Concurrent nominal classification systems in Indo-European languages

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A quick bio

- Linguistic typology (gender, classifiers)
- Language contact (Scandinavia, Mesoamerica, SE Asia)
- History of linguistics (nominal classification, North American languages, complexity)

Context

- Extensive literature on gender since Antiquity
- Little attention devoted to well-described languages with other classification systems: different gender systems, gender and (types of) classifiers

- Here we'll focus on concurrent systems in Indo-European (gender, numeral classifiers) and their functional and diachronic implications

Outline

- Gender, classifiers as nominal classification systems
- Functions of nominal classification
- Concurrent systems Nepali (Indo-European, Indic) and early stages of Indo-European
- Implications
    - Functions of concurrent systems
    - Rise and fall of nominal classification

Nominal classification

- Gender and classifier systems as types of nominal classification
- Nominal classification (Contini-Morava & Kilarski 2013)
  - Classification of nouns and/or referents
  - Grammaticalized to some degree
  - Expressed in one or more NP-internal or external contexts
- A “‘unique window’ into studying how humans construct representations of the world and encode them into their languages” (Aikhenvald 2000: 307)

Gender

- A categorization of nouns (Greek γένος (*genos*), Latin *genus* ‘kind’) that is “reflected in the behavior of associated words.” (Hockett 1958: 231)

- Gender involves various components of language structure
  - lexicon (as a classification of nouns)
  - morphology (in synthetic expression of gender)
  - syntax (in agreement)
  - phonology (in correlations with the form of nouns)

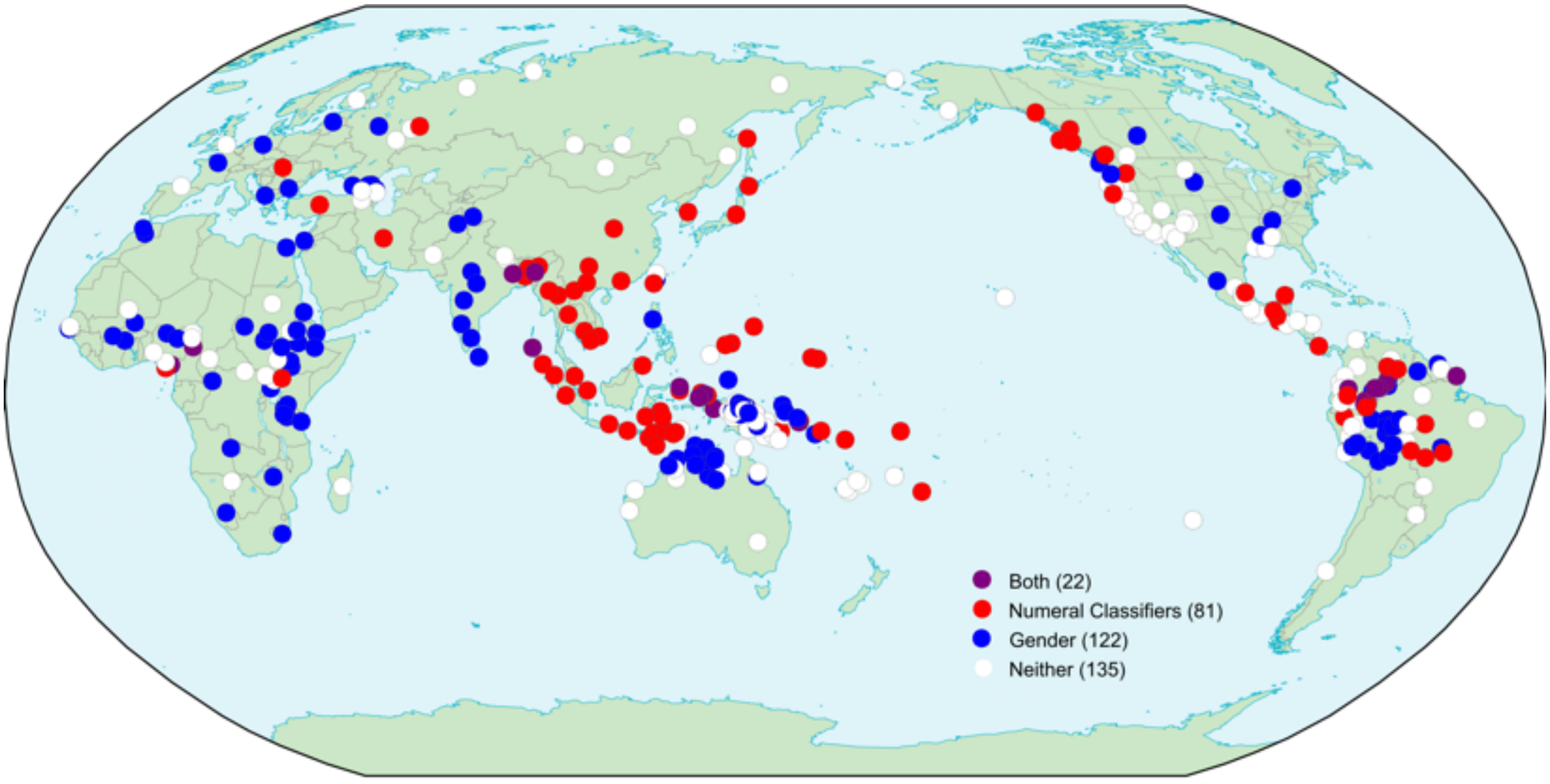
- A topic of special interest among linguists and laypeople: “the most puzzling of the grammatical categories” (Corbett 1991: 1)

Classifiers

- Free or bound morphemes denoting “some salient perceived or imputed characteristic of the entity to which an associated noun refers” (Allan 1977: 285)

- Types of classifiers (Aikhenvald 2000; Grinevald 2000)
  - numeral (with a numeral/quantifier)
  - noun (in contexts other than quantification)
  - verbal (on the verb)
  - possessive (in possessive constructions)
  - locative and deictic (in locative NPs and articles/demonstratives)

Gender and numeral classifiers (Sinnemäki 2019: 151)



Distribution of gender and numeral classifiers

- Both types of systems in 22 (6%) out of 360 languages in the sample, e.g. Fula, Ejagham (Niger-Congo), Pnar, Munda, Nicobarese (Austroasiatic), Halkomelem (Salishan) (Sinnemäki 2019)

- Inverse relationship that is independent of areal and genetic factors; complexity trade-off (Sinnemäki 2019)

- The distribution results from the complementary nature of the functions of the two systems (Tang and Kilarski in press)

Lexical and grammatical means of classification (Grinevald 2000)

Degree of grammaticalization

measure terms (*slice, flock*), verbs of ingesting (*drink, eat*)

classifiers

gender

Gender vs. classifiers (Aikhenvald 2000; Grinevald 2000)

Property	Gender	Classifiers
Agreement	yes	no
Realization	can be marked on the noun	typically not affixed to the noun
Applicability	all nouns classified	not all nouns classified
Assignment	semantic or semantic/formal	semantic or lexical
Size of inventory	relatively small, closed system	relatively large, open system
Variability	nouns assigned to a class without variability	classifier choice used to highlight a referent's property

Gender vs. classifiers

- Problems dichotomies and individual semantic/morphosyntactic parameters, e.g. size, variability

- ‘Canonical gender’ and classifiers (Corbett & Fedden 2016; Fedden & Corbett 2017)

- “In a canonical gender system, each noun has a single gender value.” (Corbett & Fedden 2016: 9).

- In a canonical system this gender value is based on the meaning of the noun and remains the same for all agreement targets across all domains of agreement.

- Classifiers as classification systems which differ in various ways from this canonical system

Concurrent systems in earlier studies

- Discussions of semantic and morphosyntactic properties of concurrent systems
    - Gerlach Royen's (1880–1955) *Die nominalen Klassifikationssysteme in den Sprachen der Erde* (Royen 1929)
    - Christianus Cornelius Uhlenbeck's (1866–1951) work on Algonquian languages; review of Royen (1929) in Uhlenbeck (1932)
- Effects of language contact in South Asia on gender and numeral classifiers (Emeneau 1956)

Functions of nominal classification (Contini-Morava & Kilarski 2013)

- Types of functions:
  - semantic (expansion of the referential power of the lexicon)
  - pragmatic (establishing and manipulating the status of discourse referents)

Semantic functions

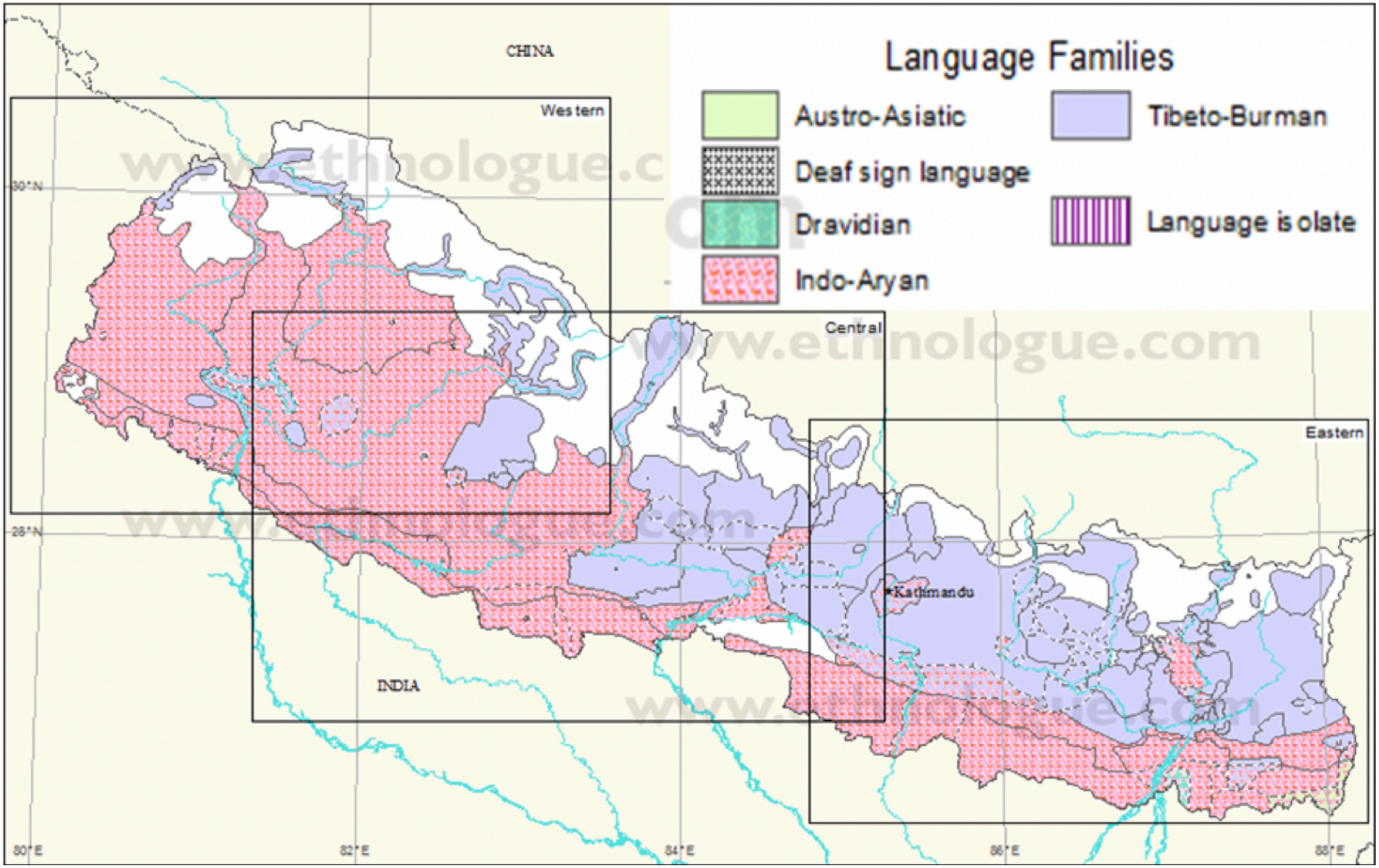
- Expansion of the lexicon: creating new lexical items
- Differentiating referents: differentiating a semantically neutral lexeme
- Individuation: interaction with number
- Attributing properties to referents: expressing affective meanings

Pragmatic functions

- Reference identification: anaphoric and deictic use of classification markers to help identify a referent, and disambiguate between potential referents

- Reference management: correlation with definiteness and prominence in discourse

- Re-presentation: use of classification markers to introduce a new discourse perspective on the referent



Languages of Nepal (Simons & Fennig 2017)

Nominal classification in Nepali

- How many genders?
  - 0 (Priestly 1983; Corbett 1991; Aikhenvald 2000; Riccardi 2003)
  - 2 (Clark 1977; Acharya 1991; Matthews 1998; Poudel 2010)
  - 4 (Manders 2007)
  - 11 (Pokharel 2010)
- How many classifiers?
  - 2 (human vs. non-human) (Acharya 1991; Matthews 1998; Riccardi 2003)
  - >200 (Pokharel 2010)
- Different varieties of Nepali? Citations of earlier inaccurate accounts?

Nominal classification in Nepali (Tang & Kilarski in press)

- Data source: 10 native speakers
- Framework: Fedden & Corbett (2017) on concurrent systems, Contini-Morava & Kilarski (2013) on functions
- Two gender systems (masculine vs. feminine; human vs. non-human) and a numeral classifier system

Genders in Nepali: masculine vs. feminine

a.	*Mer-o*	*ramr-o*	*keto*	*nepali*	*bolcha*
	my-M	beautiful-M	boy(M)	Nepali	speak.PRS.3SG.M
	‘My handsome boyfriend speaks Nepali.’				
b.	*Mer-i*	*ramr-i*	*keti*	*nepali*	*bolche*
	my-F	beautiful-F	girl(F)	Nepali	speak.PRS.3SG.F
	‘My beautiful girlfriend speaks Nepali.’				
c.	*Mer-o*	*kitaab*	*yahan*	*cha*	
	my-M	book(M)	*here*	be.PRS.3SG.M	
	‘My book is here.’				

Genders in Nepali: human vs. non-human

a. *U* *ramr-o* *cha*
he/she beautiful-M be.PRS.3SG.M
'He is handsome.'

b. *U* *ramr-i* *che*
he/she beautiful-F be.PRS.3SG.F
'She is beautiful.'

c. *Tyo* *ramr-o* *cha*
it beautiful-M be.PRS.3SG.M
'It (e.g. a house) is beautiful.'

Numeral classifiers in Nepali

- Around 10 numeral (sortal) classifiers: general classifier, human classifier, inanimate classifiers based on shape, dimensionality and material

- The general classifier
  - Occurs with both animate and inanimate nouns
  - Occurs with numerals either independently or as fused with a numeral
  - Shows gender agreement in both independent and fused forms

Numeral classifiers in Nepali

a.	*tin*	*jana*	*manche*
	three	CLF.HUMAN	man
	‘three men’		
b.	*tin*	*dana*	*syaauu*
	three	CLF.ROUND.FRUIT	apple
	‘three apples’		
c.	*tin*	*wot-a*	*keto*
	three	CLF.GENERAL-M	boy(M)
	‘three boys’		
d.	*tin-t-a*	*keto*	
	three-CLF.GENERAL-M	boy(M)	
	‘three boys’		

Lexical functions of gender (M/F) and classifiers in Nepali

Function	Gender	Numeral classifiers
Expansion of the lexicon	Yes (expression of size among inanimates)	No (classifiers are not affixed to nouns)
Differentiating referents	Yes (indication of sex among animates)	Yes (expression of size and shape among inanimates)
Individuation	No (lack of uses of gender to distinguish between individuated and non-individuated senses of a noun)	Yes (classifiers individuate all nouns for the purpose of quantification)
Attributing properties	Yes (expression of the speaker's attitude towards animate referents by gender shift)	Yes (expression of degrees of respect towards animate referents by classifier choice)

Implications: functions

- Gender and classifiers in Nepali contribute to the lexicon and discourse in complementary ways.

- Trade-off effect
  - A function is expressed by only one system.
  - Gender and classifiers are exploited with different types of nouns (animate vs. inanimate).
  - Gender and classifiers are exploited for the same function in the same category of nouns to convey different meanings.

Implications: diachrony

- Analogies between the concurrent system in Nepali and the feminine forms of the numerals ‘3’ and ‘4’ in Celtic and Indo-Iranian (Gąsiorowski & Kilarski 2019)

- Noun root **sór-* ‘woman, female’ was grammaticalized as a suffix of limited productivity.

- The feminine marker **-sr-* obligatorily follows a numeral within a numeral phrase if it refers to a noun denoting a female.

- A nascent system of numeral classifiers in Proto-Indo-European predating the rise of the feminine gender

Numeral classifiers in PIE and modern IE

- Semantic analogies between feminine markers in PIE and modern IE in terms of
  - Expression of feminine reference by semantically bleached ‘femininizing’ markers vs. feminine gender agreement markers
  - Classificatory systems expressed on numerals, in which animate referents are classified with respect to sex

Numeral classifiers in PIE and modern IE

- Same ordering (Numeral-Fem.marker-Noun) in Vedic and Nepali (classifier and numeral are contiguous, cf. Greenberg 1972)

a.	*cáta-sra(s)*	*ghṛta-dúhaḥ*	
	four-CLF.F.NOM.PL	butter-yielder(female).NOM.PL	
	‘four butter-yielders’		
b.	*tin*	*wot-i*	*keti*
	three	CLF.GENERAL-F	girl(F)
	‘three girls’		

- Similar expression: PIE feminine marker fused with the numeral by forming a compound which became morphologically opaque, while in Nepali the feminine suffix appears with the general classifier either as part of an independent word or is fused with the numeral.

Future developments in PIE

- Grammaticalization path of the feminine classifier: compound element > derivational suffix > numeral classifier

- Failed experiment: limited productivity as a numeral classifier (only on numerals ‘3’ and ‘4’; no evidence for other numerals

- The nascent numeral classifier system was ‘outcompeted’ by a fully fledged feminine gender, with the feminine classifier reinterpreted as a feminine marker in the new agreement system.

Alternative scenarios

- Gender and numeral classifiers as a common Indo-European trait?
- A perfectly possible scenario considering the sociolinguistic context of early Indo-European
- A ‘society of intimates’ (cf. Givón 1979; Trudgill 2011): small communities, social stability, cultural uniformity and informational homogeneity would allow such complexification in grammar.
- A different picture of the history of language study in the Western tradition: grammatical gender, a prime example of arbitrariness and redundancy, co-occurs with a more transparent numeral classifier system.

Research opportunities: typology

- Need for
- Cross-linguistic/dialectal surveys
- Discourse and corpus data
- Data from concurrent and transitional classification systems
- Data from endangered and less studied languages

Research opportunities: functions and diachrony

- Functions of small vs. large classification systems
- Extent of variability in gender (gender shift, reclassification)
- Functions of concurrent systems of different degrees of complexity
- Role of social and demographic factors in the rise and fall of nominal classification systems

Conclusions

- Considerable progress in recent research but largely fragmentary knowledge of nominal classification systems
- Value of evidence ‘on the door-step’
- Value of insights and data in earlier ‘pre-modern’ studies

Working on Nepali in Poznań

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