



Tom Güldemann* and Ines Fiedler

More diversity enGENDERed by African languages: an introduction

<https://doi.org/10.1515/stuf-2021-1030>

Abstract: We give an overview of current research questions pursued in connection with an ongoing project on nominal classification systems in Africa, with a particular focus on Niger-Congo. We first introduce our cross-linguistically applicable methodological approach which provides new insights into the design of a range of gender systems on the continent. We then apply these ideas to the “noun class” systems of Niger-Congo. We focus on non-canonical phenomena of poorly known languages, which attest to an unexpected systemic diversity beyond the well-known Bantu type and promise to change the synchronic and diachronic perspective on the gender systems of this family.

Keywords: Africa; agreement; nominal classification; classifier; gender; Niger-Congo

1 Introduction

This issue of *Language Typology and Universals* assembles a collection of papers that deal with the analysis of a variety of gender systems in African languages. Most contributions arose from the international workshop “Gender across Niger-Congo”, held in November 2018 at the Humboldt-Universität zu Berlin. The meeting was organized within the framework of the research project “Noun classification systems in Africa between gender and nominal declension–deriflection” which has been sponsored by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) – project number 338110259 since March 2017.

The project has two major research foci, both of which are reflected in this volume, as well as in this introduction paper. One goal is to refine the approach to the cross-linguistic typology of gender systems in Africa and beyond, within the greater context of nominal classification in general. This topic is dealt with in

***Corresponding author: Tom Güldemann**, Department of Asian and African Studies, Humboldt-Universität zu Berlin, Berlin, Germany; and Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany, E-mail: tom.gueldemann@staff.hu-berlin.de

Ines Fiedler, Department of Asian and African Studies, Humboldt-Universität zu Berlin, Berlin, Germany, E-mail: ines.fiedler@staff.hu-berlin.de

Section 2.1. The second main goal of the project is to establish a framework for the synchronic description and historical reconstruction of gender in Niger–Congo, the globally biggest language family with this feature, and to apply it by means of a large-scale comparison of maximally diverse systems. Some first results of this project component are presented in Section 2.2. In Section 3, we briefly introduce the nine language-specific studies with reference to some ideas presented in Section 2.

2 Investigating diverse gender systems in Africa

2.1 Gender typology in Africa and beyond

The typological project component aims at a unitary assessment of the organizational principles of gender systems in African languages in order to refine the general cross-linguistic typology. Our approach to gender starts out from Corbett’s (e.g., Corbett 1991, 2006) influential work, which understands gender as the classification of nouns, or, more broadly, nominal concepts, as reflected by agreement on associated words. That is, syntactic agreement expressed on “agreement targets” co-varies with the language-specific categorization of nominal “agreement controllers”. While Corbett’s approach serves as our primary reference point for the analysis of gender, our framework differs in some important respects in order to better capture certain aspects that emerged subsequently regarding the cross-linguistic diversity of gender systems.

2.1.1 Nominal form classes versus agreement classes in gender systems

A complicating aspect of analyzing gender in most languages is that agreement systems involve other features in addition to gender. Accordingly, the full understanding of a gender system requires an analysis and subsequent “subtraction” of all agreement features other than gender. Since gender is most often conflated with number, gender systems can be discerned commonly by separating out the number component from the agreement system.

In Portuguese, for example, there are four agreement paradigms across the different targets whose principal thematic elements are *o*, *os*, *a*, and *as*. All four exponents simultaneously encode gender and number, namely (in the above order) masculine singular, masculine plural, feminine singular, and feminine plural. These four forms represent so-called “agreement classes”, which conflate two distinct agreement features. In general, an agreement class (abbreviated in the following as AGR) is constituted by a class of concrete nominal forms classified

together on account of their identical behavior across all agreement contexts – this irrespective of the concrete value of agreement features like number, gender, etc. (see below for more discussion of this issue). When subtracting the number component from the Portuguese agreement system, one can identify a binary split of nouns into two “gender classes” or simply “genders”: masculine, conveyed by *o* in the singular and *os* in the plural, and feminine, conveyed by *a* in the singular and *as* in the plural. A gender, as the central target of the analysis, can thus be conceived of as a class of abstract nouns in the lexicon, which in Portuguese and similar languages are characterized by combinations of two agreement classes reflecting the number opposition. Accordingly, to the extent other agreement features interfere, identifying agreement classes in a first step and genders in a second step is at the heart of the analysis of gender systems in most languages.

The agreement of a target with a nominal controller is not only determined by properties of the relevant noun as representing an abstract lexeme – properties that may or may not be related to the noun’s meaning or contextual reference derived thereof. Agreement can also depend more directly on the morphological or phonological properties of a concrete form of the noun in the relevant agreement context. In Portuguese, for example, the forms of the above four agreement exponents also happen to characterize the shape of many nominal controllers themselves. While both lexical and formal features of controllers may relate to agreement in a language-specific system, they do not necessarily yield the same assignment for all controllers. Thus, some Portuguese nouns that end in *-a(s)*, itself correlating strongly with feminine gender, trigger in fact masculine agreement, for example, *o novo problema* ‘the new problem’.

In languages in which formal properties of nouns are salient criteria for agreement, mismatches such as the above from Portuguese make it preferable to keep a controller’s morpho(phono)logical shape conceptually apart from its syntactic behavior. This is even more important in languages where nominal forms partly echo the agreement exponents in a so-called “alliterative” manner. This phenomenon is also relevant in Africa for the large group of Niger-Congo languages and is dealt with in more detail in Section 2.2.1.

In order to separate the form of controllers from agreement, we employ two additional analytical concepts. The class of concrete noun forms that is based on account of identical properties in their morpho(phono)logical shape, again irrespective of concrete values of the agreement features, is called here a “nominal form class”, as opposed to agreement class as defined above. Our fourth and final concept is the counterpart of gender in the realm of the morpho(phono)logy of controllers. In Portuguese, the singular–plural pair of nominal endings in *-a/-as* defines one form paradigm as opposed to other such pairs like *-o/-os* etc. While *-a/-as* and *-o/-os* reflect the most simple and regular patterns of nominal number

inflection, other such form pairs also convey derivational functions. For example, *-ice/-ices* derive abstract nouns which have the same agreement effect as the form pair *-a/-as*, conveying feminine gender. In view of such derivational phenomena, which can be a central part of the overall nominal system, we prefer to avoid such traditional, conceptually narrow terms as “declension” or “inflection” class. In lieu of such terminology, we propose the artificial but more inclusive term “deriflection” (class), which amalgamates DERIVation and INFLECTION. This means a deriflection consists of a class of nominals, often but not exclusively defined in the lexicon, that is established on account of the same morpho(phono)logical variation for number and other similar categories.

Overall, we thus distinguish four analytical concepts, which, although intricately related, are all in principle independent from each other. Table 1 summarizes them with respect to their mutual interrelations, which exist on two planes. Whereas on the horizontal plane agreement class and gender belong to the syntactic domain of a language, nominal form class and deriflection have their place in morpho(phono)logy. On the vertical plane, agreement class and nominal form class refer both to a word form in a concrete morpho-syntactic context as opposed to gender and deriflection, which relate to the more abstract notions of nouns in the lexicon or grammar of a language.

Table 1: Four concepts used for analyzing gender systems.

Relates to	Concrete noun in a morpho-syntactic context = word form	Abstract noun in lexicon or grammar = lexeme/paradigm
Syntax	a. AGREEMENT CLASS (abbreviated as AGR and Arabic number)	b. GENDER
Morpho(phono)logy	c. NOMINAL FORM CLASS	d. DERIFLECTION

2.1.2 Class exponents dedicated to specific gender and number values?

The typological discussion about gender has been significantly shaped by the research tradition on European languages, whose systems are commonly characterized by a specific profile of their gender systems. Apart from the cross-linguistically frequent conflation of the encoding of gender and number in the agreement system, this concerns in particular the dedication of individual agreement classes to individual gender and number values. That is, a specific class entails single values of agreement features, as in the case of the four agreement classes in Portuguese.

This areally and genealogically biased phenomenon has been intertwined with the cross-linguistic analysis of gender in Corbett’s (1991: 147–148) influential

study, in that the crucial concept of agreement class is tied to a specific number value, following Zaliznjak (1964). This and other decisions lead to a complex conceptual and terminological machinery of “controller gender”, “target gender”, “agreement class”, and “consistent agreement pattern”, whose usefulness is questionable in view of data that turned up in subsequent cross-linguistic research.

Güldemann (2000) in particular dealt with gender systems in Southern African languages from the Kx'a and Tuu families of the Kalahari Basin area, both subsumed under a typological grouping then called “Non-Khoe Khoisan”. There, agreement classes have a profile very different from the European standard. Figure 1 gives the gender system of Tsumkwe Jul'hoan, a dialect of the Ju language complex of the Kx'a family according to Dickens (2005). It possesses four agreement classes (numbered by Arabic numerals), which are conveyed by different pronoun series whose use depends on the morpho-syntactic context. Figure 1 represents the four classes by means of the unmarked pronoun series with the widest range of use contexts. When mapping the four agreement classes over the two number values, the overall behavior of Tsumkwe Jul'hoan nouns can be shown to establish five genders.

AGR	SG	PL
3	<i>ká</i>	<i>ká</i>
4	<i>hì</i>	<i>hì</i>
1	<i>ha</i>	<i>ha</i>
2		<i>sì</i>

Figure 1: Gender system in Tsumkwe Jul'hoan.

The crucial point is that the four agreement classes are overall poorly dedicated to specific gender and number values. Only AGR2 is tied exclusively to plural number and own-group human gender (= agreement class pair 1/2). Three of four agreement classes refer to both singular and plural. Moreover, two agreement classes, namely 1 and 4, partake in more than one gender, whereby AGR1 is even involved in three of the five genders.

Such apparently rare systems of Jul'hoan and other Non-Khoe languages of the Kalahari Basin are of considerable interest for cross-linguistic research on gender. In order to assess their status in Africa, Güldemann (2000: 28) is an attempt at a simple continental typology according to two binary features, specifically natural sex as a criterion for gender assignment and number-sensitivity of agreement classes, and tentatively assigned various language groups according to the resulting four-way classification, as shown in Table 2. While the two Non-Khoe

Table 2: Four-way typology of African gender systems (after Güldemann 2000).

	I Genders sex-based	II Genders not sex-based
A _{AGR} strongly sensitive to number	“Khoisan” other than non-Khoe, Afroasiatic other than Cushitic, parts of “Nilo-Saharan” like Eastern Nilotic, Dajuic, etc.	Bantu and much of the rest of Niger-Congo, most Kordofanian
B _{AGR} weakly sensitive to number	Cushitic, Kadu	Non-Khoe “Khoisan” (= Kx’a and Tuu)

“Khoisan” families Kx’a and Tuu hold indeed a unique position on the continent, other African languages do show partial similarities to them.

The current project aims at testing these preliminary hypotheses by targeting particularly less common languages of type B. The research accomplished already shows that the picture in Table 2 has to be refined in various ways. For example, the sex-based gender systems in the Kadu family need to be reanalyzed due to so-called tripartite number marking that interferes in complex ways with the gender system (see Güldemann and Junglas in preparation; Neuhaus 2008). More important and relevant for the following discussion in Section 2.2, is that the large Niger-Congo family also contains languages whose agreement classes are not dedicated to the commonly expected number values of singular and plural.

2.2 The multiple challenges of Niger-Congo “noun classes”

The goal of the second project component is the more extensive and reliable historical-comparative evaluation of the gender and deriflection systems in the Niger-Congo family, as conceived of in Güldemann (2018) but outside the Bantu subgroup. We analyze gender according to the unified and typologically applicable approach outlined in Section 2.1, and on this basis we reconstruct earlier proto-stages at different genealogical levels of the family. The focus on languages whose gender systems deviate in various respects from the canon found in the well-researched Bantu languages reveals an up to now unexpected amount and nature of differences within Niger-Congo, parts of which we discuss in the following.

2.2.1 “Noun classes” as confluences of agreement and nominal form classes

Exponents of gender marking in canonical Niger-Congo languages also mark number. Moreover, the exponents have, to a large extent, an alliterative form both across agreement targets and between these and agreement controllers.

- (1) a. **ki-ti** **ki-le** **ki-moja** **ki-me-anguka**
KI.7-chair **7-D.DEM** **7-one** **7-PERF-fall**
‘that one chair has fallen’
- b. **vi-ti** **vi-le** **vi-wili** **vi-me-anguka**
VI.8-chair **8-D.DEM** **8-two** **8-PERF-fall**
‘those two chairs have fallen’

Example (1) from the Bantu language Swahili shows the “ideal” alliterative type in which the gender-number prefixes (marked in bold) are identical on both the controllers *ki-ti/vi-ti* ‘chair(s)’ and the three following agreement targets. Moreover, since the relation between the controller prefix and the set of target prefixes is biunique, it is not necessary to distinguish between an agreement class and a nominal form class. The one-to-one relation between agreement and noun form in such cases is behind the traditional concept of a Niger-Congo “noun class”. In (1), the singular form of ‘chair’ with its associated agreement belongs to “noun class” 7 and its plural counterpart to “noun class” 8, and the pairing of these two classes establishes one of many genders in Swahili. However, while the situation as in (1) recurs in this and similar Niger-Congo languages, it is not difficult to find crucial exceptions.

- (2) a. **m-toto** **yu-le** **m-moja** **a-me-anguka**
M(W)-child.1 **1-D.DEM** **1-one** **1-PERF-fall**
‘that one child has fallen’
- b. **wa-toto** **wa-le** **wa-wili** **wa-me-anguka**
W(A).2-child **2-D.DEM** **2-two** **2-PERF-fall**
‘those two children have fallen’
- (3) a. *rafiki* **yu-le** **m-moja** **a-me-anguka**
∅:friend.1 **1-D.DEM** **1-one** **1-PERF-fall**
‘that one friend has fallen’
- b. **ma-rafiki** **wa-le** **wa-wili** **wa-me-anguka**
MA.2-friend **2-D.DEM** **2-two** **2-PERF-fall**
‘those two friends have fallen’
- (4) **m-ti** **u-le** **m-moja** **u-me-anguka**
M(W)-tree.3 **3-D.DEM** **3-one** **3-PERF-fall**
‘that one tree has fallen’

Incomplete alliteration aside, examples (2)–(4) demonstrate that the crucial one-to-one relation between nominal form and agreement class is not universal. The comparison between (2) and (3) shows that one agreement class (represented by

Arabic numbers) co-occurs with more than one nominal form class (represented here by the capitalized exponent), viz. $AGR1$ with $M(W)$ and \emptyset and $AGR2$ with WA and MA . Conversely, the comparison between (2a) and (4) shows that a given nominal form class can be associated with more than one agreement class, namely $M(W)$ with $AGR1$ and 3.

That the situation in Swahili is old, can be discerned from the available Proto-Bantu reconstruction by Meeussen (1967a: 96–99), whose detailed information allows one to establish a close approximation to the original situation.

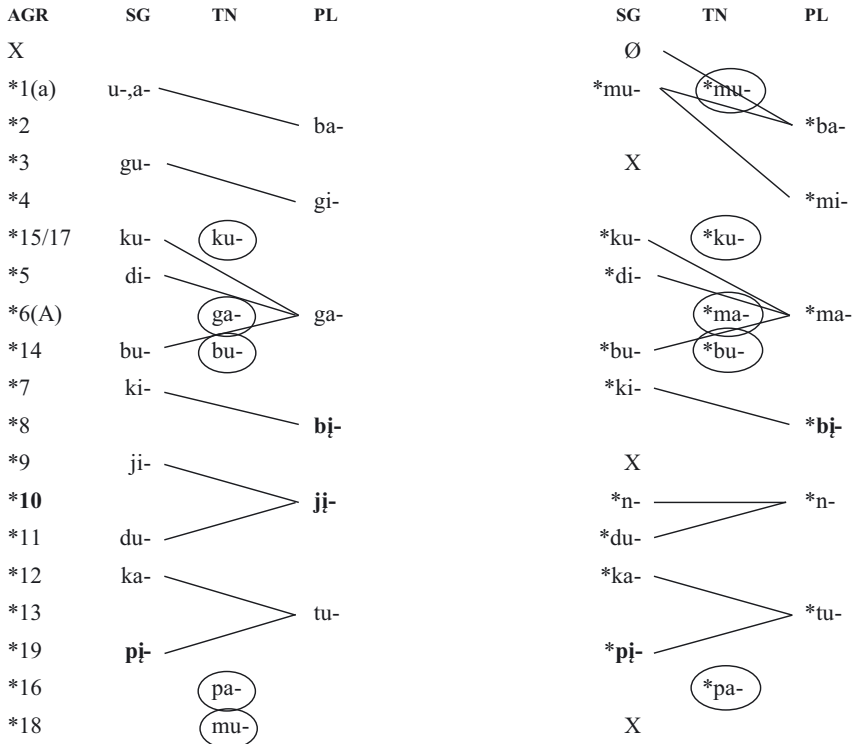
AGR		NF
X		\emptyset
*1(a)	u-,a-	*mu-
*3	gu-	X
*18	mu-	X
*2	ba-	*ba-
*4	gi-	*mi-
*15/17	ku-	*ku-
*5	di-	*i-
*6(A)	ga-	*ma-
*14	bu-	*bu-
*7	ki-	*ki-
*8	bi-	*bi-
*9	ji-	*n-
*10	ji-	X
*11	du-	*du-
*12	ka-	*ka-
*13	tu-	*tu-
*16	pa-	*pa-
*19	pi-	*pi-

Note: X = no independent agreement class counterpart

Figure 2: Agreement classes and nominal form classes in Proto-Bantu.

Figure 2 depicts the Proto-Bantu “noun class” system by way of mapping the 18 agreement classes on the left and the 16 nominal form classes on the right. Figure 3 shows that, despite the widely predominant one-to-one relation between the two class types, the few mismatches revolving around $AGR1$, 3, and 18 as well as 9 and 10 lead to noteworthy differences between the gender system, resulting from agreement and the deriflection system based on nominal form classes. In terms of systemic organization as per Heine (1982: 196–198) and Corbett (1991: 154–158), the

left panel of Figure 3 displays the gender system of the “convergent” type, with 10 genders for count nouns established by a class pair, in opposition to the deriflection system of the “crossed” type, with 11 number alternations in the right panel.



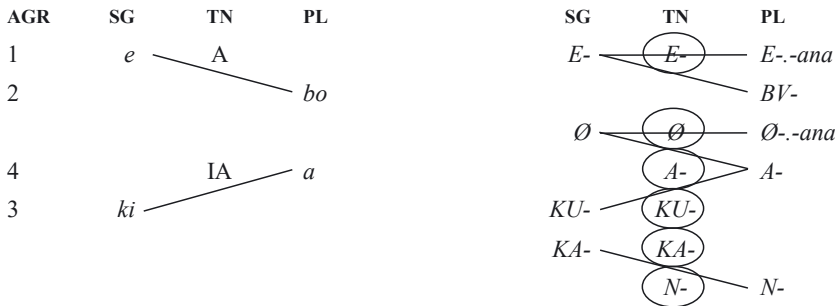
Note: X = no independent counterpart in the other class type

Figure 3: Gender system (left) versus deriflection system (right) in Proto-Bantu.

In Bantu languages, which served as the blueprint for developing the “noun class” framework, the mismatches between agreement and nominal form classes are still restricted and do not lead to a situation where gender and deriflection diverge entirely. Nevertheless, while the class mismatches seem to be minor, their structural consequences are not. This must cast doubt on the unqualified use of the philological “noun class” concept, which conflates agreement class and nominal form class, and justifies, in fact requires, the conceptual and analytical separation of the two as discussed in detail in Güldemann and Fiedler (2019). While our approach is not really new (cf., e.g., Meeussen 1967b: 12 for such a proposal), the “noun class” framework remains deeply entrenched in Niger-Congo studies and,

as we argue, hampers synchronic analysis, diachronic reconstruction, and typological reception of the Niger-Congo noun classification systems.

In particular, in a number of languages in- and outside Bantu, historical processes led to a restructuring of the nominal system, making the philological “noun class” concept completely inadequate. That is, as soon as agreement and nominal form classes are subject to differential change, the parallelism implied by using “noun class” breaks down. More often, dramatic change concerns agreement and the resulting gender system under retention of diverse nominal forms and the resulting deriflection system. Figure 4 shows such a case in Gonja (Guang, Benue-Kwa). According to the data in Painter (1970), the language reduced its gender system to a simple animate-inanimate opposition, shown in the figure’s left panel, but retained a complex Niger-Congo type deriflection system, as represented in the right panel.



Note: AGR are represented by subject pronouns, “inquote” genders are disregarded

Figure 4: Gender system (left) versus deriflection system (right) in Gonja.

Since traditional Niger-Congo studies focus on inherited “noun classes”, they have a strong tendency to assess nominal classification in such languages in terms of the more conservative deriflection system, against the typological standard, which looks at the agreement-based gender system. The failure to describe cases like Gonja comprehensively leads to a number of negative effects. From a typological view, for example, it deprives the general discipline of interesting variants of what Fedden and Corbett (2017) have called “concurrent noun classification”, as discussed in more detail in Güldemann and Fiedler (in preparation).

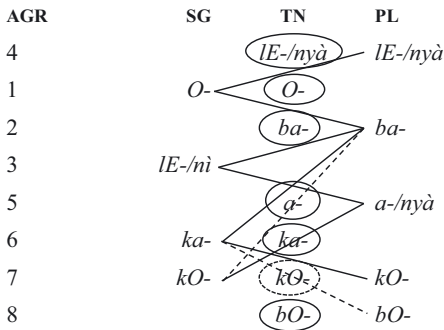
2.2.2 “Noun classes” dedicated to specific number values?

The “noun class” concept and its associated descriptive bias toward the Bantu model is also associated with another backdrop. As can be seen from Figures 2 and 3,

the large majority of the reconstructed agreement and nominal form classes of Proto-Bantu partake in class pairs assigned to two numbers, singular and plural, and are also tied to either of the two values. With the additional background of a similar situation in European languages, this profile of classes in Proto-Bantu is commonly projected on other groups and earlier language states of Niger-Congo. This approach is also associated with an incomplete description of transnumeral nouns and their agreement behavior. Nouns for masses and liquids aside, this neglect concerns such important groups as proper names, abstract terms, verbal nouns, etc.

Our research on language groups that are areally and genealogically removed from Bantu shows that a number of their agreement (and nominal form) classes do not partake in a number distinction or are not dedicated to singular or plural, including classes that are likely cognates of number-sensitive ones in Bantu.

Lelemi, a language belonging to Ghana–Togo-Mountain (Benue-Kwa), is a case in point. Its gender system is shown in Figure 5, according to the information in Allan (1973) and our analysis in Güldemann and Fiedler (2019). All but one of the eight agreement classes occur with transnumeral nouns, apart from their singular or plural value. AGR7 even appears in all three numbers, for which one possible explanation is that the class was originally transnumeral but subsequently entered a paradigmatic relation thereby developing new number values depending on its class partners, namely plural with the singular AGR6 and singular with the plural AGR5. It is thus hard to maintain that classes in Lelemi are strongly number-sensitive.



Note: dashed line = inquotate gender, circle = single-class pattern

Figure 5: Gender system in Lelemi.

Another relevant example is Limba, an Atlantic-internal isolate. We present its gender system in Figure 6, as described by Berry (1958). It shows that four agreement classes, 4, 6, 8, and 12, refer to nouns irrespective of their number value, so

that the Limba system partly resembles that of Jul’hoan in Figure 1. This is possible because plural number is not indicated exclusively by class prefixes but, similar to the situation in Jul’hoan, also by an independent plural suffix $-(i)\eta$. The examples in (5) illustrate the suffix on plural nouns with and without canonical class markers.

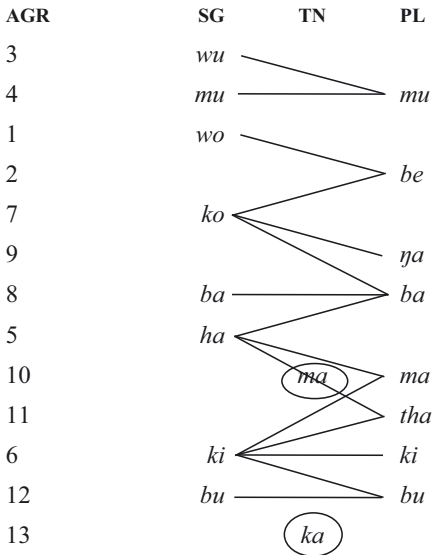


Figure 6: Gender system in Limba.

- (5) a. *ban̩ka* *ban̩keŋ* (gender 8/8)
house house:PL
‘house’ ‘houses’
- b. *boli* *boli-ŋ* (gender 12/12)
gold gold-PL
‘gold’ ‘pieces of gold’
- c. *ŋ-kala* *ŋ-kaleŋ* (gender 6/6)
N-rope N-rope:PL
‘rope’ ‘ropes’
- d. *ku-gbeke* *gbeke-ŋ* (gender 7/2)
KU-arm arm-PL
‘arm’ ‘arms’

[Berry 1958: 170, 171, 172]

The situation described above is not restricted to just a few classes in a few languages, which casts doubt on the assumption that the inherited classes have been dedicated from the very beginning to either of two number values. Instead, it needs

to be investigated whether many classes acquired a specific value in a singular–plural distinction that encroached on the noun classification system only later.

2.2.3 “Noun classes” as bound and lexicalized exponents?

The research bias toward gender systems of the Bantu type is also associated with the generalized view that class exponents are phonologically bound to a host and tied to a noun via lexical specification, which implies obligatory overt nominal form class marking in the earliest recoverable stages of Niger-Congo. This goes hand in hand with the synchronic analytical neglect of nouns without class affixes, such as proper names, loan words etc., despite their partly important role in classification systems. It is noteworthy that even Greenberg’s influential opinion has been widely ignored in this respect. Addressing his own question of class markers as “prefixes, suffixes, both or neither”, he concluded (Greenberg 1977: 102): “Our answer, then, to the question posed in the title of this paper is that the class marker was neither a prefix or a suffix but varied in its order and became fixed as it developed into an article, (...)”. Indeed, extensive evidence exists outside Bantu that class markers can have a looser and flexible status with respect to their hosts, be they nominal controllers or agreement targets, and thus cannot yet be reconstructed securely as bound and lexically specified affixes.

To begin with, languages recur where nouns are used without any class affix. A case in point is Gola, another Atlantic-internal isolate, as illustrated in (6) where a class marker occurs on the possessor but not on the possessum of the genitive phrase.

- (6) *ħεε* *fela-ɔ*
trouser man-O.1
‘the man’s trouser’ [Koroma 1994: 192]

Similarly, a single class affix can have scope over complex expressions consisting of more than one noun lexeme, as is the case in (7) with a compound from Rigwe (Kainji-Platoid, Benue-Kwa).

- (7) *ĩ-kpè* + *kə-nú* > *ĩ-kpè-nù*
CL-skin CL-mouth CL-skin-mouth
‘skin’ ‘mouth’ ‘lip’ [Gerhardt 1988: 72]

Hoffmann (1967) presents a yet more telling case in quite some detail, namely from C’Lela aka Dakarkari (Kainji-Platoid, Benue-Kwa). Here, overt nominal class marking has a largely phrasal character. A nominal affix is effectively restricted to contexts where no other class marking occurs, notably when occurring in isolation.

Example (8) shows that the noun *k-tèlè* ‘bone’ systematically lacks its prefix as soon as a modifier that carries the class specification follows.

- (8) a. *tèl kə-hnà* *tèl kə-nè*
 bone < CL-this bone < CL-DEF
 ‘this bone’ ‘the bone’
- b. *tèl kə-d-cinà* *tèl kən* *tòrɔ́*
 bone < CL:GEN-CL-back bone < CL:COMPD neck
 ‘spine’ [lit.: bone of the back] ‘collar-bone’
- c. *tèl k-pús-k(ə)-ní*
 bone < CL-white-< CL-ADJ
 ‘white bone’ [Hoffmann 1967: 244, 247, 249, 250, 251]

We have presented here only a few exemplary cases of a more pervasive phenomenon that needs to be studied with a fresh look, which steers away from looking at class systems of non-Bantu Niger-Congo languages through Bantu lenses. Each individual case may well find an explanation in terms of restructuring from the Bantu proto-type through different kinds of local or more general “class loss”. However, the entire amount of relevant data justifies the undertaking of a systematic testing of the possibility that class exponents started out as syntactically and lexically more flexible markers whose obligatory status in many modern languages is a later result of increasing grammaticalization.

2.2.4 “Noun classes” as earlier classifiers? – The origin of the Niger-Congo system

Since historical Niger-Congo studies are characterized by a considerable Bantu bias (Güldemann 2018: 109–110), it comes as no surprise that the Bantu model is also generalized unknowingly by typologists interested in the topic. Notably, Grinevald and Seifart (2004), among others, have made the pertinent observation that the semantic profile and inventory size of Niger-Congo classes are similar to those of nominal classifiers in languages of Amazonia and (South)east Asia. At the same time, being unaware of phenomena that we have just described to deviate from the Bantu canon, they conclude as follows:

Noun class systems of Niger-Congo languages do not seem [...] to have preserved any trace of stages of evolution in which they would have been characterized by a lesser degree of grammaticalization than the one at which they have been reconstructed in Proto-Bantu. (Grinevald and Seifart 2004: 257)

However, our research on a wide variety of Niger-Congo data, many of them not yet roped into the reconstruction of earlier language states, indicates otherwise. That

is, it yields growing evidence across Niger-Congo that is quite compatible with the idea that class markers were originally (i) not dedicated or sensitive to number and (ii) not fixed parts of a phonological word associated with a noun lexeme. These and other findings remove major obstacles for the idea envisaged but then abandoned by Grinevald and Seifart (2004), namely that the “noun classes” associated with Niger-Congo gender systems are somehow related historically to classifiers. Accordingly, Güldemann and Merrill (in preparation) systematically investigate the hypothesis of a different origin and development of Niger-Congo noun classification. That is, Proto-Niger-Congo “noun class” marking started out as a classifier system that had just turned into a gender system through the innovation of alliterative agreement by means of classifier repetition. This is in line with typological precedents (cf., e.g., Seifart 2005 on the Amazonian language Miraña) as well as pertinent areal and historical observations on the existence and possible grammaticalization of classifier systems in Africa (cf. Kießling 2013 and 2018 on such phenomena across the Macro-Sudan Belt).

3 The contributions of this volume

We now briefly introduce the nine language-specific studies – six on Niger-Congo languages and three from outside this language family (see the Map for their geographical location in Africa). We focus in particular on those research findings of our project that we outlined above as remarkable from a typological and/or local Africanist perspective.

The languages of the first two contributions have systems where genders are relatively few in number, involving sex-based assignment, and agreement classes are (predominantly) sensitive to specific number and gender values. Such systems belong to group AI in the African typology of Table 2 above and, in also being typical in Europe, have been setting the scene for the study of gender globally.

The contribution by Florian Lionnet is the first detailed description of the gender system of the hitherto little known isolate language Laal. The author identifies a strictly semantic system with a basic opposition of human versus non-human and two further distinctions, masculine versus feminine in the former and neuter versus abstract in the latter, whereby the abstract gender appears to be a late innovation from an earlier yet more transparent tripartite organization. Genders are covert on the noun and the lack of formal gender assignment motivates why nominal form classes and deriflections are irrelevant for the description.

The second language study by Sylvanus Job and the present first author is on Namibian Khoekhoe(gowab), a Khoe-Kwadi language of the Kalahari Basin. This has long been known to possess a tripartite sex-based system. While this analysis

is confirmed, the nature of the third non-sex gender is more precisely characterized as amalgamating neuter and common reference. A remarkable feature of this language is that noun controllers and agreement targets have exactly the same suffix paradigm. This goes beyond conventional alliteration and is best explained by a relatively recent shift of a single set of gender-number markers from free to bound exponents.

Lee Pratchett is the author of a second contribution on a Kalahari Basin language, namely on Jul’hoan as a member of the Ju complex of the Kx’a family, which was already mentioned in Section 2 regarding the remarkable profile of its agreement classes. In the African typology of Table 2, it is a representative of the overall rare type BII, which is maximally distinct from the well-known type AI of the two previous languages. The description of Jul’hoan in this volume elaborates in many ways on previous work. It shows that in Ju, as opposed to the predominant typological trend, the encoding of number is largely orthogonal to the gender system and also that the formal deriflection system has relatively little impact on gender assignment. Other noteworthy findings of the study are that language contact can contribute to a considerable gender restructuring in a relatively short time and that closely related dialects can in the first place display enormous differences in their gender system.

The remaining six articles deal with languages belonging genealogically to Niger-Congo in the narrow conception of the family by Güldemann (2018). At first glance, they all have a functional system of so-called “noun classes”, which, provided it is similar to the well-known system reconstructed for Bantu, are expected to belong to type BI in Table 2. It turns out, however, that the picture in Niger-Congo is more complex, notably because agreement classes are not consistently dedicated to a single number value. Some languages can thus be ambiguous regarding the types BI and BII, which shows the limitations of a simple discrete typology as that in Table 2.

The first article on a Niger-Congo language, written by Benedikt Winkhardt and the present authors, deals with Mba from the Mbaic family of Ubangi. This language is special in representing a case of “concurrent nominal classification” in terms of Fedden and Corbett (2017). The language possesses a tripartite pronominal gender system involving such semantic assignment features as animacy and natural sex, as well as a canonical Niger-Congo system of alliterative suffixes with more than 10 genders, whose assignment is largely formal and which originally differed clearly semantically from the first system. Another feature worth remarking in this context is that Mba has class markers referred to in Section 2.2.3 which can have phrasal scope, rather than being tied to a single constituent like a noun lexeme.

The second Niger-Congo gender system, described by Julius-Maximilian Elstermann and the present authors, is from the Longuda dialect cluster assigned

to the Adamawa group. At first glance, the system looks again “canonical” in showing parallel gender and deriflection systems due to a strong correspondence and alliteration between agreement and nominal form classes. In fact, the two class types do not display any difference other than their distinct morpho-syntactic hosts. This is similar to the above case of Khoekhoe, where agreement controller and target share the same markers due to their historically recoverable late attachment to both types of host. If not falsified, this would be further evidence for the idea entertained in Section 2.2.3 that Niger-Congo class markers were not always phonologically bound and lexically fixed exponents.

John Merrill and Viktoria Apel give a detailed analysis of the gender system of Noon from the Cangin family within Atlantic. From a Niger-Congo perspective, there are several remarkable features despite the high degree of canonical alliteration of the class marking by means of thematic consonants. First, a large portion of the nominal lexicon lacks overt class marking on the noun itself, with only a limited number of nouns giving evidence for the possible assumption that an earlier prefix was incorporated in the noun stem. Second, the language possesses two different patterns of agreement correlating with syntactic scope. Insofar as the more distant agreement is based more strongly on semantics, the phenomenon conforms to Corbett’s (2006) agreement hierarchy. The proximal, less semantic agreement is established by definite determiners attached to the noun, which illustrates how suffixal class marking on the noun can emerge.

The present second author also contributes an analysis of the gender system of Anii, a member of the Na-Togo family within Benue-Kwa. As in the previous cases, the language displays a high degree of correspondence and alliteration between nominal form and agreement classes. However, due to structural rearrangements, the deriflection system is more complex than expected. Moreover, the gender system has been subject to reorganization and partial simplification by changing the assignment patterns from a more complex semantic basis, which is largely retained in the deriflection system, to a classification steered in particular by animacy and humanness. This is related to processes in genealogically and geographically close languages, which sometimes lead to the full restructuring of the gender system according to a binary animacy-based opposition (cf. Güldemann and Fiedler 2019, in preparation).

The gender system of Ogbé-Oloma (Edoid, Benue-Kwa) described by Ronald Schaefer and Francis Egbokhare has a profile that differs considerably from the previous Niger-Congo languages. In particular, there is a low degree of biunique mapping between nominal form and agreement classes, which in turn causes alliteration between the two to decrease considerably, notably regarding vowel qualities. Here, the “noun class” concept no longer serves any useful synchronic purpose. The formal mismatch between agreement and nominal form is also

responsible for a quite restricted correlation between gender and number inflection. Moreover, the large freedom in the pairing of singular and plural classes for both genders and inflections leads to crossed systems that are highly complex and semantically poorly predictable; human nouns establish one of the rare cases where meaning strongly correlates with a single gender. Overall, the gender system of Ogbe-Oloma looks like a late, evolved stage of a Niger-Congo gender system.

A similar picture emerges in Bruce Connell's description of the gender system of Durop (Upper Cross, Benue-Kwa). While there is some degree of alliteration, the large number of identified nominal form classes and agreement classes do not line up neatly. Moreover, the agreement system itself is complex involving three subsets whose differentiation into classes varies considerably, only one matching the noun prefixes well. As in Ogbe-Oloma, the systems of both deriflections and genders are crossed with little semantic coherence within individual patterns with the exception of the behavior of human nouns. Another commonality of the two languages reiterates an observation already made by Güldemann and Fiedler (2019: 113, 139) in other Niger-Congo languages, whose systems look historically more evolved, namely that the complexity in the morphological domain of deriflection is higher than that for agreement-defined genders.

Abbreviations

Abbreviations follow the Leipzig glossing rules, except the following:

A	animate
AGR	agreement class
CL	class marker
COMPD	compound
D	distal
IA	inanimate
PREF	perfect
TN	transnumeral

References

- Allan, Edward Jay. 1973. *A grammar of Buem: The Lelemi language*. London: University of London Doctoral dissertation.
- Berry, Jack. 1958. Nominal classes in Hu-Limba. *Sierra Leone Studies* 11. 169–173.
- Corbett, Greville G. 1991. *Gender*. Cambridge: Cambridge University Press.
- Corbett, Greville G. 2006. *Agreement*. Cambridge: Cambridge University Press.

- Dickens, Patrick J. 2005. *A concise grammar of Ju'hoan with a Ju'hoan–English glossary and a subject index*. Köln: Rüdiger Köppe.
- Fedden, Sebastian & Greville G. Corbett. 2017. Gender and classifiers in concurrent systems: Refining the typology of nominal classification. *Glossa: A Journal of General Linguistics* 2(1). 1–47.
- Gerhardt, Ludwig. 1988. Auf- und Abbau von nominalen Klassensystemen. In Siegmund Brauner & H. Ekkehard Wolff (eds.), *Progressive traditions in African and Oriental studies*, 69–77. Berlin: Akademie Verlag.
- Greenberg, Joseph H. 1977. *Niger-Congo noun class markers: Prefixes, suffixes, both or neither. Studies in African Linguistics, Supplement 7*, 97–104. Los Angeles: Department of Linguistics, University of California.
- Grinevald, Colette & Frank Seifart. 2004. Noun classes in African and Amazonian languages: Towards a comparison. *Linguistic Typology* 8. 243–285.
- Güldemann, Tom. 2018. Historical linguistics and genealogical language classification in Africa. In Tom Güldemann (ed.), *The languages and linguistics of Africa*, 58–444. Berlin & Boston: De Gruyter Mouton.
- Güldemann, Tom. 2000. Noun categorization in non-Khoe lineages of Khoisan. *Afrikanistische Arbeitspapiere* 63. 5–33.
- Güldemann, Tom & Ines Fiedler. 2019. Niger-Congo “noun classes” conflate gender with deriflection. In Francesca di Garbo, Bruno Olsson & Bernhard Wälchli (eds.), *Grammatical gender and linguistic complexity*, 95–145. Berlin: Language Science Press.
- Güldemann, Tom & Ines Fiedler. in preparation. *Restructured Niger-Congo gender languages with a new type of concurrent nominal classification*.
- Güldemann, Tom & Jan Junglas. in preparation. *When number complicates gender: A new analysis of the nominal system of Krongo*.
- Güldemann, Tom & Jack Merrill. in preparation. *Proto-Niger-Congo as a late classifier language, or why should Africa be full of “noun classes” but almost void of classifiers?*.
- Heine, Bernd. 1982. African noun class systems. In Hansjakob Seiler & Christian Lehmann (eds.), *Apprehension: Das sprachliche Erfassen von Gegenständen, Teil I: Bereich und Ordnung der Phänomene*, 189–216. Tübingen: Gunter Narr.
- Hoffmann, Carl F. 1967. An outline of the Dakarkari noun class system and the relation between prefix and suffix noun class systems. In Gabriel Manessy (ed.), *La classification nominale dans les langues négro-africaines*, 237–259. Paris: CNRS.
- Kießling, Roland. 2013. On the origin of Niger-Congo nominal classification. In Ritsuko Kikusawa & Lawrence A. Reid (eds.), *Historical linguistics 2011: Selected papers from the 20th international conference on historical linguistics, Osaka, 25–30 July 2011*, 43–65. Amsterdam & Philadelphia: John Benjamins.
- Kießling, Roland. 2018. Niger-Congo numeral classifiers in a diachronic perspective. In William B. McGregor & Søren Wichmann (eds.), *The diachrony of classification systems*, 33–76. Amsterdam & Philadelphia: John Benjamins.
- Koroma, Regine. 1994. *Die Morphosyntax des Gola*. Köln: Institut für Afrikanistik, Universität zu Köln.
- Meeussen, Achille E. 1967a. Bantu grammatical reconstructions. *Africana Linguistica* 3. 79–121.
- Meeussen, Achille E. 1967b. Introduction, 2. Suggestions présentées par Monsieur le Professeur A. E. Meussen (Tervuren). In Gabriel Manessy (ed.), *La classification nominale dans les langues négro-africaines*, 12. Paris: CNRS.
- Neuhaus, Simon. 2008. *Das Genusssystem des Krongo*. Zürich: Universität Zürich Licentiate thesis.

- Painter, Colin. 1970. *Gonja: A phonological and grammatical study*. Bloomington: Indiana University Press.
- Seifart, Frank. 2005. *The structure and use of shape-based noun classes in Miraña (North West Amazon)*. Wageningen: Ponsen and Looijen.
- Zaliznjak, Andrej A. 1964. K voprosu o grammatičeskix kategorijax roda i oduševlennosti v sovremennom ruskom jazyke [On the grammatical categories of gender and animacy in Modern Russian]. *Voprosy jazykoznanija* 4. 25–40.