

## Person and gender in pronoun paradigms: A semantic account of a morphological pattern

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This paper explores the implications of a well-known (e.g. Siewierska 2013) typological asymmetry in the distribution of gender contrasts in pronoun systems: in languages that mark pronoun gender, those distinctions are commonly made only in the third person ( $3\pi$ ), and often only in the  $3\pi$  singular ( $3sg$ ). We argue that this is best explained by a semantic difference between the  $\phi$ -features of discourse participants and non-participants: the former derive an individual of type  $e$ , the latter a predicate of type  $\langle e, t \rangle$ .

**The phenomenon:** In our survey of pronoun systems in 112 languages, gender is limited to  $3sg$  in 13 languages, and to  $3\pi$  in general in another 18. In contrast, only one language, Iraqw, expresses gender in participant pronouns (specifically  $2\pi$ ) but not in  $3\pi$  (Nordbustad 1988). Awtuw (Feldman 1986) and Halkomelem (Galloway 1993; Wiltschko 2002) show the more common pattern:

a.				b.						
SG	DU	PL		SINGULAR	PLURAL					
1	wan	nan	nom	1	tɛʔéʔɛlθɛ	tɛʔlíməʔ				
2	jen	an	om	2	tɛlówə	tɛʔwóləp				
3	tej	rej	ræw	rom	3	tútʔ’à	θútʔ’à	tútʔ’à:ləm	jútʔ’à:ləm	θútʔ’à:ləm
	FEM	NON-F		MASC/—	FEM	MASC	—	FEM		

Table 1: Illustrative paradigms: Nominative pronouns in (a) Awtuw and (b) Halkomelem

**The theoretical challenge:** Three initially plausible approaches prove unsatisfactory in accounting for the above asymmetry: (1) A **feature-geometric** approach might make gender a dependent of the feature defining  $3\pi$ . However,  $3\pi$  has been persuasively analyzed as the least marked person, either bearing negative  $[-part]$  (e.g. Noyer 1992) or lacking a privative  $[PART]$  feature (e.g. Harley and Ritter 2002). There is thus no plausible  $\phi$ -feature that  $3\pi$  has and participants lack, on which gender could geometrically depend. (2) In Distributed Morphology, **Impoverishment** could delete gender features in the context of  $[PART]$ . Such an account can generate the attested pattern, but does not explain it. A rule deleting  $[PART]$  in the context of  $[FEM]$  would be formally just as simple, but would generate syncretic patterns that seem to be unattested (e.g. distinct pronouns for ‘ $I_M$ ’, ‘ $you_M$ ’, and ‘ $he$ ’, but a single form for ‘ $I_F/you_F/she$ ’). (3) As  $3\pi$  pronouns often pattern with demonstratives, one might posit a **layer of syntactic structure**, perhaps DP, present in  $3\pi$  but absent in  $1\pi$  and  $2\pi$ , which is the locus of gender (at least in languages exhibiting this pattern). This runs counter to what Déchaine and Wiltschko (2002) propose for English, however. Moreover, Wiltschko (2002) shows that the Halkomelem pronouns in Table 1b must all be DPs: they cannot be bound, and all include a morphologically identifiable determiner.

**Proposal:** We propose a semantic account, building on Bjorkman et al.’s (2019) analysis of Heiltsuk. Heiltsuk demonstratives can be oriented to participants (‘this near me’, ‘that near you’) but not  $3\pi$  (‘that near them’). Bjorkman et al. attribute this to the semantics of a locative element  $\chi$  (Harbour 2016):  $\chi$  is a function from individuals to locations, and so can compose with participant feature bundles (semantically individuals, type  $e$ ), but not  $3\pi$  bundles ( $\langle e, t \rangle$  predicates denoting the property of not being a participant). We suggest that gender features compositionally restrict the domain of potential reference (to members of a gender class, however construed), and so—conversely to  $\chi$ —can compose with predicates ( $3\pi$ ) but not individuals ( $1\pi$  or  $2\pi$ ). In languages that mark gender only in  $3\pi$ , gender is structurally higher than person, and can only compose with non-participant person features: In Halkomelem, gender is on D, and marked in the contrast between t- and  $\theta$ - in the determiner component, neutralized to t- in  $1\pi$  and  $2\pi$ . In languages that mark gender in all persons (e.g. Hebrew), gender is lower than person, and so composes before it (see Ritter 1993 for arguments that the locus of gender varies crosslinguistically, and is low in Hebrew full DPs). Accidental syncretisms can still arise through underspecification of vocabulary items, so the Iraqw pattern (gender-in- $2\pi$ -only) can be generated, but is expected to be less common than the gender-in- $3\pi$ -only pattern. This departs from Kramer’s (2016) arguments that gender is always low, on N or  $n$ ; we explore possible implications for differences in the functional structure of nouns vs. pronouns.

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