (2011): Syntax in the absence of Determiner Phrase. PhD thesis, University of Connecticut, Storrs.

Despić, Miloje (2017): 'Investigations in mixed agreement: Polite plurals, hybrid nouns and coordinate structures', *Morphology* **27**(3), 253–310.

Elbourne, Paul (2005): *Situations and individuals*. MIT Press, Cambridge, MA.

Embick, David (2010): *Localism versus globalism in morphology and phonology*. MIT Press, Cambridge, MA.

Fassi Fehri, Abdelkader (2000): Distributing features and affixes in Arabic subject verb agreement paradigms. *In:* J. Lecarme, J. Lowenstamm and U. Shlonsky, eds, *Research in Afroasiatic Grammar*. John Benjamins, Amsterdam, pp. 79–100.

Fassi Fehri, Abdelkader (2018): *Constructing Feminine to Mean: Gender, Number, Numeral and Quantifier Extensions in Arabic*. Lexington Books, Lanham, MD.

Foley, Steven and Maziar Toosarvandani (2019): Agreement, locality, and the syntax of pronouns: The Person-Case Constraint and beyond.. Ms., University of California, Santa Cruz.

Franks, Steven (2013): 'Orphans, Doubling, Coordination, and Phases: On Nominal Structure in Slovenian', *Slovenski jezik Ű Slovene Linguistic Studies* **9**, 55–92.

Georgi, Doreen (2012): A uniform analysis of global and local argument encoding patterns: A local and cyclic approach. *In:* C. Constantinescu, B. L. Bruyn and K. Linke, eds, *Proceedings of ConSOLE VXII (2009, Nova Gorica)*. pp. 137–161.

Georgi, Doreen (2013): 'A relativized probing approach to person encoding in local scenarios', *Linguistic Variation* **12**(2), 153–210.

Georgi, Doreen (2014): Opaque interactions of Merge and Agree: On the nature and order of elementary operations. PhD thesis, University of Leipzig, Leipzig.

Greenberg, Joseph H. (1963): Some universals of grammar with particular reference to the order of meaningful elements. *In:* J. H. Greenberg, ed., *Universals of Language*. MIT Press, Cambridge, MA, pp. 73–113.

Hammerly, Christopher (2018): Limiting gender. *In:* E. Mathieu, M. Dali and G. Zareikar, eds, *Gender and Noun Classification*. Oxford University Press.

Harbour, Daniel (2007): 'Against PersonP', *Syntax* **10**, 223–243.

Harbour, Daniel (2008): Discontinuous agreement and the syntax-morphology interface. *In:* D. Harbour, D. Adger and S. Béjar, eds, *Phi-Theory: Phi-Features across Modules and Interfaces*. Oxford University Press, Oxford, pp. 185–220.

Harbour, Daniel (2016): *Impossible persons*. MIT Press, Cambrigde, MA.

Harley, Heidi and Elizabeth Ritter (2002): 'Person and number in pronouns: A feature-geometric analysis', *Language* **78**(3), 482–526.

Heck, Fabian and Gereon Müller (2007): Extremely local optimization. *In:* E. Brainbridge and B. Agbayani, eds, *Proceedings of WECOL 2006*. California State University, Fresno, pp. 170–183.

Jovović, Ivana (2022): 'Condition B and Other Conditions on Pronominal Licensing in Serbo-Croatian', *Linguistic Inquiry* .

Kalin, Laura (2019): Nominal licensing is driven by valued (phi-)features. *In:* G. Ramchand and P. Svenonius, eds, *Nordlyd 43.1, GLOW Short Report Proceedings for the 40th GLOW colloquium held in Leiden in 2017*. University of Tromso Ű The Arctic University of Norway, pp. 15–29.

Kramer, Ruth (2015): *The Morphosyntax of Gender*. Oxford University Press, Oxford.

Kratzer, Angelika (2007): On the plurality of verbs. *In:* T. H.-Z. . J. Dölling, ed., *Event structures in linguistic form and interpretation*. Mouton de Gruyter, pp. 269–299.

Kučerová, Ivona (2018): 'Phi-features at the syntax-semantics interface: Evidence from nominal inflection', *Linguistic Inquiry* **49**(4), 813–845.

Landau, Idan (2016): 'DP-internal semantic agreement: A configurational analysis', *Natural Language and Linguistic Theory* **34**(3), 975–1020.

Marantz, Alec (2001): Words. Ms. Massachusetts Institute of Technology, Cambridge, MA.

Marantz, Alec (2007): Phases in words. *In:* S.-H. e. a. Choe, ed., *Phases in the Theory of Grammar*. Dong In, Seoul, pp. 191–222.

McFadden, Thomas (2018): '*ABA in Stem-allomorphy and the Emptiness of the Nominative', *Glossa* **3**(1), 1–36.

McFadden, Thomas and Sandhya Sundaresan (2009): 'Subject distribution and finiteness in Tamil and other languages: selection vs. Case', *Journal of South Asian Linguistics* **2**, 5–34.

McGinnis, Martha (2005): 'On markedness asymmetries in person and number', *Language* **81**, 699–718.

Miličev, Tanja and Maša Bešlin (2019): Instrumental case: Why it is absent from the clitic system in Serbian/Croatian. *In:* V. Lopičić and B. M. Ilić, eds, *Jezik,knjiđevnost, teorija [Language, Literature, Theory]*. Faculty of Philosophy, Niš, pp. 153–168.

Moskal, Beata (2015*a*): Domains on the Border: Between Morphology and Phonology. PhD thesis, University of Connecticut.

Moskal, Beata (2015*b*): 'Limits on allomorphy: A case study in nominal suppletion', *Linguistic Inquiry* **46**(2), 363–375.

Moskal, Beata and Peter W. Smith (2016): 'Towards a Theory without Adjacency: Hyper-contextual VI-rules', *Morphology* **26**, 295–312.

Müller, Gereon (2009): Ergativity, accusativity, and the order of Merge and Agree. *In:* K. K. Grohmann, ed., *Explorations of Phase Theory. Features and Arguments*. Mouton de Gruyter, Berlin, pp. 269–308.

Neeleman, Ad and Kriszta Szendröi (2007): 'Radical Pro Drop and the Morphology of Pronouns', *Linguistic Inquiry* **38**, 671–714.

Nevins, Andrew (2007): 'The representation of third person and its consequences for the person–case constraint', *Natural Language and Linguistic Theory* **25**(3), 273–313.

Nevins, Andrew (2011*a*): 'Marked targets versus tarked triggers and impoverishment of the dual', *Linguistic Inquiry* **42**(3), 413–444.

Nevins, Andrew (2011*b*): 'Multiple Agree with clitics: Person complementarity vs. omnivorous number',

Natural Language and Linguistic Theory **29**(4), 939–971.

Nevins, Andrew and Jeffrey K. Parrott (2010): 'Variable rules meet Impoverishment theory: Patterns of agreement leveling in English varieties', *Lingua* **120**(5), 1135–1159.

Noyer, Rolf (1992): Features, positions, and affixes in autonomous morphological structure. PhD thesis, MIT, Cambridge, MA.

Parrott, Jeffrey (2015): Gender Impoverishment in Czech, Slavic, and beyond. *In:* M. Ziková, P. Caha and M. Dočekal, eds, *Slavic Languages in the Perspective of Formal Grammar; Proceedings of FDSL 10.5, Brno 2014*. Peter Lang, Frankfurt am Main.

Pesetsky, David (2013): *Russian case morphology and the syntactic categories*. MIT Press, Cambridge, MA.

Postal, Paul (1969): On so-called "pronouns" in English. *In:* D. Reibel and S. Schane, eds, *Modern readings in transformational grammar*. Prentice-Hall, pp. 201–224.

Preminger, Omer (2014): *Agreement and its Failures*. MIT Press, Cambridge, MA.

Progovac, Ljiljana (1998): 'Determiner phrase in a language without determiners', *Journal of Linguistics* **34**, 165–179.

Puškar-Gallien, Zorica (2019*a*): The representation of gender on pronouns. Ms. Leibniz-ZAS, Berlin.

Puškar-Gallien, Zorica (2019*b*): 'Resolving polite conflicts in predicate agreement', *Glossa* **4**(1), 33.

Puškar, Zorica (2017): Hybrid Agreement: Modelling variation, hierarchy effects and ϕ-feature mismatches. PhD thesis, University of Leipzig, Leipzig.

Puškar, Zorica (2018): 'Interactions of gender and number agreement: Evidence from Bosnian/Croatian/Serbian', *Syntax* **21**(3), 275–318.

Roberts, Ian (2010): *Agreement and head movement: Clitics, incorporation, and defective goals*. MIT Press, Cambridge, MA.

Ruda, Marta (2021*a*): 'Polish personal pronouns: [PersP Pers [NumP Num [n]]] and [NumP Num [n]]', *Studies in Polish Linguistics* **16**(1), 23–40.

Ruda, Marta (2021*b*): 'Strict and Sloppy Readings of Pronominal Objects in Polish', *Studies in Polish Linguistics* **16**(2), 121–144.

Runić, Jelena (2014): A New Look at Clitics, Clitic Doubling, and Argument Ellipsis: Evidence from Slavic. PhD thesis, University of Connecticut.

Sichel, Ivy and Maziar Toosarvandani (2022): The featural life of nominals. Ms., University of California, Santa Cruz.

Smith, Peter W., Beata Moskal, Ting Xu, Jungmin Kang and Jonathan David Bobaljik (2018): Case and Number Suppletion in Pronouns. Ms. Goethe-Universtität Frankfurt am Main, Syracuse University, University of Connecticut.

Stanković, Branimir (2014*a*): Arguments for DP-analysis of Serbo-Croatian nominal expressions. *In:* L. Veselovská and M. Janebová, eds, *Nominal structures: All in complex DPs*. Palacký University, Olomouc, pp. 29–48.

Stanković, Branimir (2014*b*): Sintaksa i semantika odredjenog i neodredjenog pridevskog vida u srpskom jeziku [The syntax and semantics of definite and indefinite adjectives in Serbian]. PhD thesis, University of Kragujevac, Kragujevac.

Stegovec, Adrian (2019): Crop to fit: Pronoun size and its relation to strict/sloppy identity. Handout from a talk presented at the 93rd Annual Meeting of the Linguistic Society of America (LSA), New York, NY, January 3rdŰ6th.

Steriopolo, Olga (2018*a*): 'Mixed gender agreement in the case of Russian hybrid nouns', *Questions and Answers in Linguistics* .

Steriopolo, Olga (2018*b*): 'Morphosyntax of gender in Russian sex-differentiable nouns', *Journal of Slavic Linguistics* **26**(1).

Steriopolo, Olga and Martina Wiltschko (2010): Distributed GENDER hypothesis. *In:* G. Zybatow, P. Dudchuk, S. Minor and E. Pschehotskaya, eds, *Formal Studies in Slavic Linguistics. Proceedings of FDSL 7.5*. Peter Lang, New York, pp. 155–172.

Stojanović, Danijela (1997): Object shift in Serbo-Croatian. *In:* j. R. Black and V. Motapanyane, eds, *Clitics, pronouns and movement*. John Benjamins, Amsterdam/Philadelphia, p. 301Ű320.

Talić, Aida (2018): 'Spelling out enclitics and giving their tone a voice: Cyclic clitic incorporation in BCS and breaking the cycle', *The Linguistic Review* **35**(2), 307–370.

Trenkić, Danijela (2004): 'Definiteness in Serbian/Croatian/Bosnian and some implications for thegeneral structure of the nominal phrase', *Lingua* **114**, 1401–1427.

Trommer, Jochen (2002): The interaction of morphology and syntax in affix order. *In:* G. Booij and J. van Marle, eds, *Yearbook of Morphology 2002*. Kluwer, Dordrecht, pp. 283–324.

van Alem, Astrid (2022): Complementizer agreement is clitic doubling: Evidence from intervention effects in Frisian and Limburgian. Ms, University of Potsdam.

van Koppen, Marjo (2012): 'The distribution of phi-features in pronouns', *Natural Language and Linguistic Theory* **30**(1), 135–177.

van Urk, Coppe (2018): 'Pronoun copying in Dinka and the Copy Theory of Movement', *Natural Language and Linguistic Theory* **36**(3), 937–990.

Willer-Gold, Jana, Boban Arsenijević, Mia Batinić, Nermina Čordalija, Marijana Kresić, Nedžad Leko, Lanko Marušič, Tanja Milićev, Nataša Milićević, Ivana Mitić, Andrew Nevins, Anita Peti-Stantić, Branimir Stanković, Tina Šuligoj and Jelena Tušek (2016): 'Morphosyntactic production of Coordination Agreement in South Slavic: From Theory to Experiments', *Journal of Slavic Linguistics* **24**(1), 187–224.

Appendix 1: Agreement

- In order to be able to put the agreement of pronouns into a wider context of how agreement works in general in BCMS, we first need to review the possible patterns of agreement in the language in general.
- A set of assumptions on agreement will follow, which will lay down the basis for a general account on agreement, applicable to both nouns and pronouns, and other more special cases, such as hybrid nouns.

7.1　A digression: Agreement of nouns

- **Nouns of declension Class I:** end in $\varnothing$; masculine grammatical gender, may be inanimate (*mir* 'peace'), animate (*konj* 'horse') and human (*kuvar* 'cook'). Control M agreement, regardless of animacy.

(51)　a.　Kuvar je　　　pevao.
　　　　　cook　AUX.3.SG sang.M.SG
　　　　　'The cook was singing.'

　　　b.　Papir je　　　bačen.
　　　　　paper AUX.3.SG thrown.M.SG
　　　　　'Paper was thrown away.'

	CLASS I (M)		CLASS II (N)		CLASS III (F)		CLASS IV (F)	
	SG	PL	SG	PL	SG	PL	SG	PL
NOM	*konj-Ø*	*konj-i*	*sel-o*	*sel-a*	*rib-a*	*rib-e*	*krv-Ø*	*krv-i*
GEN	*konj-a*	*konj-a*	*sel-a*	*sel-a*	*rib-e*	*rib-a*	*krv-i*	*krv-i*
DAT	*konj-u*	*konj-ima*	*sel-u*	*sel-ima*	*rib-i*	*rib-ama*	*krv-i*	*krv-ima*
ACC	*konj-a*	*konj-e*	*sel-o*	*sel-a*	*rib-u*	*rib-e*	*krv-Ø*	*krv-i*
INS	*konj-em*	*konj-ima*	*sel-om*	*sel-ima*	*rib-om*	*rib-ama*	*krv-ju*	*krv-ima*
LOC	*konj-u*	*konj-ima*	*sel-u*	*sel-ima*	*rib-i*	*rib-ama*	*krv-i*	*krv-ima*

Table 4: BCS nouns and their declension classes

- **Nouns of declension Class II:** end in *-e* or *-o*; grammatical neuter gender, some of them are animate (*jagnje* 'lamb'), but most are inanimate (*selo* 'village'). Control N agreement:

(52) a. Jagnje je   skakutalo.   b. Selo je   lepo.
          lamb AUX.3.SG hopped.N.SG   village AUX.3.SG pretty.N.SG
          'A lamb was hopping .'   'The village is pretty.'

- **Nouns of declension Class III:** end in *-a*; grammatical feminine gender.
- Control M or F agreement, but in the PL overwhelmingly F.
- Recent work by Arsenijević et al. (2022) argues for a novel classification based on class III nouns' semantic properties and agreement patterns they trigger accordingly.
    - ClassIIIa: Feminine natural gender (*majka*, *sestra*) control F agreement. Trigger lexical feminine gender presuppositions (denote a set whose characteristic property includes being female).

(53) a. Majka je   pevala.   b. Majke su   pevale.
          mother AUX.3.SG sang.F.SG   mothers AUX.3.PL sang.F.PL
          'Mother sang.'   'Mothers sang.'

    - Class IIIb: Masculine natural gender (*tata*, *deda*) control M agreement in the singular and feminine in the plural. Trigger lexical masculine gender presuppositions (denote a set whose characteristic property includes being male).

(54) a. Deda je   pevao.   b. Dede su   pevale.
          grandpa AUX.3.SG sang.M.SG   grandpas AUX.3.PL sang.F.PL
          'Grandpa sang.'   'Grandpas sang.'

- Class IIIc are (partially) generic and may be divided into three subclasses:
- Class IIIc1: masculine with a feminative counterpart (*komšij-a* 'male neighbour' vs. *komšij-nica* 'female neighbour'): control M agreement in the singular and feminine in the plural. Male antipresupposition due to the availability of a derived counterpart that is necessarily feminine.

(55) a. Komšija   je   pevao.
          male.neighbour AUX.3.SG sang.M.SG
          'A male neighbour sang.'
      b. Komšinica   je   pevala.
          female.neighbour AUX.3.SG sang.F.SG
          'A female neighbour sang.'
      c. Komšije su   pevale.
          neighbours AUX.3.PL sang.F.PL
          'Neighbours sang.'

- Class IIIc2: masculine without a feminative counterpart (*sudija* 'judge', *knjigivođa* 'bookkeeper'): control mostly M agreement, but F possible; this depends on the referent for the noun (for all human-denoting nouns, a prototypical referent is by default male Arsenijević 2018; Arsenijević et al. 2022, may be affected by cultural bias, thus feature [HUMAN] may be assumed to trigger a weak male presupposition).

(56) a. Sudija/knjigovođa je   pevao/?pevala.
          judge/bookkeeper AUX.3.SG sang.M.SG/sang.F.SG
          'A judge/bookkeeper sang.'
      b. Sudije/knjigovođe su   pevale/??pevali.
          judges/bookkeepers AUX.3.PL sang.F.PL/sang.M.PL
          'Neighbours sang.'

- Class IIIc3: epithet, non-referential (*budala* 'fool'): control F agreement. Weak feminine presupposition based on grammatical feminine gender.

(57) a. Budala je   pevala/??*pevalo.
   fool   AUX.3.SG sang.F.SG/sang.M.SG
          'A fool sang.'

b. Budale su   pevale/??*pevali.
   fool   AUX.3.PL sang.F.PL/sang.M.PL
   'Fools sang.'

- Class IIId animate (*roda* 'stork'): control F agreement
- Class IIId inanimate (*stolica* 'chair'): control F agreement
- **Nouns of declension Class IV:** end in ∅; grammatical feminine gender, almost all inanimate (*krv* 'blood'). Control F agreement.

7.2 The structure of nouns

7.2.1 Class I nouns: Masculine grammatical gender

- Involve the *n*P base, a number phrase (if plural) and a CLP (59). If human referent, the *n*P will also contain the feature [HUM], which entails the feature [ANIM].
- (58)-(59) represent animate and inanimate plural nouns. Singular noun lacks #P.
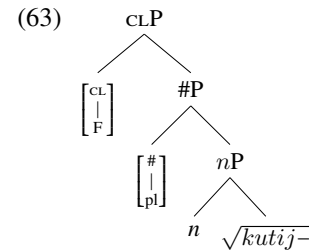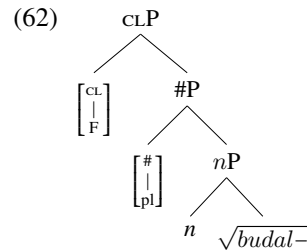
(58)

(59)
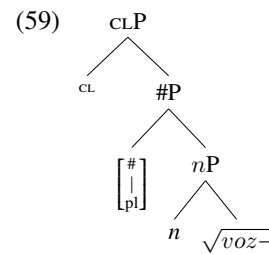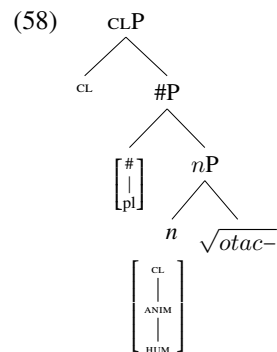
7.2.2 Class III nouns: Feminine grammatical gender

- Recall that class III nouns include several subclasses.
- Nouns like *majka* 'mother', with feminine natural gender and feminine grammatical gender are represented as in (60).
- Nouns like *deda* 'grandpa' also involve feature [HUM], which participates in agreement, yielding masculine agreement.
- With both of them, I assume that the lexical root is the source of the lexical gender presupposition.

(60)

(61)
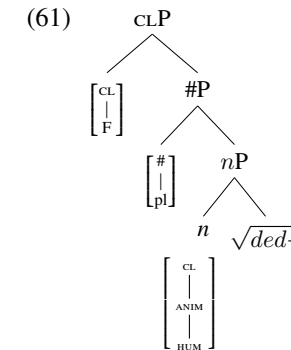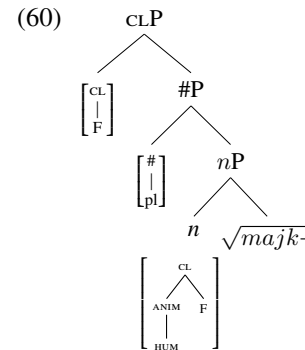
- Furthermore, nouns like *komšija* 'neighbour' and *sudija* 'judge' receive the same analysis as nouns of the *deda*-type (61). The difference between them would be that with *neighbour*-type nouns, the nominalizer *n* will be the source of gender antipresupposition; i.e. since there is a feminine counterpart of *n* available in the grammar that could derive a feminine noun, this one is interpreted as masculine. *Judge*-type nouns rely on feature [HUMAN] as a source of a weak masculine gender presupposition.
- In case a noun like *judge* or *bookkeeper* refers to a female referent and the speaker accepts feminine agreement with it in the singular, this noun can be represented as the regular feminine noun with natural feminine gender, like *mother* in (60).[5]
- Finally, nouns of the *budala* 'fool' type, which cannot act referentially and cannot control masculine agreement, lack natural gender (62), like inanimate nouns (*kutija* 'box') (63).
- Since nouns of *budala*-type have expressive meaning, the lack of reference can also be attributed to that. They can be thought of as defective, such that an additional projection that introduces expressive meaning blocks their *n*P, and thereby the referential properties. Here they resemble the pronouns seen above; lack of natural gender takes away the possibilities of stronger gender presuppositions.

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[5]The double representation of feminine gender may be redundant and we could reduce it by simply assuming that *n* can only have features [CLASS-ANIMATE-HUMAN], and the CLP above only CL, which would then be feminine gender, and masculine may be absence of gender. This might well work for nouns, but the reason I am still reluctant to abandon a structural presence of natural feminine gender is agreement of local person pronouns, which need a feminine feature to control their gender agreement.

(62)

CLP
- $\begin{bmatrix} \text{CL} \\ | \\ \text{F} \end{bmatrix}$
- #P
  - $\begin{bmatrix} \# \\ | \\ \text{pl} \end{bmatrix}$
  - nP
    - n
    - $\sqrt{budal-}$

(63)

CLP
- $\begin{bmatrix} \text{CL} \\ | \\ \text{F} \end{bmatrix}$
- #P
  - $\begin{bmatrix} \# \\ | \\ \text{pl} \end{bmatrix}$
  - nP
    - n
    - $\sqrt{kutij-}$

(65) Agree with CLP (no valuation):

PROBE	GOAL: ClP	AGREE
CL:□	[CL]	✗
ANIM:□	[F]	✗
HUM:□		

(66) Successful Agree for natural gender:

PROBE	GOAL: nP	AGREE
CL:□	[CL]	✓
ANIM:□	[ANIM]	✓
HUM:□	[HUM]	✓

(67) Successful Agree for natural gender:

PROBE	GOAL: nP	AGREE
CL:□	[CL]	✓
ANIM:□	[CL]	✓
HUM:□	[HUM]	✓
	[F]	✓

(68) Successful Agree for grammatical gender:

PROBE	GOAL: ClP	AGREE
CL:□	[CL]	✓
	[F]	✓

7.3 Assumptions on agreement

- **Relativised probing** (Béjar 2003; Béjar and Řezáč 2003, 2009; Georgi 2012, 2013; Nevins 2007, 2011*b*; Preminger 2014; Deal 2020):
- A probe can be programmed to only search for a feature of certain complexity.
- Proposal: gender probe in BCS is relativised towards natural gender. If a probe can agree in gender, and two types of gender are available in its search domain, it will prefer to be valued with natural gender features. [6]

(64) $\begin{bmatrix} *\text{CL:}□* \\ *\text{ANIM:}□* \\ *\text{HUM:}□* \end{bmatrix}$

- Condition on Agree: The Goal needs to have the same structure as the probe ('Condition on value: G(oal) values P(robe) iff f'(G) entails f(P)' Béjar 2003:65).
- Result is Relativized Minimality: The Probe can skip certain phrases in its search domain if they do not have the features of corresponding complexity (65).
- Probing stops when a Goal of the right type is found (66).
- Finally, if the Goal has more complex structure than the Probe, this is also unproblematic since the condition on Value is satisfied (Goal entails Probe). As a consequence, if n contains the features [CL[ANIM[HUM][F]]], the additional feature F may be copied (67).
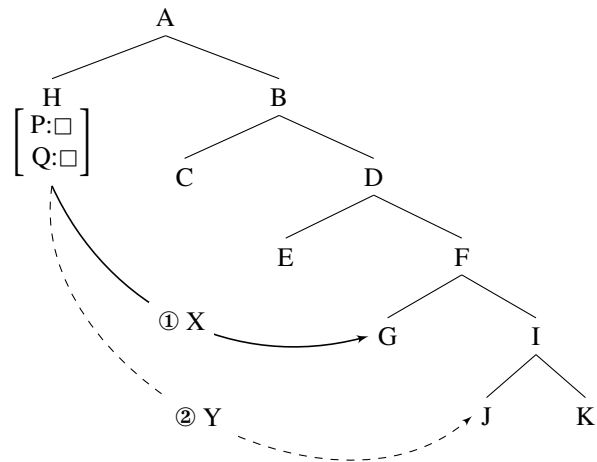
- If the Probe does not find the right Goal, Agree does not result in valuation, which triggers a second cycle of Agree.
⇒ If the Probe does not find natural gender on nP, a new cycle of Agree is initiated. The Probe's features are reduced up to the root node [*CL:□*] (see Béjar 2003), leading the Probe to only look for gender features, disregarding animacy.
- At this point, CLP, as the closest goal with the corresponding feature, is able to value the probe's features, resulting in valuing the probe with grammatical gender features.
- This is why in the second cycle [F] can also be copied from CLP (68).
- **Order of operations on the same head:** Person, gender agreement and number agreement are carried out separately by means of separate operations (π-agree, CL-Agree and #-Agree). An agreeing head may carry two Probes. The precise order of operations on a single head can be underspecified in a language. As a result, γ-Agree can precede or follow #-Agree (Müller 2009; Georgi 2014; Assmann et al. 2015; Puškar 2017, 2018; Puškar-Gallien 2019*b*).
- **Condition on Agree Domains:** the initial Agree operation creates a domain within which the following Agree from the same head must apply.

(69) *Condition on Agree Domains (CAD)*
After an Agree operation X, triggered by a probe P from a syntactic head H, has targeted a goal G, any subsequent Agree operation Y, triggered by a probe Q on H cannot target any constituents c-commanded by G.

(70)

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[6] I will use the notation [*F:□*] introduced in Heck and Müller (2007) to denote an unvalued probe feature.

A

H
$\begin{bmatrix} \text{P}:\square \\ \text{Q}:\square \end{bmatrix}$

B

C   D

E   F

① X → G   I

② Y   J   K

(71) **Natural masculine gender:** [∗CL:□[HUMAN:□]∗] > [∗#:□∗]

PartP

Part
$\begin{bmatrix} \begin{bmatrix} \text{∗CL}: \square \ast \\ \text{∗ANIM}: \square \ast \\ \text{∗HUM}: \square \ast \end{bmatrix} \\ [\text{∗#}: \square \ast] \end{bmatrix}$

*v*P

...

v′

...   CL   *v*   VP

$\begin{bmatrix} \text{CL} \\ | \\ \text{F} \end{bmatrix}$ #   ...

②

① $\begin{bmatrix} \text{#} \\ | \\ \text{pl} \end{bmatrix}$ *n*P

n $\sqrt{judge}$

$\begin{bmatrix} \text{CL} \\ | \\ \text{ANIM} \\ | \\ \text{HUM} \end{bmatrix}$

⇒ The domain c-commanded by G rendered opaque for further Agree operations.
- **Failed Agree:** A failure of Agree to find a matching goal does not lead to a crash, but to default agreement (Béjar 2003; Preminger 2014).

7.3.1   Agreement of nouns

Agreement with Class III (hybrid) nouns
- Recall that some ClassIII nouns (*deda* 'grandfather', *komšija* 'neighbour', *sudija* 'judge') agree in masculine gender in the singular and feminine gender in the plural.
- Let us start by deriving the agreement in the plural.
- Assume that CL and # Probe are located on the Part(iciple) head, above the *v*P. If CL probes before #, the result will be natural gender agreement, realised as masculine gender on the participle.
- The gender probe will be able to find all the features it searches for and the subsequent number agreement operation applies within the domain established by the previous Agree.
- ☞ As a result, the feature [HUM] on the participle will receive a null spell-out, while [PL] will be realised as *-i* (masculne agreement). The feature [HUM] will also trigger masculine gender presuppositions both on the noun and the agreeing element.
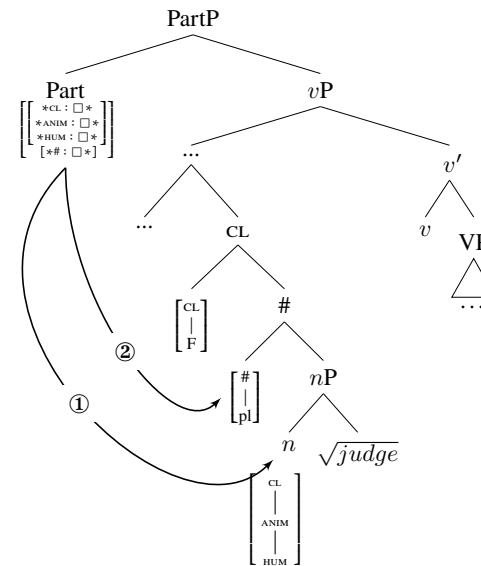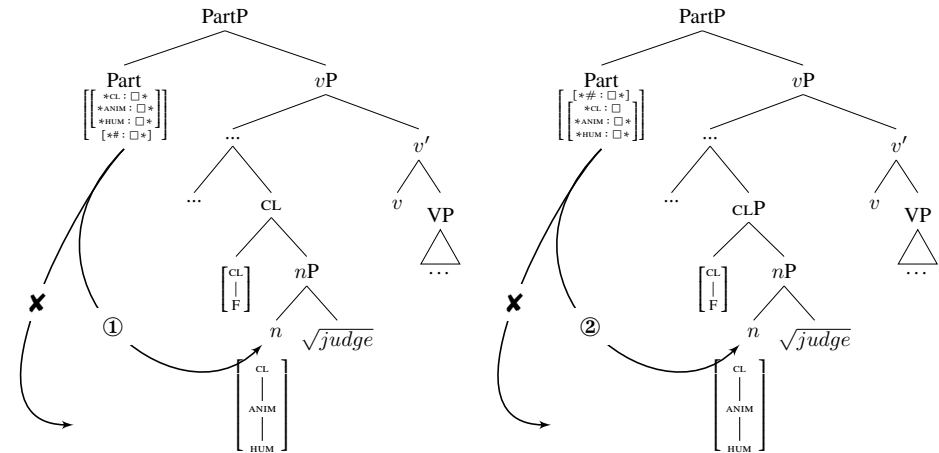
- Feminine agreement will result under the opposite order of operations.
- If #-Agree applies first, the following operation can only apply within the domain established by this operation after it has found a Goal.
- As a result, the features on *n* cannot be reached, and the gender probe gets reduced to [CL], meaning that it can now copy the feminine gender from CLP.
- ☞ As a result, the participle's gender feature is valued as grammatical feminine.

(72) **Grammatical feminine gender:** [∗#:□∗] > [∗CL:□[HUMAN:□]∗]

(73) **Natural masculine gender:** [∗CL:□[HUMAN:□]∗] > [∗#:□∗]

(74) **Natural masculine gender:** [∗#:□∗] > [∗CL:□[HUMAN:□]∗]
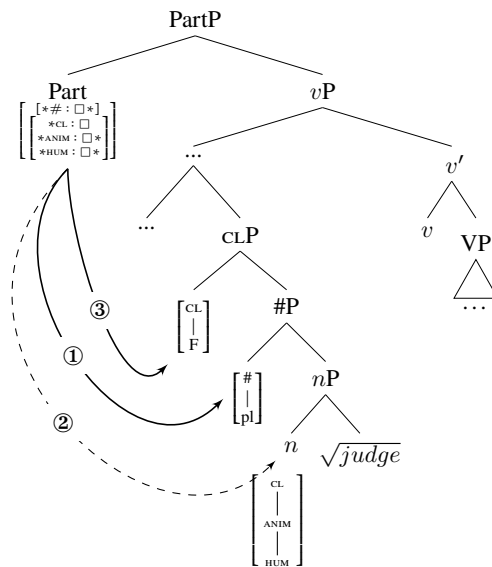
- Additional assumption: Most BCMS speakers apply #-Agree before CL-Agree, i.e. the Probes in the language tend to look for number features first.
- In this sense number affects gender agreement, it blocks natural gender agreement and forces agreement with grammatical gender (see Puškar 2017; Puškar-Gallien 2019*b* for further parametrisation options across the Slavic family).
- Finally, the intervention effect does not arise in the singular, due to the absence of #P.
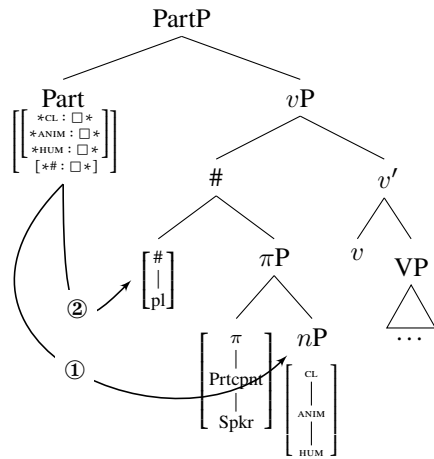- Thus natural gender agreement will be the only option under any order of operations.

7.3.2 Agreement of pronouns

- In a manner similar to nouns, under the order in which gender agreement precedes number agreement, natural gender will be copied from *n*P first, followed by the copying of number from the #P.
- The example shows a first-person pronoun with masculine natural gender, but the derivation for the feminine gender would be the same (75).
- Under the reverse order of operations, the result will always be default masculine plural agreement.
- The number probe will target the #P, after which the access to the natural gender on *n*P would be blocked (76).
- As grammatical gender is missing on local-person pronouns, the reduced gender probe in the second cycle of Gender Agree cannot find any features to copy. This will lead to a failure of Agree and a default realisation of the [pl] suffix *-i* by the morphology.

(75) **Masculine natural gender:** [∗CL:□[HUMAN:□]∗] > [∗#:□∗]

PartP

Part
$$\begin{bmatrix}\begin{bmatrix}*\text{CL}:\square* \\ *\text{ANIM}:\square* \\ *\text{HUM}:\square* \\ [*\#:\square*]\end{bmatrix}\end{bmatrix}$$

vP

#
$$\begin{bmatrix}\# \\ | \\ \text{pl}\end{bmatrix}$$

② ①

v′

πP

π
$$\begin{bmatrix}\pi \\ | \\ \text{Prtcpnt} \\ | \\ \text{Spkr}\end{bmatrix}$$

nP
$$\begin{bmatrix}\text{CL} \\ | \\ \text{ANIM} \\ | \\ \text{HUM}\end{bmatrix}$$

v

VP
...

(76) **Default gender:** [∗#:□∗] > [∗CL:□[HUMAN:□]∗]

PartP

Part
$$\begin{bmatrix}[*\#:\square*] \\ \begin{bmatrix}*\text{CL}:\square \\ *\text{ANIM}:\square* \\ *\text{HUM}:\square*\end{bmatrix}\end{bmatrix}$$

vP

#P

③✘ ①

#
$$\begin{bmatrix}\# \\ | \\ \text{pl}\end{bmatrix}$$

②✘

v′

πP

π
$$\begin{bmatrix}\pi \\ | \\ \text{Prtcpnt} \\ | \\ \text{Spkr}\end{bmatrix}$$

nP
$$\begin{bmatrix}\text{CL} \\ | \\ \text{ANIM} \\ | \\ \text{HUM}\end{bmatrix}$$

v

VP
...
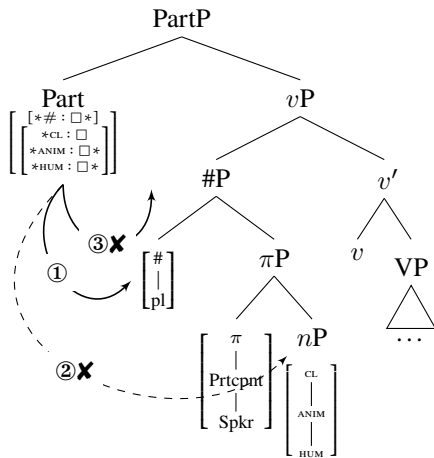
- This has the positive consequence of deriving one additional mismatching pattern in BCSM, namely default agreement with a feminine plural local-person pronoun:

(77) a.   Mi smo došle.
     2.PL aux.1.PL came.F.PL
     'We (female referents) came.'

    b.   ?Mi smo došli.
     2.PL aux.1.PL came.M.PL
     'We (female referents) came.'

- The pattern in (77a) would thus be derived by ordering CL-Agree before #-Agree on Part (75); (77b) would result from the counterfeeding order in (76), whereby gender agreement fails due to an early application of #-Agree.
- Yet, since this pattern is subject to inter-speaker variation, the issue of how to restrict it will be left for further research.
- As with nouns, in the singular such mismatches can, and do not happen, sue to the absence of the blocking effect of the plural number:

(78) **Masculine natural gender:** [∗CL:□[HUMAN:□]∗] > [∗#:□∗]

PartP

Part
$$\begin{bmatrix}\begin{bmatrix}*\text{CL}:\square* \\ *\text{ANIM}:\square* \\ *\text{HUM}:\square* \\ [*\#:\square*]\end{bmatrix}\end{bmatrix}$$

vP

...

②✘ ①

... πP

π
$$\begin{bmatrix}\pi \\ | \\ \text{Prtcpnt} \\ | \\ \text{Spkr}\end{bmatrix}$$

nP
$$\begin{bmatrix}\text{CL} \\ | \\ \text{ANIM} \\ | \\ \text{HUM}\end{bmatrix}$$

v′

v

VP
...

(79) **Masculine natural gender:** [∗#:□∗] > [∗CL:□[HUMAN:□]∗]

PartP

Part
$$\begin{bmatrix}[*\#:\square*] \\ \begin{bmatrix}*\text{CL}:\square \\ *\text{ANIM}:\square* \\ *\text{HUM}:\square*\end{bmatrix}\end{bmatrix}$$

vP

...

①✘ ②

... πP

π
$$\begin{bmatrix}\pi \\ | \\ \text{Prtcpnt} \\ | \\ \text{Spkr}\end{bmatrix}$$

nP
$$\begin{bmatrix}\text{CL} \\ | \\ \text{ANIM} \\ | \\ \text{HUM}\end{bmatrix}$$

v′

v

VP
...

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