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Toward a new conceptual framework for comparing gender systems and some so-called classifier systems

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1. The larger programme:

Toward an IPA-like standard set of grammatical terms

what I am NOT interested in: – the “true” analysis/description of some phenomenon
– a general (“formal”) analytical framework for describing language-particular phenomena

what I am interested in: – understanding (= explaining) general properties of Human Language
– hence: what grammatical properties are general across the world’s languages
– hence: what are good methods of finding universals, including: what are good comparative concepts

(note: I make no a priori assumptions about the kinds of explanations for universals that might be most suitable, and I think that there is evidence for three rather different kinds of constraints: *mutational*, *functional-adaptive* and *representational constraints*; Haspelmath 2014; 2018)

So what are good comparative concepts?

This is very hard to say in advance of a worldwide study, but in some cases, concepts not too distant from traditional concepts such as *subject*, *verb*, *adjective*, *demonstrative*, *numeral* have proven useful (Greenberg 1963).

Greenberg (1963) also lists a number of universals about gender, e.g.

Universal 36. If a language has the category of gender, it always has the category of number.

Universal 37. A language never has more gender categories in nonsingular numbers than in the singular.

Are these universals true? Answering this question presupposes that we know what is meant by “gender”, and this is not trivial.

More generally, linguists often use general terms without being clear about their precise meaning. There are two solutions to this kind of unclarity:

- each time one uses a term, one says what exactly one means by it
(cf. Matthew Dryer on the Lingtyp List, 2017-12-04:
“we should demand that linguists be clear how they are using particular terms, whether it is by citing operational criteria for their use or citing someone else’s use”)
- we agree on a standard meaning for each traditional term, just as with the IPA, we managed to agree on a standard meaning for each traditional letter

2. Some problems with the terms “gender” and “classifier”

- (1) a. It has been found recently that gender and classifier systems **cannot be kept apart clearly**, despite what had been thought earlier (e.g. Dixon 1986).
- b. But we still want to **talk about gender** in the traditional sense (e.g. in contexts where we discuss “aquisition of gender” (Audring 2016), or when we informally ask whether a language has gender).
- c. Gender systems with few classes are very **prominent in European languages** and thus have unduly dominated our thinking about nominal classification systems.
- d. Gender is typically **defined through “agreement”**, but this notion is itself poorly defined, and it does not allow us to distinguish gender from classifiers.
- e. *Gender* is the name of a **feature** (like number and case), while *classifier* is the name of a kind of **marker**.
- f. Classifiers are often said to be **separate elements**, whereas gender markers are thought to be **inflectional exponents**, but the distinction between separate elements and morphological exponents has been elusive (Haspelmath 2011).
- g. The term “nominal classification” for the intended domain is odd, because there are many other ways in which **nouns are grouped into classes** (e.g. different ways of forming plurals, such as Swedish plural classes *-or/-ar/-er/-n/-Ø*)

My proposed solution:

- define a new notion of **nomifier**
- say how gender markers and (some) classifiers are special types of nomifiers
- the whole domain is called **nomification** (= “nominal classification”)

3. Markers and features

Gender is a grammatical phenomenon that is recognized by its reflection “in the behavior of associated words” (as in Hockett’s 1958: 231 classic definition), and this behaviour implies that the associated words include GENDER MARKERS, as illustrated in (2)-(3).

(2) Russian

- | | | |
|----|-------------------------|----------------|
| a. | <i>bol’s-oj</i> | <i>dom</i> |
| | big-M.NOM.SG | house(M) |
| | ‘big house’ | |
| b. | <i>bol’s-aja</i> | <i>cerkov’</i> |
| | big-F.NOM.SG | church(F) |
| | ‘big church’ | |

(3) Hinuq (Nakh-Daghestanian) (Forker 2013: 464)

- | | | |
|----|----------------------------------|---------------|
| a. | <i>Ø-eg^wey užı</i> | ‘small boy’ |
| b. | <i>y-eg^wey ked</i> | ‘small girl’ |
| c. | <i>b-eg^wey k’et’u</i> | ‘small cat’ |
| d. | <i>r-eg^wey t’oq</i> | ‘small knife’ |

Classificatory phenomena that do not involve grammatical markers do not fall under nomification, e.g. “classificatory verbs” (though Aikhenvald 2000: 153-159 treats them under this heading):

(4) German

- | | | |
|----|-------------------------|----------------------------|
| a. | <i>Die Frau trinkt.</i> | |
| | the woman drinks | (human subject) |
| b. | <i>Die Kuh säuft.</i> | (* <i>Die Kuh trinkt</i>) |
| | the cow drinks | (nonhuman subject) |

Definitions of *gender* often say that it is a MORPHOSYNTACTIC FEATURE of **nouns**, as well as on **the targets of gender agreement** (adjectives, demonstratives, argument indexes, and so on) (e.g. Corbett 2012). But:

(I) while the gender class of a noun is an **inherent property**, the gender marker on a target such as an adjective is an **overt element**. Gender classes and gender markers are thus crucially different.

(II) the notion of a “feature” is very abstract (others use the terms “category” or “attribute”), and it is simpler to limit one’s terminology to GENDER CLASSES (i.e. classes of nouns) and GENDER MARKERS (i.e. grammatical markers on targets).

– this solves problem (2e), namely that classifiers are always thought of as markers, while gender is traditionally the name of a feature. We only consider markers: gender markers and classifiers, or more generally, nomifiers.

Classifier constructions are very similar to constructions with gender markers:

(5) Japanese

- a. *inu* *san-biki*
 dog(BIKI) three-CLF.BIKI
 ‘three dogs’
- b. *niwatori* *san-ba*
 chicken(BA) three-CLF.BA
 ‘three chickens’

We do not normally say that Japanese has a “classifier feature” on nouns and on numerals, and that this feature is overt on nouns, but realized by suffixes in numerals. Instead, we say that there is a PARADIGM of classifiers, and we can say that each noun belongs to a CLASSIFIER CLASS. In view of the problems with the notion of feature that we just saw, we can adopt the same way of talking also for gender phenomena:

(6) Gender languages like Russian have a paradigm (or “system”) of gender markers, and each noun belongs to a gender class.

This way of thinking and talking about gender makes classifier systems and gender systems fully parallel, and it allows us to define both in very similar ways.

4. *Nomifiers* as a superordinate term for classifiers and gender markers

Numeral classifiers and gender markers have long been treated together under the general heading of NOMINAL CLASSIFICATION.

(e.g. Royen (1929), Harvey & Reid 1997; Senft (ed.) 2000; Seifart 2010)

This can be shortened to NOMIFICATION – which is not as transparent, but this is good, because the term actually has a narrower sense than “classification of nouns” (e.g. different plural classes do not fall under it).

A marker in nomification constructions can be called a *nomifier*, and gender markers and numeral classifiers can be defined as special types of nomifiers.

(*Nomifier* can be thought of as short for “nominal classifier”, but the term “classifier” does not normally include gender markers, so the new term is better.)

But isn’t it possible to define gender systems as a distinct phenomenon independently of classifier systems, in terms of a notion of agreement?

– NO:

- (7) a. “The morphosyntactic characteristics of North West Amazonian systems challenge a certain tradition of nominal classification typology ... [where] “noun classes” are distinguished from “classifiers”.” (Seifart & Payne 2007: 383)
- b. “the traditional division between gender and classifiers as fulfilling similar functions in languages of different types is ever harder to maintain” (Fedden & Corbett 2017: 1)
- c. “The weight of evidence from languages with diverse nominal classification systems has clearly shifted the balance. Maintaining the distinction between genders and classifiers has become untenable.” (Singer 2018: 1)

– thus we solve the problem that gender and classifier systems cannot be kept apart clearly (cf. 1a)

– we also solve the problem that European gender systems have unduly dominated our thinking about nomification (cf. 1c)

5. A definition of *nomifier*

a preliminary attempt:

- (8) a. **nomifier system** =
a paradigm of grammatical markers which occur on noun-associated forms and each of which reflects a broad property of the corresponding noun other than person and number
- b. **nomifier** =
a grammatical marker in a nomifier system
- c. **nomification** =
the general phenomenon of grammatical marking by nomifiers
(= nominal classification)

Note:

- “paradigm” implies that there are at least two nomifiers, and that they are mutually incompatible
- the new notion of “noun-associated forms” replaces the unclear notion of agreement (cf. §6)
- “reflecting a property” corresponds to the traditional notion of “classification”
- person markers and number markers are not nomifiers by definition

6. Nomifiers on noun-associated forms vs. “agreement”

Corbett (1991: 4-5): gender is reflected in agreement, while numeral classifiers do not constitute agreement.

Seifart (2010: 720): the “presence or absence of agreement” sets gender systems apart from classifiers

Grinevald (2015: 812): “classifiers can be distinguished from concordial systems such as gender and noun class systems”

But this does not work. There is no justification coming from an independently understood notion of “agreement” for the distinction between the behaviour of the gender markers *-oj* and *-aja* in Russian, and the numeral classifiers *-biki* and *-ba* in Japanese; cf. also:

(9) Hindi-Urdu

a. *mer-aa ghar*
my-M.SG house(M)
‘my house’

b. *mer-ii kitaab*
my-F.SG book(F)
‘my book’

(10) Manam (Lichtenberk 2009: 249-250)

a. *pera ?ana-gu*
house(ANA) PCLF.ANA-1SG.POSS
‘my house’

b. *asi ne-gu*
bushknife(NE) PCLF.NE-1SG.POSS
‘my bushknife’

attempts at defining “agreement”:

Steele (1978):

“covariation of a formal property of one constituent with a formal or semantic property of another constituent”.

– but this also comprises all kinds of other dependencies,
e.g. the dependency of the case-marking pattern on tense-aspect forms,
or the dependency of mood forms on particular subordinators,
as found in Latin

Lehmann (1982: 203) :

a situation where two constituents (target and controller) are in some grammatical or semantic relation and where a feature value of a feature that a controller exhibits is expressed on the target.

– but this does not exclude numeral classifiers or possessive classifiers

Moreover, nomifiers (both gender markers and classifiers) are often used in situations when the corresponding noun is not overtly present:

- (11) a. Russian
bol'sh-aja
 big-F.SG.NOM
 'the big one (feminine gender)'
- b. Japanese
san-biki
 three-BIKI
 'three (dog-like animals)'

Here one would have to posit the presence of a zero controller, but this is not acceptable in typology (description can make use of invisible elements, but typology cannot)

Corbett (2006) gives up on defining agreement and limits himself to characterizing “canonical agreement”. Such a definition allows one to tell for each of the relevant constructions how far they are from canonical agreement, but it does not allow one to delimit the phenomenon, so it is not suitable for the present purposes.

The alternative: a new concept of NOUN-ASSOCIATED FORM:

- (12) A **noun-associated form** is an adnominal modifier (article, demonstrative, adjective, or numeral), or a verbal argument index (subject or object index), or an anaphoric pronoun.

While abstract notions like “feature (value)” and “grammatical or semantic relation” are hard to apply across languages, the more concrete notions used in (12) are much more tractable.

7. Defining gender systems

Earlier authors have made many important observations and generalizations about gender systems, and we do not want to lose these, even though earlier definitions of gender have not proved viable. Thus, the challenge is to come up with a definition of “gender marker” that is cross-linguistically applicable and is **extensionally very largely identical with the earlier intuitive notion of gender**.

gender system =

a nomifier system with up to 20 nomifier classes (= gender classes) whose nomifiers are not restricted to occurring on numerals and possibly other adnominal modifiers, or restricted to occurring on possessors

Only 20 classes? Fedden & Corbett (2017: 5) explicitly reject such a condition:

“we do not accept that the number of classes should be indicative of whether something is a gender or a classifier system. We believe that a linguistic phenomenon should not be defined by the number of instances.”

drop this condition? (it seems that few linguists would be willing to accept the possibility of a gender system with 50 or 100 classes)

The second condition is required in order to exclude numeral classifiers from the domain of gender markers, as in (13).

(13) Vietnamese (Löbel 2000: 261, 265)

- a. *một con cá*
 one NCLF.ANIMAL fish(ANIMAL)
 ‘a fish’
- b. *hai quả đào*
 two NCLF.FRUIT peach(FRUIT)
 ‘two peaches’

Numeral classifiers are not different in nature from gender markers, but they are never called gender markers in the earlier literature – so this condition is necessary to maintain continuity with legacy usage

The third condition is required to exclude possessive classifiers from the domain of gender markers (see below).

Alternatively, could we **give up the definition of gender entirely**, and limit ourselves to defining “canonical gender” (Corbett & Fedden 2016). This would allow us to say how a putative nomifier system relates to canonical gender, but it would no longer be possible to test universal claims about gender, or to make maps about gender (cf. Corbett 2005).

(In fact, the canonical approach does not even delimit the notion of nomifier, so that it is unclear what kinds of phenomena can be regarded as “non-canonical gender”, e.g. whether it makes sense to say that the singular-plural distinction, or even the active-passive distinction, is a very non-canonical type of gender distinction).

Since the term *gender* is deeply entrenched, and we want to treat it as a general phenomenon (e.g. “Does your language have gender?”), even linguists who do not have a universalist agenda need such a definition (cf. 1c)

8. Defining numeral classifier systems

Next we consider the definition of numeral classifiers, which are also defined as a subtype of nomifiers:

numeral classifier system =
 a nomifier system whose nomifiers are restricted to occurring on numerals
 and possibly other adnominal modifiers

Numeral classifiers may be restricted to occurring with numerals (and quantifiers like ‘how many’ or ‘many’), as in Japanese and Vietnamese, but they may also occur additionally with other adnominal modifiers, as in Mandarin.

- (14)
- | | | | | |
|----|------------|------------|-------------|----------------|
| a. | <i>sān</i> | <i>běn</i> | <i>shū</i> | |
| | three | CLF.BOOK | book | ‘three books’ |
| b. | <i>zhè</i> | <i>běn</i> | <i>shū</i> | |
| | this | CLF.BOOK | book | ‘this book’ |
| c. | <i>sān</i> | <i>bǎ</i> | <i>yǐzi</i> | |
| | three | CLF.CHAIR | chair | ‘three chairs’ |
| d. | <i>zhè</i> | <i>bǎ</i> | <i>yǐzi</i> | |
| | this | CLF.CHAIR | chair | ‘this chair’ |

Such nomifiers are of course quite similar to gender markers, and the decision to call them numeral classifiers and to exclude them from gender is of course entirely arbitrary, just like the decision to limit gender systems to 20 classes.

(A more transparent term would be NUMERAL NOMIFIER, and this could be shortened to NUMERIFIER.)

As discussed by Seifart (2009), Aikhenvald (2000: 123) regards constructions such as (15a) from Bora (Amazonia) as numeral classifier constructions (there are over 60 nomifier classes in Bora).

- (15) Bora
- | | | | |
|----|------------------|----------------|----------------|
| a. | <i>tsá-ʔo</i> | <i>úhɨʔo</i> | |
| | one-CL.OBLONG | banana(OBLONG) | |
| | ‘one banana’ | | |
| b. | <i>á:kíte-hɨ</i> | <i>ɛ:-hɨ</i> | <i>ugwá:bɨ</i> |
| | fall-CL.ROUND | that-CL.ROUND | axe(ROUND) |
| | ‘That axe fell.’ | | |

But the Bora Class Markers also occur on verbs (and relativizers), so they are not numeral classifiers by my definition (and Seifart rejects Aikhenvald's treatment)..

(They are not gender markers either, because there are more than 60 of them. Bora has a nomifier class that fits none of our stereotypical notions – so Seifart calls for a “multidimensional typology”.)

9. Defining possessive classifier systems

Many languages have two different possessive classes: alienable and inalienable, e.g.

(16) Lango (Nilotic; Noonan 1992: 156-157)

a. *gwòkk à lóccà*
 dog of man
 ‘the man’s dog’

b. *wì rwòt*
 head king
 ‘the king’s head’

(cf. Haspelmath 2017)

But in most languages, the inalienable construction lacks an overt marker – there must be at least two nomifiers in a nomifier system, so this is not one.

Only few languages have two different possessive markers, depending on the class of the possessed noun, e.g.

(17) Samoan (Oceanic; Mosel & Hovdhaugen 1992: 282-90)

a. *le naifi a le fafine*
 the knife PCLF.A the woman
 ‘the woman’s knife’

b. *le uso o le fafine*
 the sister PCLF.O the woman
 ‘the woman’s sister’

(18) Krongo (Reh 1985: 314ff)

a. *còorì kà-káaw y-ikkì*
 house PCLF.THING-man M-that
 ‘the house of that man’

b. *bálámáyù má-fyà*
 eye PCLF.BODYPART-cow
 ‘they eye of the cow’

possessive classifier system =

a nomifier system whose nomifiers are restricted to occurring on adpossessive modifiers

10. Occurrence of nomifiers on noun-associated forms

Recall:

nomifier system =

a paradigm of grammatical markers which occur on noun-associated forms and each of which reflects a broad property of the corresponding noun other than person and number

A noun-associated form is an **adnominal modifier** (article, demonstrative, adjective, numeral, or adpossessor), or a **verbal argument marker** (subject or object index), or an **anaphoric pronoun**.

- nomifiers may occur on articles
(e.g. German *d-er* [DEF-M.SG], *die* [DEF-F.SG], *d-as* [DEF-N.SG]),
- on demonstratives
(e.g. Spanish *est-e* [this-M], *est-a* [this-F]), on adjectives (as seen earlier in (3)), and
- on numerals
(e.g. Russian *dv-a* [two-masc], *dv-e* [two-fem]; and Mandarin Classifiers)
- on adpossessors
(e.g. French *m-on* [my-M.SG] and *m-a* [my-F.SG] ‘my’; and Manam Classifiers)
- whether they are written together or not is a matter of orthographic convention (no doubt often influenced by phonological factors)
 - cf. numeral classifiers:
 - in Chinese and Vietnamese: written separately
 - in Japanese, typically written together

(problem 1f is solved: spelling is disregarded, what matters is “occurrence on” noun-associated forms, i.e. immediately adjacent)

In the Australian languages, the situation is apparently sometimes different, because the “noun classifiers” or “generics” sometimes occur only together with more specific nouns.

However, in other Australian languages, these forms seem to behave similarly to the Qanjobalan languages, i.e. not only as article-like elements of full nominals, but also as anaphoric pronouns, e.g. Murrinhpatha (Walsh 1997).

- (22) a. KARDU (aboriginal people)
kardu thipman ‘Aboriginal black person’
kardu pule ‘husband’
- b. KU (other animates)
ku lawarnka ‘wallaby’
ku murl ‘fly’
ku thipman ‘non-Aboriginal black person’
- c. MI (plants)
mi lawam ‘flour’
mi marrarl ‘fruit of Kakadu plum tree’
- d. THU (weapons)
thu kuragadha ‘boomerang’
thu paku ‘large club’

In (23), we see examples of use as anaphoric pronouns, according to Walsh’s description.

- (23) a. *ku perrkenku bam-ngkardu*
 CL.KU two 1SG.SBJ-see
 ‘I saw them (animates of KU class) two.’ (p. 261)
- b. *kanhi kardu ngala*
 this CL.KARDU big
 ‘This is the big one (person of KARDU class).’

12. Conclusion

Grammatical terminology is often confusing because linguists typically presuppose that a term will be understood more widely than just for a particular language, but they do not define their terms properly as comparative concepts – instead they often assume that giving particular examples will be sufficient to understand the phenomenon.

If linguistic categories were natural kinds (like chemical elements, of which there are not more than 100, or maybe like the five basic tastes: sweet, sour, bitter, salty, umami), this approach would make perfect sense.

But we do not know that how linguistic categories are limited by nature, so we need to work with comparative concepts. General terms can only be understood across the discipline as comparative concepts.

One of the biggest terminological problems is the lack of a proper definition of gender, which cannot be defined in terms of agreement.

The definition of *nomifier* as provided here gives us the possibility to investigate whether some associations are at least true as tendencies, e.g.

- nomifier systems with fewer members will tend to be obligatory
- nomifier systems with sex-based semantic assignment will tend to be used beyond adnominal numerals
- nomifier systems that are used on a wide range of targets will have few members

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