The representation of gender on local person pronouns

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Background

Languages in which local person (i.e. 1st and 2nd person) pronouns show gender distinctions have been overlooked, despite abundant literature investigating gender on pronouns (e.g. Audring 2008).
Aim: (i.) Bring such languages together under a single study. (ii.) Provide a model of the representation of ϕ-features on pronouns; derive two main generalisations on the global distribution of gender on pronouns; account for gender distribution within languages and its morphological realisation.
Previous studies: Siewierska (2013) lists 21 languages with gender on local person. Plank and Schellinger (1997) do not offer a formal proposal. Berg (2024), though encompassing a similar corpus, focuses on a different puzzle and lacks a formal proposal.

Data

SG	3 + 2 + 1	Korana (Khoe-Kwadi), Hadza (Isolate), Ngala (Ndu)
SG	3 + 2	Abkhaz (Northwest Caucasian), Arabic, Hebrew, Berber (Riffian, Tacelhiyt, Kabyle, Aures, Tamazight), Amharic, Aramaic, Musey, Kera, Lele, Hausa, Mupun, Kulere, Fyer, Ron (Bokkos, Daffo-Butura), Zari, Miya, Beja (Afro-Asiatic), //Ani, ||Gana, Buga/Khwe, Nama (Khoe-Kwadi), Manambu (Ndu), Kwoma (Sepic), Tunica (Tunica)
SG	3 + 1	Cocama-Cocamilla (Tupian)
SG	2 + 1	Paez (Isolate)
SG	2	Iraqw, Sha, Burunge, Tuareg Berber (Afro-Asiatic), Moken (Austronesian)
SG	1	
PL	3 + 2 + 1	Spanish, Provençal, Shina, Slovenian (Indo-European), Gaagudju (Gaagudju), Berber (Riffian, Tacelhiyt, Kabyle, Tuareg) (Afro-Asiatic), //Ani, ||Gana, Buga/Khwe, Nama, Korana (Khoe-Kwadi), Hadza (Isolate), Emmi (Western Daly), Monumbo (Bogia)
PL	3 + 2	Berber Tumzabt Berber (Aures, Tamazight), Arabic, Hebrew, Beja (Afro-Asiatic), Tunica (Tunica)
PL	3 + 1	
PL	2 + 1	
PL	2	
PL	1	
DU	3 + 2 + 1	Gaagudju (Gaagudju), Slovenian, Lithuanian, (Indo-European), Dumo (Skou), Djeebbana, Burarra, Nakkara (Maningrida), Ngandi, Nunggubuyu, Anindilyakwa (Gunwinyguan), Murrinpatha (Southern Daly), Touo (Isolate), Bora (Boran), Murui Huitoto (Witotoan), //Ani, ||Gana, Buga/Khwe, Nama, Korana (Khoe-Kwadi),
DU	3 + 2	Kamoro (Nuclear Trans New-Guinea)
DU	3 + 1	Cocama-Cocamilla (Tupian)
DU	2 + 1	
DU	2	
DU	1	Wutung (Skou)

Table 1: 62 languages belonging to 20 families with gender distinctions in local person

Generalisations

Global level:

• Gender distinctions on 1st and 2nd person to the exclusion of 3rd possible in the SG and PL.

• Gaps in the following conditions: only 1st person (in SG and PL), only 2nd person non-SG, only 1st and 2nd person non-SG, $3^{rd}+1^{st}$ person (in the PL).

(1) *Generalisation I*:
Having gender distinctions in 1st person singular entails having gender distinctions in the 2nd and/or 3rd person as well.

(2) *Generalisation II*:
Having gender distinctions in 1st person non-singular entails having gender distinctions on 2nd and 3rd peson as well.

$\Rightarrow$ Formal description of 2nd and 3rd person is included in the formal description of the 1st person (Harley and Ritter 2002, Ackema and Neelemann 2013, 2018).

Individual-language level:

• gender distinctions on local person only in the SG

• only non-SG (c.f. Greenberg's 1963 *Universal 37*: A language never has more gender categories in non-singular numbers than in the singular, and *Universal 45*: If there are any gender distinctions in the plural of the pronoun, there are some gender distinctions in the singular also.)

  – both PL and DU, only DU, only PL (language lacks DU), only PL (language has DU)

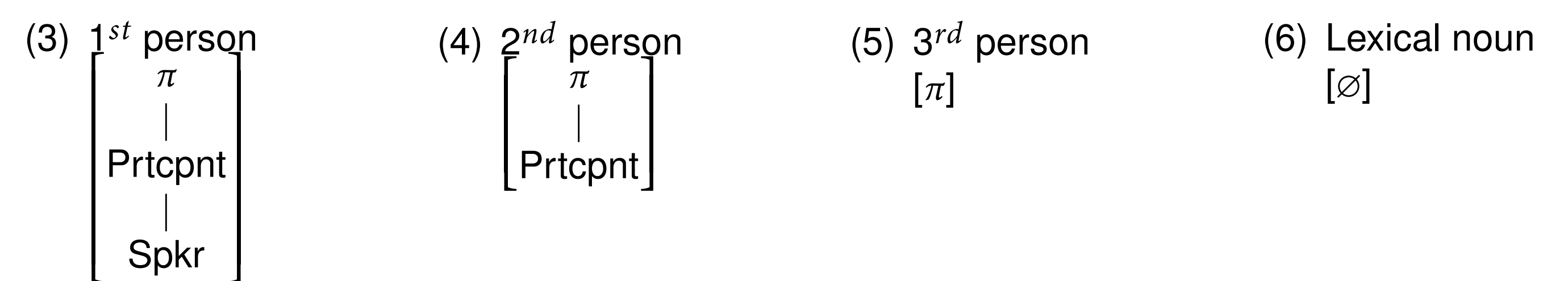• both in the SG and in the non-SG

Morphological level:

• Languages which have been argued to have separate gender morphemes: Spanish, Provençal, Lithuanian, Slovenian, Berber, Amharic, Arabic, Beja, //Ani, ||Gana, Buga, Nama, Korana, Hadza, Dumo, Kwoma, Kamoro, Djeebbana, Burarra, Murrinhpatha, Nunggubuyu, Anindilyakwa, Gaagudju, Touo, Bora, Paez, Tunica, Ngandi, Nakkara, Wutung, Emmi

• Pronouns not segmentable: Abkhaz, Musey, Kera, Lele, Hausa, Mupun, Monumbo, Shina

Selected references

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Assumptions

• **A1:** The complexity of the representation of **person** features increases from the 3rd (5) towards the 1st person (3) (Georgi 2013, Nevins 2007, Béjar and Řezáč 2009, Deal 2015).

(3) 1st person
$$\begin{bmatrix} \pi \\ | \\ Prtcpnt \\ | \\ Spkr \end{bmatrix}$$

(4) 2nd person
$$\begin{bmatrix} \pi \\ | \\ Prtcpnt \end{bmatrix}$$

(5) 3rd person
$[\pi]$

(6) Lexical noun
$[\varnothing]$

• **A2:** **Number** is represented by a general number node [#] and a [PL] node below it, as in (7) (Harley and Ritter 2002). Feature [MINimal] may be added to represent dual number. Singular is the absence of number $\Rightarrow$ absence of #P (Kratzer 2007, Nevins 2011, Pesetsky 2013).
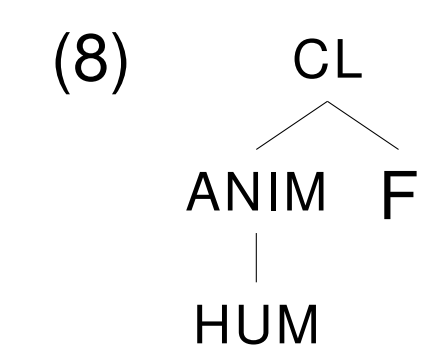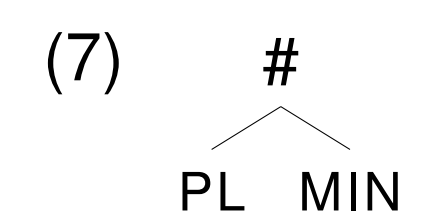
• **A3:** **Gender** includes a general gender node CLASS, a marked feminine value [F] and an animacy [ANIM] and humanness [HUM] specification (8) (see also Hammerly 2018, Caha 2021, Adamson and Anagnostopoulou 2025, Puškar-Gallien to appear).

(7)
```
      #
     / \
   PL   MIN
```

(8)
```
       CL
      /  \
   ANIM   F
     |
    HUM
```

• **A4:** Each feature type projects a phrase. No root – n is the base (Moskal 2015). Person is lower than number (Noyer 1992, Trommer 2002, Harbour 2016, Ackema and Neelemann 2018, van Urk 2019). Gender as CLP projected above #P (Puškar-Gallien to appear).
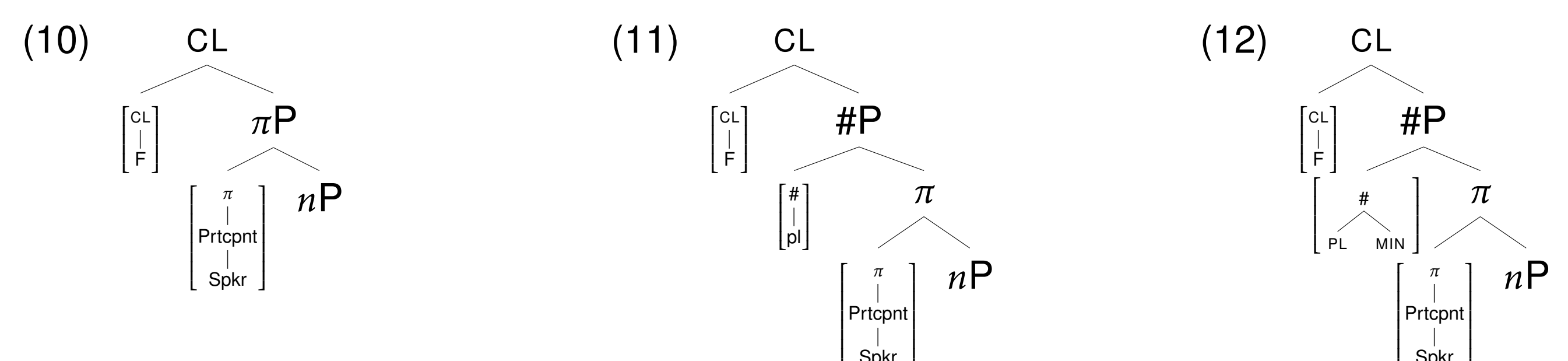
(9) $[_{KP} K [_{CLP} CL [_{\#P} \# [_{\pi P} \pi [_{nP} n]]]]]$

• **A5:** Morphology interprets syntactic structures (Distributed Morphology, c.f. Halle and Marantz 1993), Vocabulary Insertion dischages syntactic features root-outwards; **cyclic realisation** of the phrases in (9) (Bobaljik 2000).

• **A6:** #P is a cyclic domain in the sense of Moskal (2015), Smith et al. (2019).

Analysis

The internal structure of 1st person: singular (10), plural (11) and dual (12)

(10)
```
      CL
     /  \
  [CL    πP
   |    /  \
   F]  π    nP
       |
     Prtcpnt
       |
      Spkr
```

(11)
```
      CL
     /  \
  [CL    #P
   |    /  \
   F]  #    π
      [pl]  |  \
           Prtcpnt  nP
            |
           Spkr
```

(12)
```
      CL
     /  \
  [CL    #P
   |    /  \
   F]  #    π
      / \   | \
    PL  MIN π  nP
          Prtcpnt
            |
           Spkr
```

Global Consequences:
Generalisation I: If gender is present on 1st person, it will be present on other persons, c.f. A1.
Generalisation II: Gender does not combine freely with any person in the non-singular number, due to cyclicity and since #P introduces a locality barrier (c.f. A2, A3, A4, A5).

Language-internal consequences: Having gender present in some environments justifies postulating it across the board (e.g. languages with gender distinctions only on 2nd person SG distinguish between 3rd person M and F *object* pronouns: Iraqw, Burunge (Cushitic), Sha (Chadic), c.f. Mous 1993, Kiessling 1994, Jungraithmayr 1970). The absence of gender in certain environments depends on language-internal factors (markedness toleration, c.f. Weisser in press, principle of informativity, c.f. Berg 2024, diachrony, c.f. Plank and Schellinger 1997, etc.)

Morphological consequences: A4 and A5 predict that π should be realised closest to the nominal base, followed by # and then by gender (*Mirror Principle*, Baker 1985). Languages in Table 2 confirm this prediction. Others: Spanish, Provençal, Lithuanian, Slovenian, (most) Berber languages, Arabic, //Ani, Buga, Nama, ||Gana, Dumo, Djeebbana, Murrinpatha, Nunggubuyu, Anindilyakwa, Touo, Bora, Paez, Nakkara, Emmi. The rest are under scrutiny.

SG	Korana	Hadza	Beja	Gaagudju
1			(un)àni	ngaanj
1M	ti-re	ʼono		
1F	ti-ta	ʼono-ko		
2				ngiinja
2M	sa-ts	te	(um)baʼu:k	
2F	sa-s	te-ko	(um)baʼu:k	
3M	ll'di-b	bami	(um)baʼu:	ngaayu
3F	ll'di-s	bo-ko	(um)baʼu:	naawu
3C	ll'di-ʼi			
DU				
1INM	sa-kham			manaa-mana
1INF	sa-sam			manaa-njdja
1INC	sa-m			
1EXM	si-kham			ngaa-mana
1EXF	si-sam			ngaa-njdja
1EXC	s-im			
2M	sa-kharo			nginjaa-mana
2F	sa-saro			nginjaa-njdja
2C	sa-khaoo			
3M	ll'di-khara			nowoo-mana
3F	ll'di-sara			nowoo-njdja
3C	ll'di-kha			
PL				
1			(an)hìnin	
1INM	sa-tje	ʼuni-bʼi		man-aada
1INF	sa-se	ʼone-beʼe		man-eemba
1INC	sa-da			
1EXM	si-tje	ʼu-bʼi		ng-aada
1EXF	si-se	ʼo-beʼe		ng-aamba
1EXC	si-da			
2M	sa-kao	ʼiti-bi	(am)baʼa:k(na)	nginj-aada
2F	sa-sao	ʼete-be	(am)baʼa:k(na)	nginj-eemba
2C	sa-du			
3M	ll'dku	bʼi	(am)baʼa:	now-ooda
3F	ll'dide	beʼe	(am)baʼa:	now-oomba
3C	ll'dine			

Table 2: Personal pronouns in Korana (Khoe-Kwadi, South Africa; Siewierska 2013), Hadza (isolate, Tanzania; Sands (2013: 270)), Beja (Cushitic, Sudan; Vanhove 2014: 16), Gaagudju (Gaagudju, Australia; Harvey 2002)