# Grammatical Change and Emblematic Features in Western Nilotic

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## 1. Irregularity and grammatical change[1]

Apart from internal dynamics, language change is specifically attributed to a number of external factors that all deal with the transmission of language and culture. Language contact is usually regarded as the major external stimulus for linguistic change. Research during the past ten years very much focused on linguistic areas as a specifically intensive and long-lasting form of contact. The more models of genetic relationships remain hard to prove as linguistic realities —e.g. in the cases of Atlantic and Nilo-Saharan— the more it has to be taken into account that a complex contact history and a history of linguistic taboos, manipulations and language planning contribute to a blurred picture of language origins in Africa. In particular, extreme contact situations such as in linguistic areas are very likely to have produced intertwined languages (Bakker & Mous 1994), linguistic isolates, and perhaps new language families. In exploring linguistic areas we may grasp the importance of social history in language classification.

The concepts of language attitude and social history here imply the presence of cultural and social proscription in language change. Besides internal motivations for grammatical change, different borrowing routines exist in any natural language, such as convergence with varying specific (not any) contact languages, intra-dialectal diffusion depending on prestige, and numerous strata of loans besides strata without lexical loans. Consequently, there are competing changes in the grammatical system which are finally responsible for the accumulation or the discharge of linguistic residue. This paper will explore the differences between grammatical permeability and emblematicity in extreme language contact. This is based on the hypothesis that some parts of the grammar change easily, while others hardly ever seem to change and thus adaptation never affects all parts of the grammar and lexicon. Which parts are affected depends on culture.

## 2. Linguistic areas and diachrony

Current investigations in African linguistic areas tend to be synchronic in basically defining a geographic area or region which is characterised by the occurrence of similar grammatical techniques and common typological patterns in a number of otherwise probably unrelated languages. But this approach has obvious limitations. The changes and retentions in a linguistic area, in situations of creolisation and language change, may only be adequately understood and interpreted if the social history and language attitudes of speaker communities have been taken into account. Thus linguistic areas must also be explored diachronically in order to understand the time depth of a *sprachbund*. Here, geographic boundaries may vary during the course of time, as the area spreads or its linguistic properties cease to be productive in some of the languages.

The issue of choice in borrowing patterns and in diffusionability of grammatical material is another feature of linguistic areas that changes over the course of time. Language engineering and
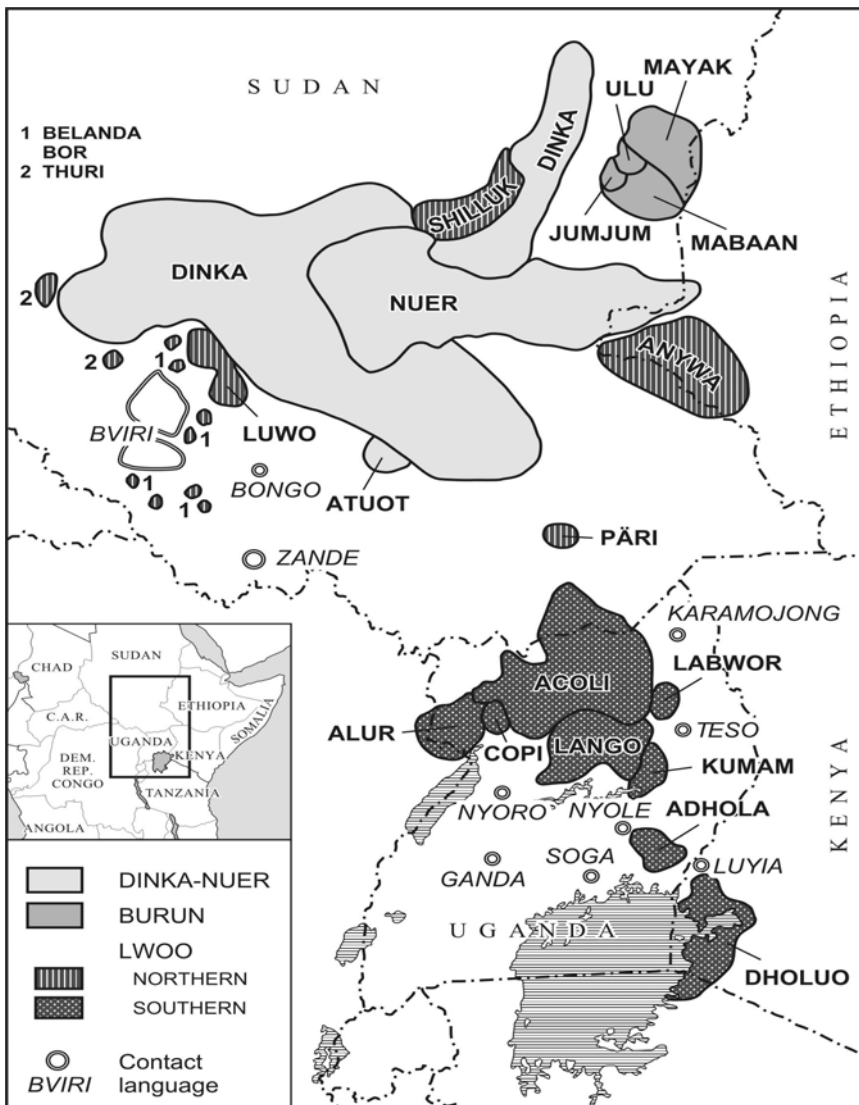
similar cultural techniques have been demonstrated to contribute to the exclusion of certain borrowings (e.g. Aikhenvald 2001). The possibility of choice is an interesting argument in explaining the maintenance of linguistic areas. A main question in this context would be: What may be borrowed? If everything in a grammatical system is logically available for diffusion, why are certain areal properties borrowed easily while others do not ever seem to change? How are choices made and do they generally play a role in contact situations?

The East African contact phenomena that are discussed here provide a case study of how and why certain properties are retained, while others converge with structures of contact languages. The focus lies on derivational noun morphology and number marking of Western Nilotic. As a hypothesis, it is claimed that there are properties of the nominal inflection that undergo steady changes, whereby these already ongoing changes may be enhanced by contact. On the other hand, there are areal features that have become emblematic and hardly change at all.

## 3. Western Nilotic noun morphology

Western Nilotic forms one of three coordinate branches of Nilotic and comprises of three groups, namely Burun, Dinka-Nuer and Lwoo (see Map and Figure 1).



**Map 1.** The Western Nilotic languages and their contact partners

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Nilo-Saharan
        Eastern Sudanic
        Nilotic
            Western Nilotic
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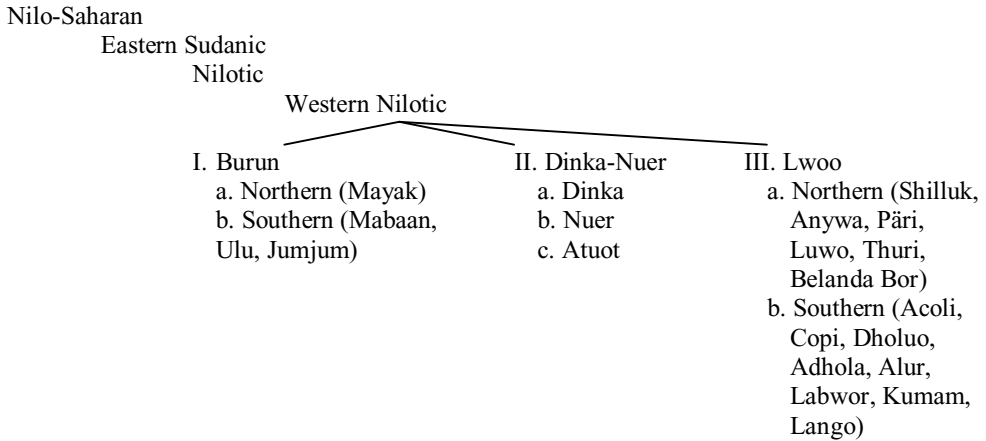| I. Burun | II. Dinka-Nuer | III. Lwoo |
|---|---|---|
| a. Northern (Mayak) | a. Dinka | a. Northern (Shilluk, |
| b. Southern (Mabaan, | b. Nuer | Anywa, Päri, |
| Ulu, Jumjum) | c. Atuot | Luwo, Thuri, |
| | | Belanda Bor) |
| | | b. Southern (Acoli, |
| | | Copi, Dholuo, |
| | | Adhola, Alur, |
| | | Labwor, Kumam, |
| | | Lango) |

**Figure 1.** Classification of Western Nilotic (Storch 2005, based on Bender 2000, Köhler 1955, Rottland 1982)

Western Nilotic systems of nominal classification exhibit massive divergence, which reflects intensive contact with other language groups. Because contact included both genetically related and genetically unrelated languages, the synchronic situation is consequently rather complicated. Due to the sub-family's internal typological diversity, no major attempt to reconstruct its grammatical structures has been made until recently (e.g. Andersen 1999, Storch 2005).

To exemplify basic typological differences, the derivational morphology of three Western Nilotic languages is compared in the following examples (1-3).

Mabaan, as all Burun languages (Mayak, Jumjum), is much more conservative than the other groups as far as phonology and morphology are concerned. With regard to the noun morphology this means that the noun classifier system is much better preserved than in other Eastern Sudanic families and sub-families. The substitution of the suffix is used in deriving nouns.

(1) Nominal derivation
(1.a) Mabaan[2]

| Gloss | | classifier | | | Gloss | Classifier | |
|---|---|---|---|---|---|---|---|
| bɛɛnàn̪ | 'skin, bark' | -an̪/nàn̪ | part of | > | béɛ̀kɔ̀n 'root' | -gɔ̀n | long object |
| puɲà | 'durra' | -nà | circular | > | pûɲkɔ̀n 'maize' | -gɔ̀n | long object |
| ʔûmgù | 'nose' | -ù/Nù | body part | > | ʔûmgà 'mucus | -à | collective |

Verbal nouns, too, are constructed by adding suffixed classifiers:

(1.b)

| Verb | | | deverbal noun | suffix |
|---|---|---|---|---|
| jìéb- | 'to beat' | > | jìéb-tà 'beating' | -tà |
| núc- | 'to smell' | > | núùt-à 'smell' | -tà |
| ʔán- | 'to love' | > | ʔán-nà 'love' | -Nà |

On the other extreme, the Dinka-Nuer languages use little linear morphology and operate nominal inflection by changes of tone and vowel quality. Classifiers have been largely lost, but classes are still expressed and deverbal nouns still marked by means of stem vowel mutation grades (from either grade 1 or 2 to grade 3) or tonal change.

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[2] All examples stem from the author's own fieldwork, unless indicated otherwise. I thank all those speakers of Western Nilotic languages in Sudan and Uganda who shared their knowledge with me.

(2) Dinka

| Verb | | | deverbal noun | | vowel grade change |
|------|---|---|---------------|---|--------------------|
| wèèy | 'to breathe' | > | 'wèèy | 'soul' | 1 or 2 > 3 |
| ṇyààr | 'to love' | > | 'ṇyèèr | 'love' | 1 > 2 |
| ṭyéc | 'to ask' | > | ṭyèc | 'question' | none (tone) |

The Lwoo languages, in contrast, resemble Mabaan in using number-marking affixes, but they have reduced the original system of nominal classifiers. Instead, prefixed derivational morphemes have become salient formatives in noun morphology:

(3) Shilluk (Gilley 2000: 13)

| Verb | | | deverbal noun | | gloss |
|------|---|---|-----|-----|-------|
| | | | sg.[3] | pl. | |
| kod | 'to weave, tie together' | > | ʊ-kod-ɔ̀ | ʊ-kod-dì | 'grain bin' |
| ban | 'to fold' | > | ú-ban-ɔ | ú-bɛ̀n-nì | 'front skirt' |
| cwɪc | 'to compress' | > | à-cwíj-ɔ̀ | à-cwɪj-jì | 'doleib tree seedling' |

It is necessary to note here that while the nominal suffixes of Mabaan express semantically defined classes, the suffixes of Shilluk do not denote such concepts, but rather indicate number and word class. At the same time all of these languages share common features which exhibit less structural and typological diversity. Some of these features are areal features that cannot be reconstructed for any proto-language.

## 3.1. Tripartite number marking

In order to grasp the significance of contact-induced irregularities which characterise Western Nilotic noun morphology, it is essential to have an idea of the original number-indicating and class-marking patterns. As shown by Dimmendaal (2000), the majority of Eastern Sudanic languages exhibit tripartite number marking systems. A tripartite number system exhibits three principles of number indication, namely pluralisation, singulativisation, and substitution of number morphemes. This is exemplified in the following forms from Anywa (Reh 1996):

(4) Anywa (Reh 1996)

| (4.a) | | singular | plural | plural formation |
|-------|--|----------|--------|------------------|
| | 'bell' | okoot | okóód-í | |

| (4.b) | | collective | singulative | singulative formation |
|-------|--|------------|-------------|-----------------------|
| | 'butter' | búóp | búób-ò | |

| (4.c) | | singular | plural | replacement pattern |
|-------|--|----------|--------|---------------------|
| | 'loincloth' | kèèl-ʌ́ | kèèl-é | |

Dimmendaal (op.cit: 229 ff.) also explores a semantic dimension of tripartite number marking, which appears to be crucial in understanding these systems. Obviously, the cognitive perception of the speakers' world determines whether a given noun is treated as part of the singulative marking, plural marking, or replacement category. But the conceptualisation of a given noun within the different categories of the tripartite number system also depends on rather specific cultural patterns and on the ethnogrammatical structures of the language in question. This suggests that number-indicating morphemes also acquire a semantic dimension that goes beyond basic cognitive patterns.

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[3] Abbreviations used: C consonant, coll. collective, lac. lacustrine, N nasal, pl. plural, sg. singular, sgve. singulative, V vowel, ['] stress.

As can be seen in example (4.b), a singulative noun is typically a word that denotes an item that is singled out from a mass or group of similar items. Items that normally occur in pairs or larger numbers are expressed by nouns that are semantically and grammatically plural or collective and morphologically not overtly marked. As it can be seen from examples (4.a-c), the morphologically unmarked and thus underlying form of 'butter' in (4.b) is a plural or a collective both grammatically and semantically, while in (4.a) the underlying form is a singular and has a morphologically complex plural. In (4.b), the singulative form is derived from the morphologically opaque form by adding the singulative suffix -ò. In (4.c) both forms are morphologically complex, and neither may be underlying. The nouns in all three examples take singular pronominal concord if they are singular or singulative, and plural pronominal concord if they are plural or collective.

## 3.2. Noun classifiers

Besides the tripartite number marking system, many Eastern Sudanic language families exhibit noun classifying properties. In Western Nilotic, this property is very salient in Burun languages (Mabaan, Mayak, Jumjum); all other languages of the sub-family exhibit at least significant remnants of the system.

Western Nilotic languages employ several grammatical means for the linguistic categorisation of nouns, which, however, never exhibit grammatical agreement. Thus, the nouns themselves may be marked for sex (masc. and fem.), animacy, tactile perception, motion, and other categories, but not the accompanying parts of speech, such as adjectives, verbs, or pronouns. The present author differentiates between those noun categorization devices as found in Niger-Congo languages and those that are present in Western Nilotic, besides others. The latter exhibit suffixed morphemes that mark a noun for a semantic category and for number. They do not mark concord. Niger-Congo noun class systems, in contrast, never combine gender-marking, number-indication and class-marking, as the Western Nilotic categorizers do. They usually employ concord (or show remnants of concord) and they cover both syntactic and semantic functions.

Thus, in this contribution, the term "classifier" is used as a term for a noun categorizing device that combines the properties class-marking, number-marking and combination with gender markers, but lacks the syntactic functions of noun classes. The use of the term to some extent parallels descriptions of South American classifier systems. It does not imply that Western Nilotic noun categorization devices resemble those of morphologically isolating languages, and it does not refer to classifiers that are expressed as separate words (such as in languages with numeral classifiers, for example).

Furthermore, according to Aikhenvald's (2000) definition, the lack of concord morphemes in the categorisation devices, which can "just categorize the noun itself" (op.cit.: 2), are characteristic for classifiers, which in this respect stand in opposition to noun classes and genders with their respective systems of concord. As such, the Western Nilotic classifiers appear to be appropriate examples of this type of linguistic categorisation device.

An overview of Western Nilotic suffixes is found in Table (1) below (Storch 2005). All of these suffixes are used to construct nouns with a singular pronominal concord, i.e. singular and singulative forms of nouns. Plurals and collectives are constructed by using one of the three patterns of the tripartite number-marking system (see § 3.1). The singular or singulative suffix would then be dropped and replaced by a plural-indicating classifier. In some languages such as Mayak, a plural-marking suffixed classifier might also be added to the singular marker. Note that all of these suffixes combine the semantics of nominal categorizers, number markers and those categories expressed by tripartite number marking. They are consequently both semantically and functionally complex morphemes.

| Mayak | Mabaan | Jumjum | Dinka | Nuer | Anywa | Päri | Shilluk | Luwo | Thuri | Southern Lwoo | Labwor | Semantics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -ic | -(C)à | -ɔk, ak -VD -ɔ́ndʊ̀ | -V3- -V:- -w | | | | | | | | | long, one-dimensional, dominant objects |
| -ɔn | -gɔn | -gɔn | | | | | | | | | | derogative concepts |
| -ul | | -VD | -V:- -w | -w | | | | | | | | metal objects |
| -iṭ -eṭ -aṭ | -tà | -caN -Nu -Na | -V:- ['] HL | -V2- -VV- -V:- | -o | -ó | -ɔ̀ | -ɔ̣ -ɔ̣̀ | -ɔ | -o -VV- | -ò -jo -í -á -VV- | singulative concepts |
| -Vn | -n | -Nə -n₁ | -V:- -V3- | -l | -VNò | -Dɔ̀ | -Dɔ | -a -ɔ̣ | -ɔ́ | -o -n | -o -a | general singular |
| -it | -à | -i -ɔ | -V3- -o | -y | -ò -i | | -ɔ -ì | | | | | abstract concepts |
| -Vk | -gà | | -k | -k | -k | | | -k | | | | abstract concepts |
| -ɛ̀ | -à -ɔ | -a -ɔ | -V:- ['] -w -V2- | -y | -ò -Vnò -u -á | -â -Da | -ɔ -Dɔ | -ɔ̣ | -ɔ́ | -a -u | -o -ú -è -a | spherical, round, small, objects; mass items; specialized people |
| | -i | | | | -i | -i | -ì | | -í | -i | | fast-moving objects |
| | -ò | -ùk | -o | | -ò -VNò | -o -Dɔ̀ | -ɔ | -a | -ɔ́ -a | -a -u | -a | locatives, domestic objects |
| | -ù/ -Nù | -u/ -Nu | -V2- -V3- ['] | -c | -u | -D-u | | -ʊ̣ | -a | -ù | -ú | shape + possession, body, spatial orientation |
| | -Nà | ['] -w -l | | -w -r | -á -V:- -VN | -â -Da | -ì | -a | -a | -i | | soft, circular objects |
| | -àṇ -ɲàṇ | -caN | -w | | | | | | | -a | -é | part of a larger unit |
| | -(C)iṇ | -n₂ | -l | | -i | -i | -ì | | -í | -i | | animacy, mass |

**Table 1.** The suffixes of Western Nilotic: singular and singulative-marking classifiers

## 4. Areal features
### 4.1. Mabaan, Luwo and Margaret Bryan's T/K area

Mabaan singular classifiers are usually paired with respective plural suffixes with a similar semantic value. There are also suffixes, however, that are semantically empty and that can be paired with any of the other classifiers. One such semantically empty suffix is the general plural marker -k. This is the most common plural marker, which appears in almost all of the classes. Andersen (2004: 15) describes a number of pairings and clearly identifies this suffix as a secondary marker, which supplements a nasal singular suffix. He further points out that this plural suffix assimilates to the root-final consonant and consists of a consonant /k ~ g ~ j/ only. The general plural suffix may, however, be combined with a vowel that has a grammatical meaning itself (Storch 2005: 138), and thus as a complex marker has the allomorphs –kø, -kà, -gà. In numerous cases, the informants optionally deleted the vowel segment /à/ from the suffix, so that -kà and -kø can be regarded as optional variants. The

form *-gʌ̀* occurs after voiced plosives, glides and bilabial nasals, while *-k(ʌ̀)* occurs after voiceless plosives, laterals and velar as well as palatal nasals. Pairings with this general plural suffix are observed with the singular suffixes *-ʌ̀, -ɔ̀, -i, -ù, -N(ʌ̀), -(ɲ)àn̪, -gɔ̀n,* and *-ø.* Examples for each pairing and the different allomorphs are shown in Table 2:

| singular class | singular form | plural form | plural allophone | gloss |
|---|---|---|---|---|
| -ö | kúùl | kûlk | -k | 'hole' |
| | miiŋ | mínkʌ̀ | -kʌ̀ | 'deaf person' |
| | jwɔ́m | jɔɔmgʌ̀ | -gʌ̀ | 'monkey' |
| -ʌ̀ | káyʌ̀ | kaak | -k | 'bow' |
| | kúlʌ̀ | kûlkʌ̀ | -kʌ̀ | 'wart-hog' |
| | ɲáàŋʌ̀ | ɲáŋgʌ̀ | -gʌ̀ | 'crocodile' |
| -ɔ̀ | báànɔ̀ | bʌ́nk | -k | 'compound' |
| | ʔɔ́ɔ́nɔ̀ | ʔɔ́ɔ́rgʌ̀ | -gʌ̀ | 'house' |
| -i | mwɔ́yì | mwɔ̂k | -k | 'gazelle' |
| | pwɔ̀nì | pwɔ̀tkʌ̀ | -kʌ̀ | 'lame person' |
| -ù/Nù | núʌ́nù | nûnk | -k | 'place' |
| | kuʌlù | kulkʌ̀ | -kʌ̀ | 'hollow space' |
| | yánù | yágʌ̀ | -gʌ̀ | 'cricket' |
| -N(ʌ̀) | yɔ̂ŋŋʌ̀ | yɔ̂ŋk | -k | 'flesh' |
| | cyʌ̀nnʌ̀ | cyʌ̀nkʌ̀ | -kʌ̀ | 'paint' |
| | ɲɔ́ɔ̀nʌ̀ | ɲɔ́dgʌ̀ | -gʌ̀ | 'oil' |
| -(ɲ)àn̪ | yééɲàn̪ | yéénkʌ̀ | -kʌ̀ | 'ghost' |
| | ŋééràn̪ | ŋéérgʌ̀ | -gʌ̀ | 'rib' |
| -gɔ̀n | kààlgɔ̀n | káàlk | -k | 'bachelor' |
| | kɛɛngɔ̀n | kéènkʌ̀ | -kʌ̀ | 'slave' |

**Table 2.** K-plurals in Mabaan

The observation that certain morphological elements occur as nominal affixes in a fairly large number of distantly related or genetically unrelated languages of Eastern and Central Africa took first Margaret Bryan (1959, 1968) to the conclusion that these languages are part of a linguistic area and not necessarily part of a larger genetic entity.[4] According to Bryan, there are 'T/K languages', which are found in a large number of East African language families, while a second area called '*N/*K' is made up of language groups of a zone of much wider distribution (Bryan 1968: 169). As in Mabaan, T/K and *N/*K languages tend to mark their nominal plurals with a K-morpheme, use K as a marker for plural pronouns, genitive linkers, etc. The singular in T/K languages tends to be marked with a T-morpheme, which may also have a singulative connotation. In *N/*K languages, singulars are often constructed with a nasal. Western Nilotic, besides a large number of Central and Eastern Sudanic groups,[5] has been identified as being part of an '*N/*K area'.

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[4] Features that go together with T, N and K and seem make up the entire *sprachbund* area are a nominalizer *a-*; alternating number morphemes A (singular) and I (plural); single gender for mass nouns *ma-*; emergence of noun classification systems by means of massive grammaticalisation, case (ergative); phonological properties like ATR-based vowel harmony systems, CREAKY VS. BREATHY oppositions NOT motivated by consonantal environment; retroflex consonants; and semantic properties like olfactory categorisation by means of a separate word class. The actual geographical extent of the area includes most of Africa's Sudanic belt. For a detailed discussion cf. Güldemann (in print), Storch (in print).

[5] Recently published data suggest that a much wider region seems to be part of the T/K and *N/*K areas. Singulatives with *-tV* have been found in Meroitic, which is presently assumed to have been already in existence some 4,000 years ago (Rilly 2004), and a singular or singulative marker *-t/t-* is found as well in Cushitic and Afroasiatic, where it may have developed out of a feminine gender morpheme. The plural marker *-k/k-* is much more common and occurs in Niger-Congo, e.g. Ubangi – Bviri *ka-* (Storch 2003), Atlantic – Manjaku *ba-k-* (Doneux 1975), Benue-Congo – Jukun/Jibə *bə-k* (Storch & Dinslage 2000), Bantu – Zezuru *vadzi-/ ?*ba-ki-*

In Luwo (Jur), to provide another example, a singular noun may be morphologically opaque or have one of the following synchronic suffixes: *-ɔ, -nɔ̀, -a, -u̯, -k*. There may be a prefix, which is either *a-* or *u̯-*. The root is always monosyllabic, with the exception of loanwords from e.g. Arabic. The most prominent and productive suffixes are *-ɔ* and *-nɔ̀*, while the others seem to have become residual, as they are very rare. Among the three patterns of the tripartite number-marking system, the pluralization pattern is the most common one, which is used with almost two thirds of the nouns recorded. At the same time, singulatives have spread considerably in Luwo and have replaced the original singular forms.

In example (5), all singulative forms with *-ɔ̀* exhibit internal changes that cannot be attributed to the suffix as it surfaces here. We observe vowel lengthening ('molar', 'finger') and nasalization ('hair', 'breast', 'urine'), which suggest that the suffix originally was more complex and is very likely to have consisted of a nasal element as well. This nasal also surfaces in some singulars which occur in the replacement pattern groups, so that a possible conclusion is to assume that, besides the singulative suffix, two universal singularising morphemes were originally used: *-ɔ̀* and *-N-ɔ̀*. Both must have merged in later times and are distributed rather unsystematically. This observation speaks in favour of a hypothesis that during the convergence to an areal number marking type the original distinction between singulative and singular has become residual. The over-presence of singulatives is best explained as the result of a process of analogy as well as areal convergence to an N-marking type, which leads to a uniform, semantically governed pattern of singulativization of all nouns denoting items that would possibly not occur as a single object naturally.

(5)  Singulatives with *-N-ɔ̀*

| coll. | sgve. | |
|---|---|---|
| ɲam | ɲaamɔ̀ | 'molars' |
| yíɛ̀r | yíɛ̀nɔ̀ | 'hair' |
| ṭôn | ṭúnnɔ̀ | 'breasts' |
| cíŋ | cíŋɔ̀ | 'hands' |
| lwɛt | lɛɛdɔ̀ | 'fingers' |
| làc | lâɲɔ̀ | 'urine' |

Summarizing these observations, a first conclusion would be that T/N/K areal number markers contributed to
a)  levelling and neutralisation of the noun classes in plural formation (Mabaan), and
b)  the emergence of dominant number-marking patterns such as pluralization and singulative marking at the expense of less salient patterns such as marking by singular-indicating classifier suffixes (Luwo).

Tripartite number marking and noun classifiers still exist, but in connection with areally distributed T/N/K markers.

## 4.2. Maintenance of linguistic distinctness in Belanda

After the original classifier system had become unbalanced due to the diffusion of exclusively number-marking suffixes, and after singulatives have spread into other number marking patterns (replacement pattern) in the course of semantic innovation, the entire nominal system had become sufficiently altered and affected by contact to lose many of its prototypical features. In historically much later contact situations, this situation provides the basis for further typological and grammatical changes. Some exceptionally intensive contact situations of the 19th century include contact between

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(Maho 1999) as well as in Meroitic *(\*-gu*; Rilly 2004). Obviously, so many adaptations are universally present in the languages of Sudanic Africa –south of the Sahel and north of the rain forest– (Güldemann, in print) that the more recent migrations within the last five to eight centuries are not significant enough to account for their massive diffusion.

Western Nilotic and Niger-Congo (Ubangi) languages and have led to further significant typological changes in the respective Western Nilotic languages. Interestingly, change only occurs where the system has already been shown to be flexible in the older contact scenarios.

Belanda Bor is a Lwoo language that derives from an early 19th century split-off of the main Luwo body. A group called Bor by that time separated from the Luwo and migrated into the Western hills of Bahr el-Ghazal because of group-internal conflicts and slave raids by Turko-Arab traders. As far as we know from early reports on the situation in the mid-19th century Bahr el-Ghazal (Ali 1972, Santandrea 1964), the slave trade exerted a genocidal pressure on the populations of Bahr el-Ghazal that has led to the reorganisation of several ethnic boundaries. The Bor certainly were in such a situation, reaching the hills where they finally sought refuge in a desperate state. Both livestock and agricultural technology were lost, and the entire group began to live in caves. The farmers and pastoralists of once had become foragers, who would live on what they gathered in the bush. In an early contribution by Tucker, it is mentioned that the Bor assumed the least prestige and were marginalised by all other groups of south-western Bahr el-Ghazal ("The Jur despised by the Dinka and despising the Bor" (Tucker 1931: 59)).

During the Zande invasions of the late 18th and early 19th centuries a rapid eastward expansion of the Ubangi-speaking groups of Central Africa took place. In order to flee from enslavement by the Zande, speakers of Bviri, a Ndogo-Sere-Tagbu language (Ubangi), hid in the mountainous parts of Bahr el-Ghazal, where they settled among the Bor, assisting them in house-building, clearing the bush for their farms, and also allowing them to participate in the religious life of the Bviri (Mur'ba Wau 2002). Bor assumed the inferior position in the relationship, and the convergence phenomena towards Bviri speak in favour of multilingualism and code-switching practices that eventually would have led to Creole-like formations and rapid changes of group boundaries. Language shift should have occurred in a relatively short period of time, as this was a socially, politically and economically reasonable strategy. But the Bor apparently maintained their group identity and, moreover, their linguistic distinctness.

However, after two or three generations of coexistence with the Bviri, Bor had completely lost the richness in number marking patterns and noun classifier devices of Western Nilotic altogether and did not retain any productive nominal suffixes. The typological changes that have occurred in Bor — transforming a suffixing noun classifier language into a weakly prefixing language without any remarkable noun categorisation devices— are the result of a massive process of cultural and ethnic amalgamation with the Ubangi-speaking group. The languages of the Sere-Ndogo-Tagbu-group, to which Bviri belongs, mark plurals by means of a semantically empty prefix, e.g. *ni*, pl. *ndá-ni* 'woman' in Ndogo-Bai. There are no noun classes. Belanda Bor has largely borrowed this grammatical pattern: it mostly uses a prefix *ká-* —which of course is one of the old areal features that are so omnipresent in Western Nilotic— as a plural marker. The semantically empty pluraliser has thus replaced the original plural classifiers and derivational morphemes. But besides this simple pluralisation pattern, the language has also retained the replacement and singulative patterns. However, number marking operates entirely by prefixing devices.

(6) Belanda Bor (Storch 2005)

| (6.a) | | singular | plural | plural formation |
|---|---|---|---|---|
| | 'wound' | kà | ká-kà | |

| (6.b) | | collective | singulative | singulative formation |
|---|---|---|---|---|
| | 'sorghum, grain' | bél | ɲí-bél | |

| (6.c) | | singular | plural | replacement pattern |
|---|---|---|---|---|
| | 'liar' | jì-tòt | jò-tòt | |

Number marking patterns in Belanda Bor have acquired a new semantic dimension in so far as the replacement pattern is used exclusively for nouns that denote human beings. Singulative formation operates with all those nouns that denote mass items. Both, the singulative prefix and the

singular/plural prefixes of the replacement pattern are grammaticalisations of endocentric nouns (*ɲí-* 'daughter of'*, ji-, jo-* 'traveller, person of').

Interestingly, both, the underlying collective as well as the singulative noun have plurals. In both cases the additive general plural prefix *ká-* is employed:

(7) ká-fìì   'quantities of water'      ká-ɲí-fìì   'drops of water'

This already very much resembles Niger-Congo patterns (Miehe, in print). But singulatives have also diffused into Bviri, which being an Ubangi language did not have this category originally. Bviri did not only borrow singulatives from Bor, but also the areally distributed plural marker *ka-*. Thus, while essentially converging to Ubangi, morphological material of Bor has also diffused into Bviri, as the following examples illustrate:

(8.a) Bviri plurals (Behagel 1988)
    sg.      pl.
    ni       ka-ni      'woman'

(8.b) Bviri singulatives (Santandrea 1961)
    sgve.    coll.
    vo-sírí  siri        'star'

These examples show exactly the opposite of the usual case, where the politically dominant language influences the less dominant one. Here, the transfer process has taken the opposite direction. Instead of the common Ndogo-Sere-Tagbu morpheme *ndá-*, the Belanda Bor plural prefix *ká-* is found, and this pluralizer clearly spread into Bviri as an areally distributed morpheme. It is intriguing that perhaps more than two thousand years after its occurrence in Meroitic, this plural marker is introduced into Ubangian Bviri as a prefix. If the historical hypothesis about the origin and time-scale of T, N and K may ever be proven to hold true, then this linguistic area would have survived for perhaps two millenia.

### 4.3. Gender, size and number in Labwor

That semantic properties of the tripartite number system and the classifier inventory are not easily replaced by those of grammatical material from typologically different contact languages is further demonstrated in Labwor. Labwor is a minority language of Eastern Uganda and borders to the Eastern Nilotic gender-marking languages Teso and Karamojong. Culturally the Labwor are almost fully assimilated by the Karamojong. The time depth of contact is unknown, but the movement of the Labwor into their present habitat should date back to the Southern Lwoo expansions in the 13th century (Atkinson 1999, Ehret et al. 1974, Herring 1979), which correlate to long periods of drought. Stable bilingualism in Karamojong and their own language is very common among the Labwor.

In its inferior position in the contact situation, Labwor has nevertheless retained as many suffixes as the more conservative Northern Lwoo languages, and keeps up the tripartite number-marking patterns of Western Nilotic. It uses areal number markers (e.g. the *-gV* suffixes in 9.a) as well as other Western Nilotic formatives such as the suffixed classifiers *-a, -e*:

(9) Labwor
| (9.a) | | singular | plural | plural formation |
|---|---|---|---|---|
| | 'goat' | dyél | dyé-gí | |
| | 'queen bee' | mín kíc | mé-gó kíc | |
| | 'water' | píì | pì-gé | |

| (9.b) | | collective | singulative | singulative formation |
|---|---|---|---|---|
| | 'bush, forest' | bùŋ | bùŋ-á | |

(9.c)                      singular      plural              replacement pattern
    'knife'        pàl-à        pàl-é

Labwor employs a comparatively large variety of singular suffixes. Some of these exclusively express number, while others are also used in derivation and sex-indication. The latter ones are borrowed from Karamojong.

Mystical beings and large, taboo animals are underlying mass items and thus not morphologically marked. But a singulative can be derived from the opaque form by adding the vowel-harmony sensitive suffix *-í/í*. This suffix is very likely to stem from the Karamojong suffix *-ít*, which is used to single out individuals of a larger group or unit, such as *ékarimɔjɔŋá-ít* member of the Karamojong people' (Novelli 1985: 43). Examples from Labwor are:

(10) coll.        sgve.
    àbwɔ̂r        àbwɔ́rí        'eland antelope'
    lyéc          lyécí          'elephant'
    rùt           rùdì           'twin'

Similar borrowings from Eastern Nilotic are observed in singular forms. Here, a group of Labwor nouns underwent suffix substitution as a result of language contact with Karamojong. Nouns in this category denote animate objects that in some cases may be associated with the masculine gender ('friend', 'horse'). Note that 'moon' is also part of this group, a noun that is constructed in the masculine gender as well in many Eastern Nilotic languages (Vossen 1982: 395).

Beside using number-inflectional and noun categorising suffixes, Labwor also exhibits nominal prefixes. In Western Nilotic in general, sex is always indicated by such prefixes, but Lwoo languages additionally developed many derivational prefixes. As Dimmendaal (2001) was able to show, most if not all of these prefixes are grammaticalised heads of endocentric compounds.

The contact languages of Labwor —Karamojong and Teso— are exclusively gender-marking languages, and Labwor has borrowed the prefixes *à-* and *è-*, which originally indicate feminine and masculine gender, respectively. In Labwor, a semantic extension of the feminine prefix leads to a diminutive and further singular meaning as an enhancement of the number-marking system. The plural is formed with *è-*, which in Labwor has acquired its plural semantics via augmentative meaning.

(11.a) Labwor
    sg.           pl.
    à-t̪ín        è-t̪în-ɔ̂        'child'
    à-t̪ín d̪yáŋ   è-t̪ín d̪ók      'calf'
    à-kwɔ́        è-kúw-é         'thief'

(11.b) Karamojong (Novelli 1985: 41)
    sg.          pl.
    ɛ́-kìl-é      ŋí-kíl-yók      'man'        masc.
    á-bέέrú      ŋá-berò         'woman'      fem.
    í-kɔ̀kʊ       ŋí-dwé          'child'      neuter

Contact between the noun classifier language Labwor and the gender-marking language Karamojong has been close and steady for a long time. Gender as a grammatical category, however, has not diffused into Labwor. Besides the indication of sex there is no evidence for the productive construction of masculine and feminine noun forms. Evidently, from an ethnogrammatical point of view, gender of Eastern Nilotic languages is so different from what Western Nilotes seem to consider typical and relevant in their languages that this grammatical principle has not diffused into Labwor (or any other Lwoo language).

*4.4. Creative archaisms: young urban Luo*

But how about recent and fast-changing contact situations? When discussing the Lwoo-speaking areas of Central and Eastern Africa, one may get the impression that an old Sudanic linguistic area persists because slave raiding, civil war and steady migrations never allowed for establishing new *sprachbund* situations. Here, an ancient areal feature and prototypical properties persist in Mabaan, Luwo, Belanda Bor, and Labwor, whereby numerous other structural, typological and semantic changes occurred.

A look at urban varieties of Luo, spoken among multiethnic communities, illustrates that if this scenario is right, it contributed to the development of emblematic modes of interaction that are used to define group boundaries. Young speakers of Adhola call themselves *Jaaps* and their language *Jaap*, both derived from *Jopadhola* 'Adhola people'. Unlike the situation in other Southern Lwoo languages such as Chopi (Paluo), Alur, Lango, etc., number inflection in Jaap tends to look much more "Lwoo". Number marking operates by old Western Nilotic suffixes and seems to be very regular, as the following examples illustrate:

(13) Jaap (Adhola)

| sg. | pl. | | |
|-----|-----|-----|-----|
| cɔ̂gɔ̀ | cɔ̂gí | 'bone' | |
| àdûn̪d̪ó | àdûn̪d̪í | 'heart' | |
| òyéyò | òyéyí | 'mouse' | |
| àfɔ́yɔ́ | àfɔ́yí | 'hare' | |
| m̀bálásà | m̀bálásí | 'horse' | < Arabic *faras*, via lac. Bantu |
| púndà | púndí | 'pig' | < Swahili *punda* 'donkey' |
| bûmbù | bûmbí | 'spider' | < Swahili *buibui* |
| òd̪út̪ù | òd̪út̪í | 'gun' | < Swahili *mtutu* 'gun barrel' |

All examples exhibit a suffix -*ɔ*/-*o* in the singular, which alternates according to [ATR] vowel harmony and which may have a low or a high tone. The plural is exclusively constructed with -*í*/-*í*. The examples look very typical for what we have dealt with in Luwo, Anywa or Labwor. Even the many Arabic and Swahili loanwords are adapted to the Lwoo pattern and have a suffixed plural with -*i*.

Generally, the formatives are less varied than those in other Southern Lwoo languages. Most Southern Lwoo languages do not indicate number on nouns any more, except in lexemes that denote human beings. Since Adhola preserves some of the plurals and a number of suffixes, it gives the superficial impression of being more conservative.

However, a closer look shows that plural formation originally was much more complex and that the formatives must have undergone merger processes. Consequently the exclusive occurrence of -*í*/-*í* is interpreted as the result of the spreading of an imperialistic pluraliser in Jaap. The example of 'heart' illustrates that in all other Lwoo languages this noun uses different number suffixes, which further suggests that Jaap-Adhola is innovative and not conservative in having a very homogeneous number-marking morphology:

(14) 'heart'

| sg. | pl. | |
|-----|-----|-----|
| àdûn̪d̪ó | àdûn̪d̪í | Jaap (Adhola) |
| àd̪ʊ́ʊ́lɔ̀ | àd̪ʊ́ʊ̀lɛ̀ | Luwo |
| adundo | adunde | Päri |
| àd̪ʊ́ʊ́lá | àd̪ʊ́ʊ́lɛ́n̪ | Thuri |

Why did Jaap number marking become so uniform? Unlike Dholuo, which has been demonstrated to use numerous highly productive prefixes that resemble those of neighbouring Bantu languages

(Dimmendaal 2000: 382), plus using a large variety of Lwoo suffixes,[6] Jaap clearly is based on very prototypical means of suffixed number marking. Even though the language is strongly influenced by Swahili, the noun morphology seems to remain unaffected by contact with Bantu —unlike Dholuo, where a transfer of Bantu noun class structures is very salient. This simply reflects Jaap group identity as being Northern Ugandan Luo in opposition to Central Ugandan Bantu. Moreover, Swahili is influential but unpopular as it is associated to Idi Amin's reign. Consequently, Luoization of Swahili loans and avoidance of Bantu number inflection are common choices in multiethnic Jaap speaker's discourse behaviour. A result of this behaviour is consequent embedding of Swahili roots into an Adhola matrix. The overgeneralisation of the *-i*-suffixing rule leads to hyper-correct forms in which the plural marker *-i* is even suffixed to morphologically complex Adhola roots. This creative strategy of suffix addition is illustrated in (15):

(15)      ráw-í, pl. ráw-í-í          'hippo'

## 5. Conclusions

Any communicative act that makes use of language is based on co-ordination. In situations of frequent and intensive language contact, in linguistic areas for example, co-ordination takes place at a relatively high level, as speakers and addressees are establishing commonalities of identity and thought (see Clark 1996 for an analysis of commonalities in communication based on Schelling games). The examples of language contact that have been briefly presented in this paper consequently can be understood as involving two major sociolinguistic principles; first, the establishment of group boundaries, and second the creation of common ground. Both processes are rivalling processes in language change. Group boundaries are defined or strengthened by using those grammatical properties that are "Nilotic" –or "Northern" in Ugandan terms–, i.e. tripartite number marking, suffixed classifiers and number-inflectional morphemes, and sex-indicating prefixes, but also by using areally distributed grammatical properties. At the same time, areally distributed grammatical properties are employed in order to create common ground, for example in contact situations when languages of different genetic affiliation are used that belong to the same linguistic area. This would be a frame in which T/K and *N/*K features become emblematic, as they define both group boundaries and common identities in multiethnic settings, which is the case in those contact areas south of the Sudanic belt. In the Great Lakes regions of Uganda, speakers of Western Nilotic use linguistic techniques in order to maintain identity-defining boundaries between themselves and speakers of Bantu languages. Evidently the same case is encountered in the Ubangi-Nilotic contact areas West of Bahr el-Ghazal.

On the other hand, the development of a large inventory of prefixes e.g. in Belanda Bor or Dholuo may be interpreted as a strategy in creating common ground with speakers of Ubangi and Bantu respectively. Originally, all Lwoo languages as well as all other members of the Nilotic language family possessed prefixes by which the derivational system was or is operated. These prefixes can partly be reconstructed for Proto-Nilotic (Dimmendaal, pers. comm.). In some of the contact situations, a significant number of derivational prefixes and a predominantly prefixing number-marking technique may be borrowed, if they are perceived as common patterns in multiethnic discursive practices. The Belanda case is an extreme example of such a process, but Dholuo also fits in. Thus, grammatical permeability exists when marked grammatical properties are viewed as features that define common ground and provide tools for the creation of apparent common linguistic practices. The original system in Southern Lwoo prefixes was basically enhanced by language contact with Bantu, Eastern Nilotic, etc., because of its function as a feature that defined common ground in multiethnic discourse. The hyper-correct and uniform use of number-marking suffixes in Jaap illustrates that this specific

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[6] Dholuo uses the following prefixes (Tucker 1994, Storch 2005): *ɔ̀-/ò-* (< 'son of') male personal names, *à-/ə̀-* fem. gender, *ú-/ú-* deverbal abstract nouns, *dì-/dì-* (< PWN *'young') female cattle colours, *mì-/mí-* verbal nouns, *kì-/kì-* (< dem. *'this') instrumental nouns, *sí-/sí-* verbal nouns, *mà-/mə̀-* agent/abstract nouns, *hà-/hə̀-* agent nouns (?), *kà-/kə̀-* (< dem *'that') agent nouns, *wá-/wə́-* agent nouns, *kálá-/kɔ́lɔ́-* animals/body features, *bàlà-* (unknown).

grammatical technique encodes "Niloticity" and "Northerness" in discourse situations that aim at creating an anti-Bantu group identity.

Choices in borrowing grammatical properties are made according to strategies in defining the self and the other, and they consequently have meanings. These meanings exclusively refer to practices of co-ordination in communication –creating commonalities and defining group boundaries.

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