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Linguistic Typology at the Crossroads

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Linguistic Typology at the Crossroads

Language contact and non-convergent change: cases from Africa

Edited by
Pierpaolo Di Carlo and Pius W. Akumbu

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Introduction

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Abstract

This paper introduces the monographic issue of *Linguistic Typology at the Crossroads* entitled "Language contact and non-convergent change: cases from Africa", edited by Pierpaolo Di Carlo and Pius W. Akumbu. After briefly outlining non-convergent change under contact with a special attention to African settings, it deals with the fact that the languages discussed in the monographic issue have been spoken for generations in contexts of small-scale multilingualism. This is a key aspect to consider since small-scale multilingualism is a type of multilingualism that is overall little known as to its possible effects at the level of language change. The paper then addresses methodological aspects related to the study of non-convergent change in contact situations and introduces the novel concept of *correlated dissimilarity*. A call for the collection of new and more comprehensive data in the field as the only possible way to test the hypotheses raised in this volume concludes this introduction.

Keywords: language contact; small-scale multilingualism; convergent and non-convergent change; Africa.

"Sociolinguistics is not like chemistry, and
when you put two languages together the
same thing does not always happen."
(Appel & Muysken 2005: 5)

1. Non-convergent change in contact settings

Languages in contact normally undergo processes of convergent change, which is a cover term for both bilateral (i.e. convergence) and unilateral (i.e. advergence)

patterns of increased similarity between languages. However, a growing number of studies highlight contact phenomena that cannot be straightforwardly accounted for in terms of diffusion or of language-internal change or of broader typological tendencies. These contact phenomena include cases of language stability (i.e. non-change) and language divergence (see, e.g., Kühl & Braunmüller 2014: 14) which are referred to here as types of non-convergent change (cf. Kaufmann 2010). The purpose of this volume is to contribute to this developing tradition of studies, with a specific focus on sub-Saharan Africa.

Since the literature on language contact and non-convergent change is still quite limited, it might be useful to recall here some of the main existing works - with no intention to provide a comprehensive literature review, which is beyond the scope of this short introduction. Language stability refers to situations in which two or more languages in contact do not undergo convergent change as it would be expected. Examples include the maintenance of clearly distinctive lexicons in the otherwise structurally convergent languages of the Vaupès and other regions in the Amazon (e.g. Aikhenvald 2001, Epps 2020), the very minimal instances of French lexical and structural borrowing in English as a minority language of Quebec (Poplack et al. 2006), and the maintenance of grammatical gender in varieties of Norwegian in contact with Finno-Ugric languages in northern Norway (Sollid et al. 2014). Language divergence in contact settings is exemplified by cases such as relexification[1] in Oceanic languages of northern Vanuatu (François 2011), language esoterogeny[2] (e.g. Thurston 1989, Ross 1997), and restructuring at the level of suprasegmental phonology in East-Tukanoan languages (Gomez-Imbert 1999) and of noun morphology in Iwaidjan languages (Evans 2019). In spite of clear differences, what these cases have in common is that they foreground the importance of extralinguistic factors, such as speakers' language ideologies,[3] as the main factors that can possibly account for such "unnatural" outcomes of contact.

[1] Relexification is a mechanism of language change by which one language replaces much or all of its lexicon with the lexicon of another language, while its grammar remains largely intact.

[2] Esoterogeny is a term referring to a sociolinguistic development in which speakers add linguistic innovations to their language that increase its complexity and, therefore, make it harder to learn for outsiders.

[3] "[I]deas, or sets of beliefs, shared by the members of a community concerning language, its uses, and its role in their social world" (Pakendorf et al. 2021: 837).

In this overall limited literature, cases from Africa feature rarely. Except for relatively isolated remarks found in works such as Schadeberg (1981), Connell (2001), Mous (2001), Storch (2011), Mve et al. (2019), and Dimmendaal (2015: 64–81) the possibility to focus on non-convergent change phenomena in African contact settings has, to a large extent, remained outside of the linguists' agenda, although there appear to be no objective reasons why such phenomena should be so rare in this part of the world. This latter stance finds support in inspiring, general statements such as the following:

> Bantu speakers have long lived in a multilingual continuum, where many speakers master not just their own variety of speech but also those of their neighbors. Linguistic differentiation and convergence are actively pursued, one serving to establish distinct group identities, the other one to forge alliances and to foster good neighborship. (Schadeberg 2003: 158)

The papers contained in this volume are in some way related to Schedeberg's words as they (i) focus on settings where being multilingual in neighboring languages has most likely been the norm for speakers since precolonial times and (ii) explore ways to test the significance of possible connections between social, sociolinguistic, and linguistic patterns in influencing the direction of language change. I deal with these two topics in the next two sections, following which I will summarize the papers contained in this volume (section 4) and add some final comments.

2. Linguistic diversity and small-scale multilingualism

The papers contained in this volume target languages spoken in areas of relatively high linguistic diversity (see Fig. 1) where, due to the absence of lingua francas, multilingualism in neighboring languages has been the principal means of intercommunity communication before colonial times. This is established for the Cameroonian Grassfields (e.g. Warnier 1980; Di Carlo et al. 2019; Chenemo & Neba 2020), where the languages targeted in this volume by both Akumbu & Kießling and Di Carlo & Good are located (see Fig. 1). As for Usaghade (usk; Niger-Congo, Lower Cross), Connell (this volume) has collected some basic sociolinguistic information suggesting that, unsurprisingly, its speakers are also proficient in neighboring languages and there appear to be no objective reasons not to extend this state of

things back in time. The case of Bade (bde; Afro-Asiatic, Chadic), discussed by Ziegelmeyer in this volume, is less clear due to the apparent scarcity of sociolinguistic and ethnographic data.

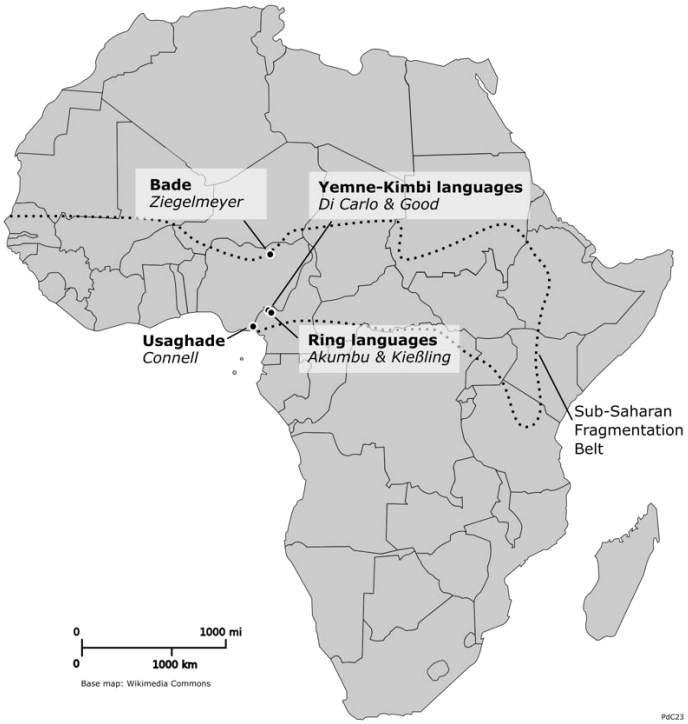

Figure 1: Map showing the approximate locations of the languages discussed in the papers in this volume. The so-called *sub-Saharan fragmentation belt* accommodates about 80% of Africa's linguistic diversity (Dalby 1970).

Bade is located in a region in which the influence of Kanuri (knc; Nilo-Saharan, Western Saharan) began no less than five centuries ago, and where Hausa (hau; Afro-Asiatic, Chadic) has gained speakers over the past century. This means that, unlike the previous cases, Bade has been long spoken in a diglossic environment (i.e. one where there is a power imbalance between communities which is ideologically extended to their languages) where being competent in Kanuri would have theoretically enabled intercommunity communication for centuries. At the same time, however, variation between Bade varieties is so high that it is debatable whether they should not be considered as distinct languages instead, thus adding to the historical scenario of diversity of the area. In such a situation, and based on evidence collected in overall similar environments of liminality between traditional communities and centralized states (e.g. the contact between Mandara montagnards and Wandala, in

Moore 2004), it seems reasonable to infer the existence of widespread multilingualism in neighboring languages / lects over the past centuries.

Why is it so important to establish a baseline for the kind of multilingualism that was (and is) practiced in these areas? Since the loci of language contact are the minds of the multilingual speakers, identifying the kind of multilingualism that these communities have practiced is key to understanding what kind of contact phenomena would be more or less expected between the languages that they speak. This is well-known (e.g. Weinreich 1953: 71–110, Thomason & Kaufman 1988: 65–100). What is lesser known is that, in its discourse about how the social factors influence language change, contact linguistics has enormously relied on a model of societal multilingualism, i.e. diglossia, which was only recently recognized to be one out of a number of possible such models, rather than the only one (see, e.g., Lüpke 2016, Di Carlo 2018, Vaughan & Singer 2018).[4] As a matter of fact, the forms of small-scale multilingualism that have characterized the communities discussed in this volume have surely included significant non-diglossic components. The most evident differences between diglossic multilingualism and small-scale multilingualism include the following:

- the conceptual systems supporting forms of diglossic multilingualism hinge on a socially widespread perception of power and prestige asymmetries between communities associated with different codes, whereas small-scale multilingualism typically arises where there are no significant inter-group differences in terms of socio-economic dominance—which is why it was first labeled *egalitarian multilingualism* (Haudricourt 1961);
- diglossic forms of multilingualism normally co-occur with models of construction of identity *qua* membership in social categories—which is the norm in industrialized and urbanized societies (e.g. Ma & Schoeneman 2007, Henrich et al. 2010)—whereas small-scale multilingualism co-occurs with relational-positional models of identity, where language choice in interaction has the effect of representing oneself as occupying a specific position within a

[4] For the sake of convenience, in this introduction I generalize the use of the term *diglossia* to encompass both diglossia and polyglossia—i.e. situations in which the languages participating in the system of social evaluation and domain-specialization are more than two—and of multilingualism as a cover term including bilingualism and forms of multi-code competence labeled as *bi- / multi-lectalism*.

concrete network of people rather than as an instance of an abstract social stereotype (e.g. Di Carlo et al. 2020, Lüpke 2021).

Both points have consequences for research focused on contact between languages spoken in contexts of small-scale multilingualism. The first point stresses that arguments so pervasive in the literature such as those based on the notion of (overt or covert) prestige imbalance between communities, might in fact be to a large extent irrelevant, if not misguided, in accounting for the social facts influencing patterns of change in these contexts (see references above and the contributions in Vaughan & Singer 2018 and Di Carlo & Good 2020).

The second point highlights a complex node which I can only briefly sketch here. In multilingual societies where language choice indexes one's membership in a concrete network of people *vis à vis* those of one's co-interactants, linguistic diversity is not only a fact of social life but also *enables* one's social relations and the activation of associated sets of rights and obligations in daily life. From this perspective one can see how, in contexts where multiple groups of roughly equal power exploit an environment that offers limited (economic and political) resources, individuals may have an interest in maintaining this multiplicity since membership in more groups means having potential access to more sources of rights and support, which can be strategically leveraged according to needs (some cases from Africa can be found in, e.g., Lüpke & Storch 2013: 22–45, Di Carlo 2018, Cobbinah 2020). In some societies, this interest surfaces in ideologically-loaded constraints on code-switching between local languages (e.g. Ojong Diba 2020). This attitude towards diversity, the relatively small size of the communities involved, and the widespread presence of individuals who, thanks to their multilingual competence, would be aware of the items and structures that make any two local languages similar or different from each other, make it likely (if not predictable) that contexts of small-scale multilingualism may be especially conducive to stability and divergence of the languages involved.

A sociolinguistically-informed study of contact that can do without prestige and without social stereotypes is yet to come, and this makes it difficult to actually put to test the claims summarized above. My view is that, until sociolinguistics is globalized, it is wise to acknowledge that we are not in a position to state with certainty what can and cannot happen to languages spoken for generations in a context of small-scale multilingualism, because existing knowledge of contact phenomena has been elaborated for the most part on the basis of crucially different sociolinguistic contexts.

From this perspective, paraphrasing Haspelmath (2004), one might say that the main goal of this volume is to contribute to raising the study of non-convergent change in African contact settings from near non-existence to a hunting and gathering stage—i.e. a stage of research in which data is provided but analyses still lack systematicity. Where contents of this volume may appear to be making "bold and not fully substantiated claims", it might be useful to recall that sometimes this serves "the useful purpose of instigating others to look for counterexamples or confirmation" (Haspelmath 2004: 220).

3. Assumptions, claims, and challenges

There are indeed some basic yet unarticulated claims that underpin the papers in this volume to a greater or lesser extent, which I briefly address in this section.

3.1 Language boundaries

The first claim has to do with where one should draw language boundaries—a practical necessity of doing work on language contact (cf. Nicolaï 2019). In this regard, "there seems to be no need to assume fundamental structural differences between dialects and languages that would make a comparison between dialect contact and language contact impossible when investigating structural changes or stability in language contact" (Kühl & Braunmüller 2014: 13–14). More specifically, what actually counts in determining if a named language is eligible to comparison is whether it is learned and used independently of any other that is reported in the speakers' multilingual repertoires, and its use (regardless of the quality and quantity of its distinctive items, cf. Watson 2019) has at least some desired social indexical effects that no other named language has for its speakers (e.g. Di Carlo et al. 2019: §3.5).[5]

[5] There is a term that is often found in research on non-convergent change phenomena but which I have purportedly avoided in this introduction: namely, *hyperdialectism*. Peter Trudgill (1986) introduced it to refer to those cases in which it was observed that one or more linguistic features that are typical of a dialect are overgeneralized by its speakers in order to increase its distinctiveness from the standard language or a neighboring dialect. This concept is of limited use in the perspective taken in this volume because of its implicit claim that such changes are specific to dialects, but there are

3.2 Correlated dissimilarities

A second claim concerns the phenomena under analysis. The fact that contact leads to borrowing and interference—i.e. to instances of convergent change—is a truism and therefore needs not be demonstrated. In actual practice, this means that comparatists can build on a shared expectation without the burden of proving it—they mainly answer the question of how the change came about, rather than why it did. By contrast, the studies in this volume focus on differential rather than similar features between languages and wonder whether these *differences* are due to contact. That contact may be the source of maintenance or enhancement of dissimilarities between languages is the marked scenario and requires an explanation (e.g. Labov 2010: 5), so the very act of taking that stance must be justified in the first place. This means taking up the challenge of testing whether some cross-linguistic dissimilarities in contact settings are somehow connected to each other. I introduce here the term *correlated dissimilarities* to refer to this special class of cross-linguistic differences, until a better term is found.

Providing an exhaustive compendium of the types of correlated dissimilarities that have been proposed in the literature is not among the goals of this short introduction, but recalling some of them might be helpful. One type of cross-linguistic difference that is often discussed as a potential index that the difference is a correlated dissimilarity is the so-called *flipping*: two items, most commonly two paradigmatic sets, from two (or more) named languages appear to be in a relationship of inversion. Consider, for instance, the case of Barasana and Taiwano (bsn), two closely related East Tukanoan languages, where there is a recurring correspondence between inverted tonal melodies of segmentally identical noun roots: Bar. *cudíró* (LHH), Tai. *cúdiro* (HLL) ‘piece of clothing’; Bar. *~wibágɨ́* (LHH), Tai. *~wíbagɨ* (HLL) ‘child’; Bar. *~jokó* (LH) Tai. *~jóko* (HL) ‘star’ (see Gomez-Imbert 1999). An example involving three languages comes from the distribution of nouns across genders in neighboring Iwaidjan languages of northern Australia (Evans 2019: 575–579). Mawng (mph; Iwaidjan, Iwaidjic), the most conservative of the three languages, has five genders (masculine, feminine, vegetable, land & liquids, and miscellaneous) with most nouns occurring in masculine and feminine, few in vegetable and land & liquids, and very

well-known difficulties in drawing a principled distinction between languages and dialects in several parts of Africa (e.g. Nurse & Philippson 2003: 2-3).

few in the miscellaneous gender. Two neighboring Iwaidjan languages, i.e. Ilgar and Iwaidja (ilg and ibd; Iwaidjan, Iwaidjic), have simplified this system but, where Ilgar has done so in the expected way (i.e. generalizing the most frequent genders), Iwaidja has enigmatically done the opposite by generalizing the miscellaneous gender. Other instances of inversion in noun class systems are also documented in Africa (e.g. the case of Laru (lro; Niger-Congo, West-Central Heibanic), see Schadeberg 1981 and Dimmendaal 2020, and one such case has also been proposed for some Ring languages by Akumbu & Kießling (this volume, see also below).

There appear to be no linguistic-only arguments that make it possible to establish that a given cross-linguistic difference can be legitimately viewed as a correlated dissimilarity. The first step that linguists working on data of this kind have taken has been to look for support in extralinguistic evidence. In this regard, linguists' efforts widely differ: those who can rely on a substantial body of knowledge provided by earlier ethnographic work (such as, e.g., in the case of the Vaupès, see references above) are facilitated in connecting the linguistic and the extra-linguistic dimension of analysis since the latter is sufficiently developed and convincing. By contrast, where such knowledge is scanty or non-existent (which is the norm in many African settings), linguists approach the problem by raising fundamentally unresolved questions, though from different starting points. In this volume, authors such as Akumbu & Kießling and Ziegelmeyer have limited sociolinguistic data to build on and therefore include the extra-linguistic dimension as a "last resort" by invoking general tendencies, such as Larsen's (1917) notion of *nabooppositio*n—i.e. a process of intentional differentiation between neighboring languages—as the main factors at play. The paper by Di Carlo & Good, on the other hand, stems from a significant body of ethnographic and sociolinguistic knowledge and devotes a lengthy discussion to the problem of what kind of characteristics might make a given instance of change a better or worse candidate to be viewed as a correlated dissimilarity (see also below).

However, it must be kept in mind that even solid and convincing extra-linguistic data can hardly answer the twofold problem of the actuation and of the propagation of non-convergent change phenomena under contact. As Campbell & Poser (2008: 352) write about the concept of language esoterogeny (which is a form of non-convergent change): "...it is not clear how this hypothesized cultural motive for these changes – conscious exclusion of outsiders (Ross 1997: 239) – could be tested or how the investigator might distinguish changes motivated for this purpose from changes that just happen with no such motive". These are crucial points that are more or less

tightly connected to the problem of deliberate language change (e.g. Thomason 2007, Storch 2011), a possibility that work on non-convergent change puts under focus. None of the papers in this volume have managed to resolve these issues, but all of them can be viewed as the initial pieces of a (timidly) unfolding scholarly debate within Africanist linguistics.

4. The papers in this volume

Pius W. Akumbu and Roland Kießling focus on a set of phonological and morphosyntactic features crisscrossing two subgroups of Grassfields Bantu languages, namely Central Ring (CR) and West Ring (WR). While some of these features might be interpreted as outcomes of contact-induced convergent change between CR and WR languages—such as, e.g., Kuk and Kung (kuk and kfl; Niger-Congo, Narrow Grassfields, Central Ring) gender assignment of various nouns that pattern with WR rather than with CR, e.g., 'neck' (gender 3/4~6a) vs. CR (gender 3/6~5/13)—others are less straightforwardly interpretable this way. The most glaring example of a potentially correlated dissimilarity is the merger of two noun classes (10 and 13) in two CR, just as in WR languages. However, while WR languages have generalized class 13, the two CR languages have generalized class 10—another possible instance of crosslinguistic flipping (see previous section). Akumbu & Kießling put forward the possibility that this phenomenon is an instance of neighbor-opposition, but at the same time admit that the scanty sociolinguistic data at hand are not sufficient to substantiate (or dismiss) this claim.

In his paper, Bruce Connell aims to understand the extent to which the morphological differences that Usaghade displays if compared to the other Lower Cross (Bantoid) languages can be explained in terms of prolonged contact with neighboring Bantu A.10 languages, especially Londo (bdu; Niger-Congo, Narrow Bantu). There are three domains in which Usaghade morphology differs from the other Lower Cross languages: (i) it preserves a fully functional noun classification and agreement system which is found mostly in the form of fossilized prefixes in the other Lower Cross languages; (ii) it marks some temporal or aspectual distinctions post-verbally whereas pre-verbal marking is default among Lower Cross languages; (iii) in a form of verb classification, it uses suffixes that find no parallel among Lower Cross languages. Thanks to a thorough comparative analysis, Connell argues that Usaghade noun morphology is in a state of *arrested erosion*—i.e. all prefixes are inherited, not

borrowed—which was reasonably maintained as a result of the presence of structurally similar but formally distinct noun class systems in Londo and other neighboring languages with which the Usaghade community interacted closely for long time. Limited knowledge of verb morphology in these languages does not allow to make equally grounded claims in this regard. However, the fact that the changes in verb morphology appear to be aberrant leads Connell to cautiously hypothesize that they could be instances of contact-induced divergence. Considering that Usaghade has borrowed about a third of its lexicon from Londo, this case lends itself to be viewed as a particularly telling example that contact can lead to different outcomes in different subsystems of a language: namely, stability in noun morphology, advergence in lexicon, and divergence in verb morphology.

Di Carlo & Good discuss two conundrums in the comparative study of the Yemne-Kimbi referential group of Bantoid languages spoken in Lower Fungom, an area of high linguistic diversity located at the northern fringes of the Cameroonian Grassfields—i.e. the puzzling cross-linguistic distribution (i) of the prefixes encoding singulars of nouns having plurals in **bi-* and (ii) of the tense-aspect markers. Existing accounts of these phenomena had to recur to *ad hoc* reconstructions of language-internal processes and left unaddressed the issue of contact. In response to this gap and based on a degree of knowledge of local societies, language ideologies, and multilingual behaviors that is relatively unusual for this type of studies, Di Carlo & Good develop a sociolinguistic model that they call *social semiosis layer*. Put roughly, the model aims to predict what features of a language will be more subject to change when the community of its speakers undergoes ideological pressures for becoming more similar or more distinct from a neighboring community. In its application, in fact, the semiosis layer model does not serve the purpose of predicting change but, rather, of assessing the likelihood that a given change might be attributed to processes of what the authors label *neighbor-bias*—a novel concept that includes but is not limited to Larsen's (1917) *nabooppositio*n. Linguistic items (i.e. any piece of structure or lexicon that can be learned and transmitted) are assessed in terms of their potential for encoding neighbor-bias (e.g. usage frequency), for being readily acquirable (e.g. semantic congruence of forms in the languages involved), and for being minimally disruptive of the existing systems. The analysis of both Yemne-Kimbi conundrums reveals that the phenomena under analysis involve items having high potentials in all these dimensions, which makes them good candidates as exemplary members of a layer of items that are expected to be leveraged first in situations of increased need

for a community to obtain distinctiveness from its neighbors. The ethnographic and historical overview provided by Di Carlo & Good suggests that speech community events compatible with this kind of language change processes can be reconstructed in the history of the Cameroonian Grassfields as a whole.

Georg Ziegelmeyer presents data about the distribution of twelve features among languages of the Bade-Ngizim group of West Chadic B.1. Some, like the loss of a distinctive opposition between two r-sounds, can be interpreted as the outcome of convergent change towards one or the other of the main languages of the wider region—i.e. Hausa or Kanuri. Others can be accounted for by language-internal factors, like the fact that a prefix *a-* encoding third person independent pronouns across all related varieties can take on the value of marking third person direct and indirect object pronouns in one of them (Gashua Bade). Two features are especially puzzling as they escape both areal and genetic interpretations. One is the presence of a verb meaning 'have' in two languages within an area where predicative possession is expressed through comitative constructions, with the roots being different in the two languages and having no known etymology. Another is nunation—i.e. the presence of an -n suffix—on nouns to mark indefiniteness, which is a non-inherited feature observed only in Western Bade and can hardly be the outcome of contact. Given these difficulties, Ziegelmeyer resorts to *nabooppositio*n as the most promising research hypothesis to test in future studies, but also stresses the lack of sociolinguistic and historiographical data for the region as the main obstacle to further pursue this goal.

5. Conclusion

What I tried to summarize so far brings about a reflection about the significance of this research for linguistic typology. In concluding his review of case studies of contact-induced divergence, Evans writes that:

> [a]lthough it is likely that contact-induced divergence is commoner in the lexicon, phonetics and phonology (Sankoff 2002), probably because these are generally the most accessible to conscious monitoring, the examples I have marshaled here [i.e. lexicon (Banks Islands of Vanuatu), phonetics and phonology (Temiar, Barasano, twelfth-century Vietnamese), morphology (Iwaidja), syntax (Portuguese DOM), and the semantics of grammar (Kuninjku)] show that the range of

> divergence effects goes much further than has generally been realized by historical linguists. (Evans 2019: 587)

If patterns of non-convergent change may materialize beyond the lexicons of languages in contact, then advances in this field might call for some future adjustments in typological language sampling. Typologists need to avoid both areal and genetic biases in constructing samples, so that languages from the same part of the world (i.e. that may bear signs of mutual resemblance because of contact) and from the same family (i.e. that may bear signs of mutual resemblance because of parallel evolution from a common source) are not overrepresented (e.g. Dryer 1989, Miestamo et al. 2016). Should future research identify the existence of areas where contact materializes also in *structural* non-convergent change, this should be considered as a third variable for a balanced (or just informed) sampling, as languages contained in such areas might be dissimilar from each other due to small-scale reactions among neighbors' structures. We are not any close to this and such a possibility would come out of the blue for most of today's typologists. At the same time, it cannot be ignored that the current scarcity of data about non-convergent change under contact is also due to discipline-internal dynamics. Our limited knowledge enables us to raise legitimate and, I believe, relevant questions that only future work can aspire to answer.

This work will have to be based on new field-based research. I have already mentioned that the availability of more and better sociolinguistic and ethnographic data is paramount for the study of language contact to be able to capture phenomena of non-convergent change. In addition, the virtual absence of psycholinguistic studies focusing on African languages (let alone on those spoken in contexts of small-scale multilingualism) represents another formidable obstacle to the advancement of knowledge in this domain, and this should change, too. The studies in this volume call for more scholarly efforts towards the collection of these types of data in African settings, with the hope that this is done through the active inclusion of both local scholars and communities of speakers.

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earlier version of this paper. All the papers in this volume except for Connell's have been developed on the basis of presentations given at the workshop entitled "Language contact and non-convergent change in West African languages", held within the 4th Symposium on West African Languages (University of Naples "L'Orientale", 21-23 September 2022). My gratitude goes to the conference organizers and participants for their stimulating feedback and discussions, in particular Zygmunt Frajzyngier, Tom Güldemann, and Valentina Schiattarella.

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Variation in Central Ring: Convergence or divergence?

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Abstract

Central Ring (CR) Grassfields Bantu languages of Cameroon seem to form a distinct subgroup within Ring that can be delimited from the West Ring subgroup by some isomorphs (e.g., absence of noun class 4, presence of a contrast of plural noun classes 10 vs. 13, absence of a fully morphologicized aspectual focus system), a couple of isoglosses such as **m-lám* (6a) 'blood', **m-fú(k)* (6a) 'pus', **kə-bvôl* (7) 'ashes', **fɨ̀ / *kʊ̀l* (9/10) 'rope', **kə-fûk* (7/8) 'farm' and gender affiliations of nominal concepts, e.g., **ú-lûə* 'bridge' in (3/13 vs. 3/6a). The standing challenge is to sort out the precise motivations for these divergent developments, i.e., to what extent they have been inspired by the felt need to accommodate to a target external to CR in the first line, or to what extent the ultimate driving force could rather have been the desire to dissociate from CR neighbours and increase linguistic distinctions as symbolic consolidation of sociopolitical independence.

Keywords: Ring languages; Cameroon; variation; convergence; divergence.

1. Introduction

The Central Ring (CR) languages of the Cameroonian Grassfields form a distinct subgroup within Ring that can be delimited from the West Ring (WR) subgroup by various isomorphs and isoglosses[1], as listed in Table 1. The isomorphs are the

[1] In accordance with established practice in dialectology and historical linguistics, we use the term "isomorph" to refer to a line indicating the limit of the spread of a morphological feature shared across a given area, in distinction to an isogloss that refers to such a line for lexical phenomena (Bussmann 1996, Beekes 1995, Händler & Wiegand 1982).

following: absence of noun class 4, presence of a contrast of plural noun classes 10 vs. 13, absence of a fully morphologicized aspectual focus system. The most salient isoglosses are: **m-lám* (6a) 'blood', **m-fʉ́(k)* (6a) 'pus', **kə-bvôl* (7) 'ashes', **fɨ̂ / *kʊ̀l* (9/10) 'rope', **kə-fûk* (7/8) 'farm'[2]. Another type of isomorph is constituted by the gender affiliation of various nominal concepts, e.g., **ú-lûə* 'bridge' in (3/13 vs. 3/6a).

	CR	**WR**
class 4	-	+
class 10 vs. 13	+	-
morphologicized aspect focus	-	+
gender of **ú-lûə* 'bridge'	3/13	3/6a
'blood'	**m-lám* (6a)	**tə-kâŋ* (13)
'pus'	**m-fʉ́(k)* (6a)	**u-dzʉ̂d* (3)
'ashes'	**kə-bvôl* (7)	**u-dzɨ̂m* (3)
'rope'	**fɨ̂ / *kʊ̀l* (9/10)	**kə-bá?* (7/8)
'farm'	**kə-fûk* (7/8)	**ú-súm* (3/4)

Table 1: CR vs. WR isomorphs and isoglosses. [3]

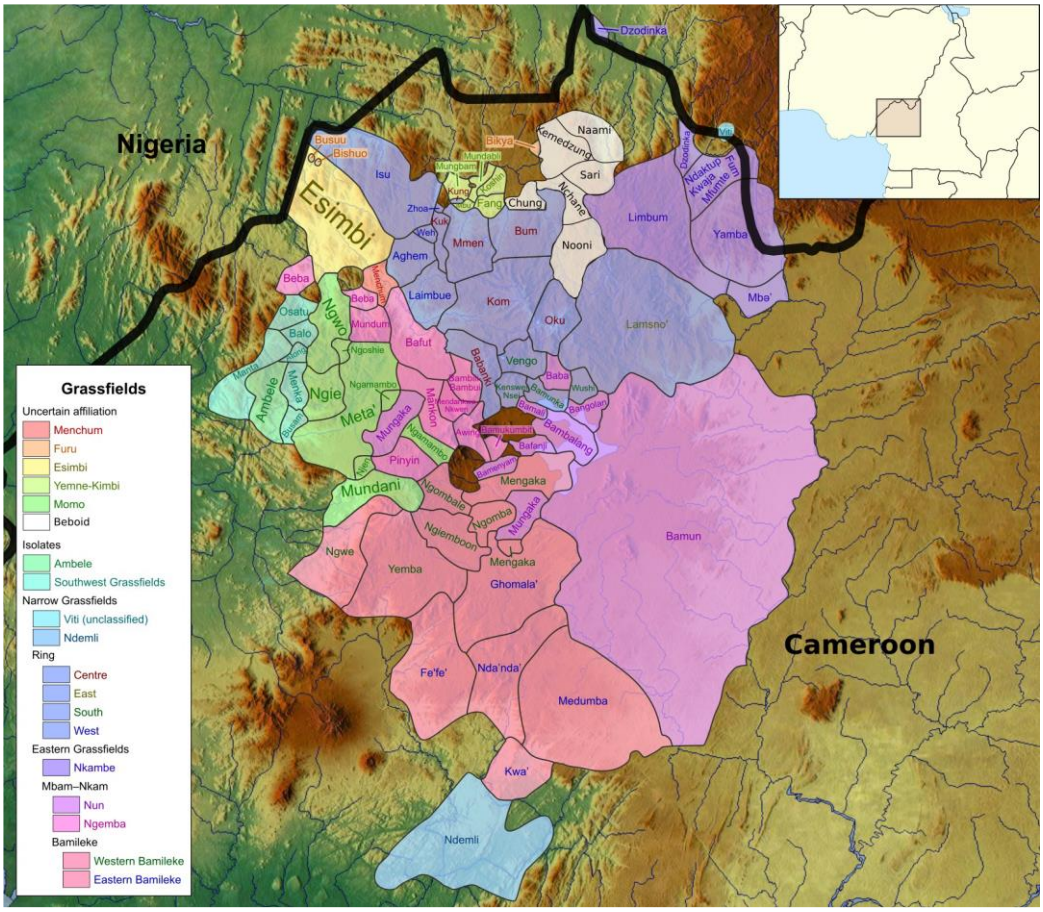
Eberhard, Simons & Fennig (2023) identify seven CR languages (Benue-Congo, Bantoid, Narrow Grassfields, Central Ring), listed here with their Glottocodes (Hammarström, Forkel, Haspelmath, & Bank 2022): Babanki (baba1266), Bum (bumm1238), Kom (komc1235), Kuk (kukk1239), Kung (kung1260), Men (mmen1238), and Oku (okuu1243). The following map shows the languages of the Grassfields region discussed in this study.

While the delineation of CR is far from established and complete, owing to serious lacunae in documentation, various trends of divergence crystallize, setting apart individual CR languages from the common CR core.[4] Thus, Babanki, on the Southern

[2] Other WR/CR isoglosses include 'all': WR *dzɛ̀m* (+Babanki) vs. CR *kɨ́m*; 'road, path': WR *dzɨ̀d* (+Babanki, Kom, Oku) vs. CR *ūnɔ́m* (Bum, Kuk, Kung, Men); 'salt': WR *ḿtsò?* vs. CR *ḿgbáŋ* (+Bu).

[3] The data used in this study have mostly been taken from the following sources: Babanki (Akumbu & Chibaka 2012), Kom (Jones 2001), Oku (Yensi 1996, Blood & Davis 1999), Men (Chiatoh 1993, Mua 2015, Möller 2012, Björkestedt 2011, Bangha 2003), Kuk (Kießling 2016, Pleus 2015) and Kung (Kießling 2019: 149, Schlenker 2012). Babanki data have been supplemented by the first author. Men, Kuk and Kung data have been supplemented based on fieldnotes by the second author.

[4] See Watters (2003), Tatang (2016), Hammarström, Forkel, Haspelmath, & Bank (2022), Eberhard, Simons & Fennig (2023) for divergent classifications of Central and West Ring languages.



Map 1: Grassfields Bantu languages (Wikimedia Commons 2022) modified by Pierpaolo Di Carlo

fringes of CR, seems to have acquired various Eastern Grassfields Bantu (EGB) features such as general low tone on noun class prefixes, reallocation of several nouns from gender 9/10 to 1/2, consecutive multiverb constructions for the expression of path notions rather than asymmetrical verb serialisation which seems to be standard in CR otherwise.

Kuk and Kung on the Northwestern fringes of CR, diverge from the CR standard by their complete merger of plural class 13 (**tə*) with plural class 10 (**sə*). This can be seen as an instance of partial approximation towards WR standards in that the contrast of plural classes 10 and 13 is given up, as in WR. Yet, distinction to WR is maintained by the fact that the merger generalizes class 10 **sə* which is precisely the form that WR has given up in favour of class 13 **tə*. Additionally, an affinity of both Kuk and Kung to WR can be seen in the gender assignment of various nouns that pattern with WR rather than with CR, e.g., 'tail' (3/4 or 3/6 vs. CR 3/13 or 3/6), 'compound' (7/8) vs. CR 7/6a~13), 'neck' (3/4~6a vs. CR 3/6~5/13). As a standing challenge, the task remains to sort out the precise motivations that underlie these

divergent developments, i.e., to which extent they have been inspired by the felt need to accommodate to a target external to CR in the first line, i.e., WR (Aghem [aghe1241; Benue Congo, Bantoid, Narrow Grassfields, West Ring], Zoa [zhoa1238; Benue Congo, Bantoid, Narrow Grassfields, West Ring]) in the case of Kuk and Kung or Bafut (bafu1246; Benue Congo, Bantoid, Narrow Grassfields, Ngemba) in the case of Babanki – or to which extent the ultimate driving force could rather have been the desire to dissociate from CR neighbours and increase linguistic distinctions as symbolic consolidation of sociopolitical independence.

In this study we explore these divergences under the perspective of their potential direction and underlying motivation. While some of the linguistic facts may be explained by convergence to external targets, others appear to be a manifestation of naboopposition (Larsen 1917). We begin in §2 with Babanki which shares various features with Eastern Grassfields Bantu (EGB) languages, and proceed in §3 to Bum whose causative extension shows a remarkable deviation from CR standards in shifting proto **s* to *h*. In §4, the devoicing of initial Proto-Ring stops and affricates in root initial position in Men, Kuk and Kung is discussed, followed by the merger of plural Classes 10 and 13 in Kuk and Kung in §5. In §6, the affinity of both Kuk and Kung to WR is evoked by examining the gender assignment of various nouns that pattern with WR rather than with CR. The difficulty to sort out the precise motivations that underlie these divergent developments is pointed out in the conclusion in §7.

2. Babanki

Babanki deviates from general CR by what looks like the acquisition of EGB features, as compiled in Table 2. These features are: general low tone in noun class prefixes (section 2.1), re-allocation of a few nouns from gender 9/10 to 1/2 (section 2.2), consecutive multiverb constructions via a homorganic nasal prefix N- for the expression of path notions rather than asymmetrical verb serialisation (ASVC) which seems to be standard in CR otherwise (section 2.3).

	CR	**Babanki**	**EGB**
NPx tone	H	L	L
gender of loanwords	9/10	1/2	1/2
same subject clause linkage	ASVC	N-	N-

Table 2: Babanki deviation from CR and alignment with EGB

2.1. Low tone in noun class prefixes

As in the Ring and Momo sub-groups of Western Grassfields Bantu generally, noun class prefixes (NPx) in Central Ring languages have high tone underlyingly. However, Babanki singles itself out as the only Ring language that rather has L tone NPx, matching with EGB, as well as Narrow Bantu where NPx have low tone (Akumbu and Hyman 2017: 1–2). As shown in the following examples involving the noun 'fufu', the high tone in Oku *ká-bân* (1a) and Kom *á-báyn* (1b) contrasts with the low tone in Babanki cognate *kə̀-báyn* (1c).

(1) NPx in selected Ring languages (Benue Congo, Bantoid, Narrow Grassfields, Central Ring)

a. Oku
má nə̀ kùm ká-bân
1SG P2 touch 7-fufu
'I touched fufu.'

b. Kom
má làe kùm á-báyn
1SG P2 touch 7-fufu
'I touched fufu.'

c. Babanki
mà tə̀ kùm kə̀-báyn
1SG P2 touch 7-fufu
'I touched fufu.'

In isolation, the high tone in these noun prefixes is generally lowered to mid, as is shown in Table 3, while the low tone in Babanki noun prefixes is maintained as such without being affected by any further lowering.

Tone	Babanki	Bum	Kom	Kuk	Kung	Men	Oku	Gloss
H_1 (H$\underset{\circ}{\text{H}}$)	*ə̀-fwín*	*ū-fwén*	*ī-fwɛ́n*	*kə̄-fʌ́i*	*kə̄-fwéi*	*ā-fwé(i)n*	*ə̄b-fín*	'leg (tibia)'
H_2 (H$\underset{\circ}{\text{L}}$)	*ə̀-kwə́ŋ*	*ū-kpə̂n*	*ī-kwɔ́*	*kə̄-kpʌ́i*	*kə̄-kpʌ́i*	*ā-kɔ́(i)n*	*ə̄b-kɔ̂i*	'arm'
L_1 (L$\underset{\circ}{\text{H}}$)	*ə̀-ɣɔ́ŋ*	*ī-wɔ̄ŋ*	*ī-ɣɔ̄ŋ*	*ī-wɔ̄ŋ*	*ī-ɣɔ̄ŋ*	*ē-ɣɔ̄ŋ*	*ī-ɣɔ́ŋ*	'spear'
L_2 (L$\underset{\circ}{\text{L}}$)	*fə̀-kɔ̀ʔ*	*fū-kə̂k*	*fī-kâʔ*	*fə̄-kâʔ*	*fə̄-kâʔ*	*fē-kâʔ*	*fē-kə̂k*	'tree'

Table 3: NPx tone of nouns in isolation

Now it might be argued that this general CR trend of NPx lowering of H to M produces a situation which is half-way towards the Babanki L tone. So, there may not be much of a difference, since it could be assumed that Babanki simply presents the final stage in a development with the rest of CR lagging behind by one step. This scenario, however, will not explain another crucial difference between CR and Babanki here, which is obvious in nouns such as 'tree'. In all of CR, it bears a HL falling contour tone in the root, while in Babanki it is low throughout. This actually reveals that in all of CR the original high tone of the NPx must have spread to the nominal root to produce a falling tone with the lexical low tone of 'tree' before its lowering to mid (Hyman 2005: 318). This is illustrated by the Oku (2a) and Kom (2b) examples where spreading of the NPx H creates HL falling contour tones on underlying L roots in both languages. Having spread to the root tone, the NPx H is then realized as M in isolation. In Babanki (2c), however, the absence of such a falling tone attests to the fact that there was no prior high tone in the NPx which could have affected the lexical low tone.

(2) NPx high tone spread and NPx lowering in Kom and Oku vs. Babanki
(Benue Congo, Bantoid, Narrow Grassfields, Central Ring)

a. Oku
/fé-kàk/ —› *fékâk* —› *fēkâk* 'tree'

b. Kom
/fɨ́-kà?/ —› *fɨ́kâ?* —› *fɨ̄kâ?* 'tree'

c. Babanki
/fə̂-kɔ̀?/ —› *fə̂kɔ̀?* 'tree'

The low-toned Babanki NPx is also subject to modification, i.e., it is raised to M under high tone influence, i.e., in constructions where it appears between two H tones (Akumbu 2019) as a result of partial assimilation, as indicated by underlining in (3b). The last example in (3b) shows that the NPx tone is not raised to M if not directly followed by a H tone.

(3) Babanki prefix tone (Benue Congo, Bantoid, Narrow Grassfields, Central Ring)

a.	*kəkɨ́m*	'crab'
	vətsɔ́ŋ	'thieves'
	vəlàmà	'brothers'
b.	*kəkɨ́m ká vətsɔ́ŋ*	'crab of thieves'
	vətsɔ́ŋ vá kəkɨ́m	'thieves of crab'
	kəkɨ́m ká vəlàmà	'crab of brothers'

The Babanki low NPx reflects the original situation, as reconstructed for Proto-Bantu (Meeussen 1967). The high NPx of the other CR languages appears to have been acquired from the augment which is reconstructed with a high tone (Hyman 2005). Following Hyman's argument, we assume that the H tone in the NPx of CR languages is a result of the augment H tone spreading to the NPx and ousting its L tone in most contexts before the augment was finally deleted, following the processes formulated in (4) and spelt out explicitly with an Oku example.[5]

(4) CR derivation of H tone prefixes from augment H

a. Augment high tone spreading:
/Ý-(C)Ỳ-R/ —› Ý-(C)Ŷ-R, e.g., Oku */Ý-fè-ɣàm/* —› *Ý-fê-ɣàm*
AUG-NPx-R
b. delinking of NPx low tone
Ý-(C)Ŷ-R —› Ý-(C)Ý-R, e.g., Oku *Ý-fê-ɣàm* —› *Ý-fé-ɣàm*
AUG-NPx-R
c. deletion of augment
~~Ý~~-(C)Ý-R, e.g., Oku *Ý-fé-ɣàm* —› *fé-ɣàm*
~~AUG~~-NPx-R

Regarding the retention of the low NPx in Babanki, one could argue that the high tone augment in Pre-Babanki was simply deleted before it could spread its tone to the NPx, but it remains unclear why only Babanki would have been affected by this process. We suggest that high tone spreading (HTS) from the augment to the NPx

[5] The NPx L is retained in N2 position as complement of various prepositions or as modifier in associative constructions, e.g., Oku *ī-ʃɔ́ŋ á kè-kɔ̀s*. This L prefix on N2 nouns "is characteristic of all or most of Western Grassfields Bantu" (Hyman 1979: 36).

must have occurred in CR after the split of Babanki from the rest of CR and its association with Bafut, an EGB community (Yenshu Vubo 2001). Pre-Babanki, on its part, would then have retained the low NPx under pre-Bafut influence, deleting the H tone augment without any trace.[6] Babanki's preference to keep low NPx like their current neighbour could be justified by the fact that "all noun prefixes have a low tone" in Eastern Grassfields languages (Watters 2003: 240), e.g., Bafut (Mfonyam 1989, Tamanji 2009). The low NPx might also result from a high influx of Bafut L1 speakers imperfectly learning Pre-Babanki. Both situations, nevertheless, suggest some type of contact induced convergence. On the other hand, a hypothesis of divergence is also possible, in the event that the Babanki were deliberately attempting to dissociate from Kom or the rest of Pre-CR. We currently do not have evidence to determine whether the Babanki low tone NPx was motivated by convergence or divergence. Such evidence might be hidden in the undocumented migration history and socio-political relations as they happened before the 17th century between various Grassfields communities.

2.2. Re-allocation of gender 9/10 nouns to gender 1/2

Babanki deviates from the rest of CR by re-allocating various nouns that refer to borrowed nouns and some miscellaneous items to gender 1/2 instead of 9/10, as is common in the rest of CR and WR, exemplified in Table 4.

In this regard, Babanki aligns with neighbouring EGB languages, e.g., Bafut which does not only show the same tendency to assign borrowings to 1/2 (Mfonyam 1989: 124, Tamanji 2009), but also often matches on the level of the individual concepts assigned to 1/2, independently of cognacy of the lexical root, e.g., RAT, HORSE, FLOWER, TABLE, LOCK, ORANGE, RADIO, MOON/MONTH. Two other items also assigned to 1/2 in Bafut, i.e., 'moon, month' and 'potato', have been dragged along and reassigned to 1/2 for the same reason.

[6] If loss of the high tone augment had been inspired by contact to EGB, it must have occurred before the high tone spreading to the NPx. If it had been later, it would be hard to account for the absence of high tone effects in low tone roots such as Babanki *ə-ɣàm* in (2).

Language	'orange'	'pot'	'potato'	class
Proto-EG	**?*	**tòǹ*	**?*	1
Bafut	*lâmsɨ̀*	*àntɔ̀ɔ̀*	*àndɔ̀ŋə̀*	1
Mankon	*lāmsɨ̀*	*àntò*	?	1
Babanki	*lâmsə̀*	*ntɔ̀n*	*ndɔ̀ŋ*	1
Kom	*lámbās*	*ntɔ̀in*	*ndɔ̀ŋ*	9
Oku	?	*ntɔ̀n*	*ndɔ̀ŋ*	9
Men	*lámâs*	*tɔ̀in*	*ndɔ̋ŋ*	9
Aghem	*lámá*	*tɔ̀e*	*ndɔ́ŋ*	9

Table 4: Cognates of CR class 9 nouns assigned to Babanki class 1

A comparison of the relevant nouns in Bafut and Babanki is provided in Table 5, where Babanki non-cognate items are given in square brackets.

	Bafut		**Babanki**	
	SG	**PL**	**SG**	**PL**
'orange'	*lâmsɨ̀*	*bɨ̀lâmsɨ̀*	*lâmsə̀*	*və̀lâmsə̀*
'radio'	*rɛ̄dyō*	*bɨ̀rɛ̄dyō*	*lédyò*	*və̀lédyò*
'table'	*tábɛ̀rɨ̀*	*bɨ̀tábɛ̀rɨ̀*	*tábə̀lə̀*	*və̀tábə̀lə̀*
'lock'	*lógɨ̀*	*bɨ̀lógɨ̀*	*lɔ́k*	*və̀lɔ́k*
'flower'	*fɨ̀láwà*	*bɨ̀fɨ̀láwà*	*fə̀láwà*	*və̀fə̀láwà*
'pig'	*kúŋàm*	*bɨ̀kúŋàm*	*ŋkʉ̆ŋàm*	*və̀ŋkʉ̆ŋàm*
'rat', 'mouse'	*fórə̄*	*bɨ̀fórə̄*	*[tʃʊ̆kʉ̀ʔ]*	*[və̀tʃʊ̆kʉ̀ʔ]*
'cock'	*àŋkə̀gɨ̀*	*bàŋkə̀gɨ̀*	*ŋkə̀ʔ*	*və̀ŋkə̀ʔ*
'horse'	*láŋə́*	*bɨ̀láŋə́*	*là̰ŋ*	*və̀là̰ŋ*
'cat'	*búʃɨ̀*	*bɨ̀búʃɨ̀*	*bùʃí*	*və̀bùʃí*
'co-wife'	*fúʔù*	*bɨ̀fúʔù*	*fɨ̋f*	*və̀fɨ́f*
'friend'	*ǹʃúkàʔà*	*bɨ̀ʃūbɨ́kàʔà*	*[wùndɔ́ŋ]*	*[və̀ndɔ́ŋ]*
'witch'	*sɔ̀rɨ̀, ndɨ̀ɨ̀*	*bɨ̀sɔ̀rɨ̀, bɨ̀lɨ̀ɨ̀*	*[ʒɛ́]*	*[və̀ʒɛ́]*
'moon', 'month'	*sàŋ*	*bɨ̀sàŋ*	*sàŋ*	*və̀sàŋ*
'pot'	*àntɔ̀ɔ̀*	*bàntɔ̀ɔ̀*	*ntɔ̀yn*	*və̀ntɔ̀yn*
'potato'	*àndɔ̀ŋə̀*	*bàndɔ̀ŋə̀*	*ndɔ̀ŋ*	*və̀ndɔ̀ŋ*

Table 5: Bafut and Babanki nouns in Gender 1/2

Table 5 shows that in many cases it is not the forms themselves that have been borrowed from Bafut to Babanki, but rather the noun class assignment of a substantial number of nominal concepts has been streamlined with Bafut, independently of their formal expression. This is evident from (a) the non-cognate forms marked by square

bracketting, i.e., 'rat, mouse', 'friend', and 'witch', and (b) cognate forms that show a considerable degree of formal divergence, e.g., Babanki *ntɔ̀yn* 'pot' (vs. Bafut *àntɔ̀ɔ̀*) or *ŋkə̀ʔ* 'cock' (vs. Bafut *àŋkə̀gɨ̀*) (Akumbu & Wills 2022). Notice, for instance, that the Bafut item for 'cock' retains a root-final velar stop that has been shifted to glottal stop in most of CR including Babanki. Also, the Bafut item for 'pot' seems to have compensated the loss of the root final nasal by vowel lengthening, and installed an extra vowel, which might have been a prefix historically.[7]
This suggests that the agents of change may have been bilingual Babanki speakers orienting towards the Bafut model - either with an aspiration to align with their Bafut allies or else to dissociate from their CR neighbours – or even both.[8]

2.3 Consecutive multiverb constructions

Babanki also deviates from the CR standard in its expression of verb linkage in various types of same subject multiverb constructions, aligning with EGB languages by using a homorganic nasal prefix N- for verbal consecutivisation. In contrast, all the other CR languages seem to lack such consecutivising nasal prefix N-, simply juxtaposing the verbs without any formal linking device in asymmetrical serial verb constructions for various functions, e.g., deictic orientation, path/vector indication, aspect, result, detrimental effect, manner and comparison, as is common in West Ring (Kießling 2011), and in Kuk (5), Kung (6), and Men (7).

(5) Kuk (Benue Congo, Bantoid, Narrow Grassfields, Central Ring): asymmetrical SVCs with various co-verbs

a. Completion with co-verb *mʌ̀nì* 'finish' (iterative: *mʌ̀lkə̀*)

ù	*pfíʌ*	*mʌ̀lkə̀*	*tʃūɔ́*	*wéá*	*kə́ᵘbó*	*pát*⁷
3SG	chew	finish	descend	2.children	N2:7.lion	completely

'He ate all the children of the lion - finish!'

[7] The loss of the root final nasal and compensatory lengthening analysis needs further checking especially because Bafut coda consonants are only nasals.

[8] While specific alliances are not discussed in this study, it helps to point out that some historical accounts of migration in the Grassfields area report wars between Babanki vs. Oku, Babanki vs. Kom but none between Babanki and Bafut (Chilver & Kaberry 1967, Geary 1980, Yenshu Vubo 2001), suggesting greater political ties between these two.

b. Detrimental effect with *màʔà* ‘throw away’
m̄ *kâ* *sʉ̀lə̀* *màʔà* *m̀múɔ̄*
1SG F2 scatter.IPF throw.away.IPF 6a.water
‘I will be scattering water.’

c. Comparison with co-verb *tsùɔ* ‘pass’
má *tàb* *tsùɔ* *ɣò*
1SG:P1.FOC tall pass 2SG
‘I’m taller than you.’

d. Deictic orientation: centripetal *bɛ̀* ‘come’
ù *nèi* *bɛ̀* *ɣò* *m̀* *tsə̌mbī* *m̀*
3SG take come 2SG with 6a.groundnuts OF.6a
‘She brings you groundnuts.’

e. Path/vector: *tʃúɔ* ‘descend; down’
kpʌ́ *tʃúɔ* *tú* *k-ɨ́ŋ*
chop.IMP descend.IMP 7.head 7-D1
‘Chop off this head!’

(6) Kung (Benue Congo, Bantoid, Narrow Grassfields, Central Ring): asymmetrical SVCs with various co-verbs

a. Completion with co-verb *mʌ̀sə̀* ‘finish’
ɣàsə́ *khìa* *mʌ̀sə̀* *ɣɛ́* *ʌ́* *náe*
1PL.EXCL P0 slice finish matter at today
‘We have finished discussing the topic for today.’

b. Detrimental effect with *màʔà* ‘throw away’ (imperfective: *màʔkə̀*)
ù *tīnə́* *màʔkə̀* *mē*
3SG push.IPF throw.IPF 1SG
‘He is pushing me uselessly (e.g., in bullying).’

c. Path/vector: *fə́sə́* ‘take out’ (< *fə́* ‘exit’), *kɔ́ʔsə́* ‘lift’ (< *kɔ́ʔ* ‘ascend’)
wŭə *ᵑgúɔ* *sʌ̀i* *fə̄sə́* *kɔ̄ʔsə́* *mē* *ʌ̄* *bûʔ* *kə̀*
SM.1:P0.FOC catch pull take.out lift 1SG at hole(s) OF.7
‘S/he has dragged me out of the hole.’

d. Path/vector: *kɔ́ʔ* ‘ascend, climb; up’
bɔ́ŋ *ᵑgkɔ́ʔ* *mwàʔlə̀* *k-ê*
pick.IMP ascend.IMP book 7-D2
‘Pick up that book!’

(7) Men (Benue Congo, Bantoid, Narrow Grassfields, Central Ring): asymmetrical SVCs with various co-verbs

a. Completion with co-verb *mɨsɛ̀* 'finish'
è *və́* *fià?* *mɨsɛ̀*
3SG 1.PF work finish
'S/he has finished work.'

b. Detrimental effect with *mà?à* 'throw away'
è *və́* *ˈtsúintê* *má?à* *kà?* *m-ê*
3SG 1.PF chop.PF throw trees 6a-D3
'S/he has cut down and thrown away those trees.'

c. Deictic orientation: centripetal *pèin* 'come'
mɨ́ *kúlə̂* *pèin*
1SG.PF return.from.farm come
'I have come back from the farm.'

d. Path/vector: *ndzɨ́sé* 'insert' < *ndʒí* 'enter'
mɨ́ *ndʌ̀m* *ndzɨ́sé* *ʃéin*
1SG.PF put insert bag
'I have put it into the bag.'

For the expression of the same functions, i.e., path/vector in motion events (8), results (9) and comparison (10), Babanki refrains from using serialization, but rather resorts to a consecutivising construction formed by prefixing all non-initial verbs with a homorganic nasal linker N-. In this Babanki aligns with Bafut (and other EGB languages) where the same nasal prefix is used for consecutivising function. Historically, two interpretations are possible: either Babanki acquired the pattern from Bafut, or all of CR lost an erstwhile consecutivising homorganic nasal prefix and only Babanki retained it – under EGB (i.e., Bafut) influence. The underlying motivation might have been either a desire by the Babanki to accommodate to Bafut standards or to distinguish themselves from CR neighbours, an issue that could best be retraced from historical records which we lack.

(8) Locatives/Directional constructions

a. Babanki (Benue Congo, Bantoid, Narrow Grassfields, Central Ring)
ɲám *sə-tsɛ̀m* *sə́* *yì* *kú?* *n-dʒʉ́* *á* *ə̄-kàŋ*
animal 10-all SM P1 climb N-go to 5-heaven
'All the animals went (up) to heaven.'

b. Bafut (Benue Congo, Bantoid, Narrow Grassfields, Ngemba; Tamanji 2009: 203)
nàà dʒá tsɨ̀m dʒí kɔ́ʔɔ́ ŋ-ɣɛ̀ɛ̂ á àbùrɨ̀
animals the all SM climb N-go to heaven
'All the animals went (up) to heaven.'

(9) Resultative constructions

a. Babanki (Benue Congo, Bantoid, Narrow Grassfields, Central Ring)
wùbúm yì tɛ̀m nyàm n-ʒwí
hunter P1 shoot 9-animal N-kill
'The hunter shot the animal dead.'
b. Bafut (Benue Congo, Bantoid, Narrow Grassfields, Ngemba; Tamanji 2009: 204)
ŋùbóò w-á à kɨ̀ túmə̂ n-àà j-á n-ʒwítə̂
hunter 1-the SM P2 shoot 9-animal 9-the N-kill
'The hunter shot the animal dead.'

(10) Comparative constructions

a. Babanki (Benue Congo, Bantoid, Narrow Grassfields, Central Ring)
tɔ̀lɔ̀kyí yì ɲ-ɲɨ́ŋ n-tʃó ŋgó
1.tortoise P2 N-run N-surpass 1.deer
'Tortoise ran faster than Deer.'
b. Bafut (Benue Congo, Bantoid, Narrow Grassfields, Central Ring; Tamanji 2009: 205)
kwímáŋkɔ̀ʔɔ̀ à lɛ́ ŋ-kxə̌ n-tʃə̌ n-gyâ
1.tortoise SM P3 N-run N-surpass 1-deer
'Tortoise ran faster than Deer.'

Tracing the reasons for this influence requires going back to historical events approximately three to four hundred years back when the Babanki and Bafut are believed to have been related or a single Tikari group living in the Ndop plain (Chilver & Kaberry 1967: 19, Yenshu Vubo 2001, Ngwa 2022: 623). According to Bafut legend, they fled from Fulani warriors in Foumban and lived in the Ndop plain for many years. Ritzenthaler (1967: 11–12) reports that "when their Fon died, three of his

stronger sons wrangled fiercely over which should succeed him. The argument seemed about to flare into open battle until one son suggested that they divide the tribe and that two of them move elsewhere to establish new villages". The group was divided into four parts so as to give two parts to the son who made the brilliant suggestion and one part to each of the other sons. One of the sons with one part decided to stay in Ndop and form present day Bamunka while the other moved to form present day Bafut. The one with two parts moved to form present day Babanki. It is not known with certainty whether the Babanki and Bafut ever lived together again or as direct neighbours thereafter but it is known that to get to their present sites, each group went through diverse migratory routes and fought many wars along the way.

3. Bum

Another CR puzzle pertains to the isolated innovation of the phoneme /h/ in Bum (Benue Congo, Bantoid, Narrow Grassfields, Central Ring). Remarkably, the innovation of /h/ is restricted to the causative extension *–hi* as reflex of the Proto-Ring **-sV* suffix that retains its sibilant in all other CR languages, as shown in (11).

(11) Causative suffix *-hi* vs. *–sV* (rest of CR)

a. *mwɔ̀m-hì* 'try', but Kom *mwɔ̀m-sì*, Oku *mwɔ̀m-sè*, Mbizinaku *mwɔ̀m-sə̀*, Babanki *mwɔ̀m-sə̀*, Men *mwɔ̀m-sè*
b. *līm-hî* 'extinguish', but Kom *lɯ́m-sɨ́*, Oku *līm-sê*, Mbizinaku *lə̄m-sə̂*, Babanki *lɛ́m-sə́*, Men *ndɨ́m-sé*, Babungo *nú-sə́*
c. *yūɣ-hî* 'perspire' but Kom *yō?-sɨ́*, Oku *zvūk-s-în*, Mbizinaku *ʒvūk-sə̂*, Babanki *ʒú?-sə́*, Men *zú?-sé*

The restriction of Bum glottal spirantisation to the causative suffix can be inferred from the retention of prior **s* in lexical roots (12) as well as in other affixes, e.g., the adnominal prefix *sə-* for class 10 (13) and its corresponding enclitic *=su* (14).

(12) Bum retention of **s* in root-initial/final position

a. *ī-sɛ̂* 'eye', cf. Kom *ī-sɯ́*, Men *ē-sɨ́*, Oku *ī-ʃiɛ̂*, Mbizinaku *ī-ʃɯ̂*, Babanki *ə̀-ʃɨ́*
b. *ū-wús* 'fire', cf. Men *ē-wʉ́s*, Mbizinaku *ə̄-və́s*

(13) Bum retention of **s* in the nominal prefix of class 10 *sə-*[9]

a. *sə̄-bvû* ‘goats’, cf. Kuk *sə̄-byí,* Kung *sə̄-ʙə̄*, Men *sē-pfɨ̄*
b. *sə̀-kʊ̀l* ‘ropes’, cf. Kung *sə̀-kʊ̀l*, Men *sē-kwɨ̀l*

(14) Bum retention of **s* in the nominal enclitic of class 10 *=su*

a. *ɲám=ᵘsú* ‘animals’, cf. Babanki *ɲám=ᵘsə́,* Kom ɲám=*sɨ̄*, Oku *ɲám=sə̄*
b. *ndʒàm=ᵘsú* ‘axes’, cf. Babanki *ndzàm=sə́,* Kom *ndʒàm=sɨ̀*, Oku *ndʒàm=sə́*

Bum may have acquired the glottal fricative from South Ring languages such as Bamessing (Kens1251; Benue Congo, Bantoid, Narrow Grassfields, South Ring; DeVries 2008), Bamunka (bamu1256; Benue Congo, Bantoid, Narrow Grassfields, South Ring; Ngeloh Takwe 2002), or Yemne-Kimbi languages (Good et al. 2011). Since Bum and South Ring do not have any geographical contact (as can be seen in Map 1), unless it happened during the migratory period or through trade connections, the most likely source would be a geographically closer Yemne-Kimbi language. Support for this possibility comes from the word for buttock, i.e., Bum *īsâh* and Buu (buuu1246; Benue Congo, Bantoid, Yemne-Kimbi) *ésáh* which both have the glottal fricative in final position. Whether such cognates were simply borrowed or not, the underlying motivation might have been either a Bum strategy to align with the speech of some Yemne-Kimbi allies or to create a distinction with CR neighbours. Again, it remains uncertain which of these options could have been responsible for the current situation.

4. Men, Kung and Kuk devoicing of plosives and affricates

Men, Kuk and Kung break away from CR by devoicing of initial Proto-Ring stops and affricates in root initial position: **b, *bv, *d, *dz, *g, *gb > p, pf, t, ts, k, kp*, as summarized in Table 6 and exemplified in Tables 7–9. Devoicing of labials is restricted to Men, as seen in Table 7.

[9] Bum class 10 aligns with all other classes in having an adnominal prefix, i.e., *sə-*. However, as in Kung (Kießling 2019), all nouns seem to provide the option of replacing their prefixes by noun class enclitics (not suffixes) under specific syntactic and pragmatic conditions. The details of these conditions remain to be clarified for Bum and other Ring languages in which this NPx vs. enclitic variation is found.

PGr	***b***	***d***	***dz***	***g***	***gb***
PB	***b***	***d***	***?***	***g***	***?***
Babanki	*b*	*d*	*dz~dʒ*	*g*	*?*
Bum	*b*	*d*	*dʒ*	*g*	*?*
Kom	*b*	*d*	*dʒ*	*g*	*?*
Kuk	*b*	*t*	*ts (~tʃ)*	*?*	*kp*
Kung	*b*	*t*	*ts (~tʃ)*	*k*	*?*
Men	*p*	*t*	*ts (~tʃ)*	*k*	*kp*
Oku	*b*	*d*	*dʒ*	*g*	*?*
Aghem	*b*	*d*	*dz*	*g*	*gb*
Bu	*b*	*t*	*ts*	*k*	*?*
Isu	*b*	*d*	*dz*	*g*	*gb*
Weh	*b*	*d*	*dz*	*g*	*gb*
Zoa	*b*	*d*	*dz*	*g*	*gb*

Table 6: Central / West Ring devoicing of initial stops

Language		**'fufu'**	**'thigh'**	**'hole', 'pit'**	**'red'**	**'bad'**	**'dance'**	**'tired'**
PB	**b*	*?	**-bèdè*	*?	**-bèŋg*	**-bíp*	**-bín*	**-búd*
PGr	**b*	**-bán`*	*?	**-bòk`*	**-bàŋ*	**-bíp*	**-bín*	**-bód-ɪ*
Aghem	*b*	*kɬbɛ́*	*kɬbî*	*kɬbô?*	*bàŋ*	*bɔ́*	*bín*	*búo*
Bu	*b*	*kábái*	*kúbî*	*kábô?*	*bàŋ*	*bá*	*bái*	*bów*
Isu	*b*	*kábá*	*kábî*	*kábwɔ̂?*	*bàŋ*	*bɛ́b*	*bán*	*bwí*
Kuk	*b*	*kābá*	*?*	*kābû?*	*bàŋ*	*bʌ́b*	*bʌ́n*	*búɔ*
Kung	*b*	*kābáe*	*kābê*	*kābû?*	*bàŋ*	*bʌ́f*	*bʌ́n*	*búɔ*
Men	*p*	*āpáin*	*āpî*	*āpû?*	*pàŋ*	*póf*	*péin*	*pɔ́*
Babanki	*b*	*kàbáin*	*kàbì*	*kàbù?*	*bàŋ*	*byɨ́f*	*bɛ́n*	*bwá?*

Table 7: Men devoicing of **b*

Devoicing of the dental series **d* and **dz* is illustrated in Tables 8-9. West Ring Bu (sometimes) seems to pattern with Kuk and Kung in devoicing non-labial stops and affricates.

Language		‘long’	‘cry’	‘heavy’	‘get old’	‘sit’	‘cross’
PB	**d*	**dà, *dèepù*	**-dìd*	**-dìtù, *dìtò*	**-nùnù*	**-dìàd*	**?*
PGr	**d*	**-dàb*	**-ddìl*	**-ddìd*	**-dùn*	**?*	**?*
Aghem	*d*	*dà*	*dìi*	*dɨ̀n*	*dwɨ̀n*	*dɔ?ɔ̀*	*dàŋ*
Bu	*t*	*tàh*	*tɨ̀i*	*tɨ̀*	*?*	*?*	*tàŋ*
Isu	*d*	*dàb*	*dìi*	*dʌ̀d*	*dzòn*	*dɔ?ɔ̀*	*dàŋ*
Kuk	*t*	*tàb*	*tɨ̀i*	*təkə̀*	*tɨ̀n*	*tʌ?ʌ́*	*tàŋ*
Kung	*t*	*tyàf*	*tì*	*tɨ̀l*	*tyɨ̀n*	*tè?è*	*?*
Men	*t*	*tyàf*	*tʃì*	*tɨ̀l*	*tɥìn*	*tà?ə*	*tyàŋ*
Babanki	*d*	*dyə̀f*	*dì*	*dì?*	*dwìn*	*[ɲú?má]*	*dyàŋ*

Table 8: Men/Kuk/Kung (*Bu) devoicing of **d*

Language		‘hunger’	‘back’	‘say, tell’	‘bunch’	‘voice’	‘path’	‘nice’
PB	**j*	**-jádà*	**-yìmà*	**?*	**?*	**-júì*	**-jìdà*	**?*
PGr	**j*	**-jè(ŋ)*	**-jìm*	**?*	**?*	**-gì[l]`*	**-jì[l]`*	**bòŋ*
Aghem	*dz*	*dzɨ̀ŋ*	*dzɨ̀m*	*dzɛ̀*	*dzɨ̀yà*	*dzɨ́*	*dʒɨ́*	*dzɔ̀*
Bu	*ts*	*tsə̀ŋ*	*tsɨ̀m*	*?*	*?*	*tsɨ́*	*tsɨ̀ɣ*	*tsɔ̀*
Isu	*dz*	*dzɔ́ŋ*	*ⁿdzím*	*dzài*	*dzɨ́*	*dzɨ́*	*ⁿdzʌ́d*	*dzwàb*
Kuk	*ts*	*tsɨ̀ŋ*	*tsɨ̀m*	*tsàa*	*tsò*	*tsə̀*	*[ūnɔ́m]*	*tsɔ̀bə̀*
Kung	*tʃ*	*tʃʌ̀ŋ*	*tʃʌ̀m*	*?*	*tsɔ̀(m)*	*kìə*	*[ūnóm]*	*tsɔ̀f*
Men	*tʃ*	*tʃə́ŋ*	*tsɨ̀m*	*tsàin*	*tsɛ̀*	*kyɨ̀(ɣ)*	*[ēndúm]*	*tsɔ̀f*
Babanki	*dʒ*	*dʒɨ̀ŋ*	*dzə̀m*	*gà?*	*gə̀*	*gɨ̀*	*dʒì*	*[bɔ̀ŋ]*

Table 9: Men/Kuk/Kung (*Bu) devoicing of **dz*

Babanki *bɔ̀ŋ* ‘be nice’ may present a PGr retention under influence of contact to EGB, whereas CR + WR have innovated **dzɔ̀b* throughout.

Instances of **g > k, *gb > kp* (Tables 10-11) are rare and patchy, probably due to the low frequency of *g and *gb in initial position.

5. Merger of plural classes 10 and 13

Kuk and Kung on the Northwestern fringes of CR, diverge from the CR standard by their complete loss of plural class 13 (**tə*) in favour of plural class 10 (**sə*). This

means that nominal concepts assigned to 10 in Kuk and Kung may either correspond to 10 in the rest of CR or to 13.

Language		**'skin', 'hide'**	**'grind'**	**'fall'**
PB	**g*	**-gùbò, *-gòbì*	*?*	**-gù, *-bù*
PGr	**g*	**-gùb̀*	**-gòk*	**-gùa*
Aghem	*g*	*gù*	*gùo*	*bvò*
Bu	*k*	*[tsəŋ]*	*kùa*	*[và]*
Isu	*g*	*dzɔ́ŋ*	*gùɔ*	*[bvɔ̀]*
Kom	*g*	*gvɨ́*	*gvà*	*[fé]*
Kuk	*?*	*?*	*[tsʌ́m]*	*[bʌ̀]*
Kung	*k*	*kù°*	*[tsʌ́m]*	*kù*
Men	*k*	*[pfɪ̄]*	*kùɔ*	*[pfù]*
Oku	*g*	*gûo*	*gùo*	*[fɛ̄ì]*
Babanki	*g*	*gwʉ̀*	*[bvù]*	*[fə́ŋ]*

Table 10: Men/Kuk/Kung (*Bu) devoicing of **g*

Language		**'cut off', 'fell'**
PB	**g, *b*	**?*
PGr	**g*	**?*
Aghem	*gb*	*gbɔ̀*
Bu	*?*	*?*
Isu	*gb*	*gbùw*
Kom	*gv*	*gvèl*
Kuk	*kp*	*kpʌ̀*
Kung	*?*	*?*
Men	*kp*	*kpɨ̀*
Babanki	*?*	*[bvà?]*

Table 11: Men/Kuk/Kung (*Bu) devoicing of **gb*

This is schematically shown in Table 12 with the full nominal forms themselves given in Table 13 below. The nouns in the upper half of both tables above the division line are assigned to class 10 in CR and continue as such in Kuk and Kung, whereas the

nouns in the lower half below the division line are assigned to class 13 in CR and continue in class 10 in Kuk and Kung.

Meaning	**Central Ring**	**Kuk**	**Kung**	**West Ring**
'axes'	*10*	*10*	*10*	*13*
'animals'	*10*	*10*	*10*	*13*
'goats'	*10*	*10*	*10*	*13*
'hoes'	*10*	*10*	*10*	*13*
'buffaloes'	*10*	*10*	*10*	*13*
'cows'	*10*	*10*	*10*	*13*
'rashes, scabies'	*10*	*10*	*10*	*13*
'soot (under pot)'	*10*	*10*	*10*	*13*
'locusts'	*10*	*10*	*10*	*13*
'pots'	*10*	*10*	*10*	*13*
'maize plants'	*10*	*[6]*	*10*	*[6]*
'mountains'	*13*	*10*	*10*	*13*
'feathers'	*13*	*10*	*10*	*13*
'charcoals'	*13*	*10*	*10*	*13*
'hearthstones'	*13*	*10*	*[10]*	*13*
'he-goats'	*13*	*10*	*10*	*13*
'wings'	*13*	*10*	*10*	*13*
'blood'	*[%]*	*10*	*10*	*13*
'chiefs'	*13*	*10*	*?*	*13*
'cutlasses'	*13*	*10*	*10*	*[%]*
'leaves'	*13*	*10*	*10*	*13*
'roots'	*13*	*10*	*10*	*13*
'lakes'	*13*	*10*	*10*	*13*
'places'	*13*	*10*	*10*	*13*

% non-cognate root

Table 12: Assignment of nominal concepts to class 10 vs. 13 in Central / West Ring

This neutralisation in Kuk and Kung can be seen as an instance of partial approximation towards WR standards in that the contrast of plural classes 10 and 13 is given up, as in WR. Yet, a clear distinction to WR is maintained by the fact that the merger in Kuk and Kung generalizes class 10 **sə* which is precisely the form that WR has given up in favour of class 13 **tə*, as seen in the last column of Tables 12-13.

Meaning	Central Ring	Kuk	Kung	West Ring
‘axes’	*sē-ndʒàm (Men)*	*sə̀-ndzə̀m*	*sə̄-fú*	*tɨ́-ndzə̂m (Agh)*
‘animals’	*sē-ɲâm (Men)*	*sə̄-ɲâm*	*sə̄-ɲâm*	*tə́-ɲâm (Isu)*
‘goats’	*byɨ̰́-sə́ (Bab)*	*sə̄-byí*	*sə̄-вə̄*	*tə́-byí (Isu)*
‘hoes’	*sē-fɨ́ɣ (Men)*	*sə̄-fɨ̃ɣ*	*sə̄-fə̃*	*tɨ́-fû (Agh)*
‘buffaloes’	*sē-fūŋ (Men)*	*sə̄-fúŋ*	*sə̀-fʊ̀ŋ˚*	*tə́-fʊ́ŋ (Isu)*
‘cows’	*mbòŋ-sɨ̀ (Kom)*	*sə̀-mbɔ̀lɔ́ʔ*	*sə̄-mbɔ̀ŋ*	*tə̀-mbɔ̃̀ŋ (Isu)*
‘rashes, scabies’	*sē-kwàs (Men)*	*sə̀-kpə̀l*	*sə̀-kpə̀s*	*[tɨ̀-kpɨ̀ŋ (Agh)]*
‘soot (under pot)’	*sē-lə̀ʔ (Men)*	*sə̀-lɨ̀ʔ*	*sə̀-lə̀ʔ˚*	*tə́-lə́k (Isu)*
‘locusts’	*sē-pīŋ (Men)*	*sə̄-bʌ́i*	*sə̄-bʌ́i*	*tɨ́-bé (Agh)*
‘pots’	*ntòn-sə̀ (Oku)*	*sə̀-tɔ̃*	*sə̀-tɔ̃̀e*	*tə̀-ntɔ̃̀ (Zoa)*
‘maize plants’	*sē-sʌ̀f (Men)*	*[ʌ̄-sʌ́b]*	*sə̀-sʌ̀f*	*[à-sɔ̀ (Agh)]*
‘mountains’	*tē-kwáʔà (Men)*	*sə̀-ŋmgbàʔ*	*sə̄-ŋgbàʔ*	*tə́-kâʔà (Isu)*
‘feathers’	*tɨ́-vɨ̂l (Kom)*	*sə̄-və̂*	*sə̄-wúlə̀*	*tə́-wʌ̂t (Zoa)*
‘charcoals’	*tē-kʲí (Men)*	*sə̄-kéi*	*sə̄-kíə*	*tə́-kái (Isu)*
‘hearthstones’	*tē-tsís (Men)*	*sə̄-tsúl*	*[sə̀-tsʊ̀ŋə̀]*	*tə́-tsʊʌ́t (Zoa)*
‘he-goats’	*tē-fə́f (Men)*	*sə̄-fʌ́b*	*sə̄-fʌ́f*	*tə́-fə́b (Weh)*
‘wings’	*tēy-ɣâa (Oku)*	*sə̄-ɣâʔlə̀*	*sə̄-ɣɛ̂ɛ*	*tɨ́-ɣ(w)ɔ̂ (Agh)*
‘blood’	*[mɨ́-lúŋ (Kom)]*	*sə̄-kâŋ*	*sə́-kâŋ*	*tə́-kâŋ (Isu)*
‘chiefs’	*tə̀-fɔ̃yn (Bab)*	*sə̀-fɔ̃*	*sə̄-fɔ̂*	*tə̀-fɔ̃̂ (Zoa)*
‘cutlasses’	*tɨ́-fô (Kom)*	*sə̄-fʲîa*	*sə̄-fɛ̂*	*[ú-kûm (Weh)]*
‘leaves’	*tə̀-fɯ́ (Bab)*	*sə̄-fúw*	*sə̄-fú*	*tɨ́-fúᵑ́ú (Agh)*
‘roots’	*tɨ̄-ɣáŋ (Bum)*	*sə̄-ɣáŋ*	*sə̄-ɣáŋ*	*tə́-ɣáᵑ́ŋə́ (Isu)*
‘lakes’	*tɨ̄-lûe (Kom)*	*sə̄-ɲî*	*sə̄-ɲî*	*tɨ́-ɲɯ̂ (Agh)*
‘places’	*tə̄-lúk (Bum)*	*sə̄-lʊ́ʔ*	*sə̄-lʊ́ʔ*	*tə́-lɔ́ᵑ́ʔɔ́ (Isu)*

Table 13: Class 10 vs. 13 in Central / West Ring

6. Gender assignment in Kuk/Kung

Additionally, an affinity of both Kuk and Kung to WR can be seen in the gender assignment of various nouns that pattern with WR rather than with CR, e.g., ‘tail’ (3/4 or 3/6 vs. CR 3/13 or 3/6), ‘compound’ (7/8) vs. CR 7/6a~13), ‘neck’ (3/4~6a vs. CR 3/6~5/13), as indicated in Table 14 where matching gender affiliation is highlighted by absence of greying.

	Language	'hand'	'foot'	'arm'	'leg'	'thigh'	'tail'	'neck'	'compound'
West Ring	Aghem	7/6	7/6	7/4	7/4	7/4	3/4	3/4	7/8
	Bu	7/6	7/6	7/4	7/4	7/4	3/6a	3/6a	7/8
	Isu	7/6	7/6	7/4	3/4	7/8	3/4	3/6a	7/8
	Weh	7/6	7/6	7/4	7/4	7/4	3/4	3/6a	7/8
	Zoa	7/6	7/6	7/4	7/4	7/8	3/6a	3/6a	7/8
Central Ring	Kuk	7/6	7/6	7/4	7/4	7/4	3/6a	3/4	7/8
	Kung	7/6	7/6	7/4	7/4	7/4	3/4~6a	3/4~6a	7/8
	Men	7/6	7/6	7/13	7/13	7/13	3/13	5/13	7/8
	Bum	7/8	7/8	3/6	3/6	?	3/13	3/13	7/13
	Kom	7/8	7/8	3/6	3/6	7/8	3/6	3/6	7/6a
	Oku	7/6	7/6	3/4	3/4	7/8	3/13	[7/8]	7/8
	Babanki	7/6	7/6	?5/6	3/6	7/8	3/13	3/13	7/6a

Table 14: Kuk/Kung (and Men) affinity to WR in gender assignment

7. Conclusion

It has been shown in this study that Babanki shares at least two features with Bafut: Noun class prefixes have L tone in both languages and Babanki re-allocates various lexical items that refer to borrowed nouns and some miscellaneous words to gender 1/2 instead of 9/10, as is common in the rest of CR and WR. Furthermore, Bum's remarkable deviation from CR standards in shifting proto causative extension **s* to *h* has been examined. In addition, the devoicing of Proto-Ring stops and affricates in root initial position in Men, Kuk and Kung, as well as the merger of plural classes 10 and 13 in Kuk and Kung have been discussed. Finally, the affinity of both Kuk and Kung to WR has been evoked by examining the gender assignment of various nouns that pattern with WR rather than with CR. As a standing challenge, the task remains to sort out the precise motivations that underlie the above divergent developments, i.e., to which extent they have been inspired by the felt need to accommodate to a CR-external target in the first line, i.e., WR (Aghem, Zoa) in the case of Kuk and Kung, and Bafut in the case of Babanki – or to which extent the ultimate driving force could rather have been the desire to dissociate from CR neighbours and maximize linguistic distinctions as symbolic consolidation of sociopolitical independence.

Abbreviations

1…13 = noun classes
1PL = 1st plural
1SG = 1st person
2SG = 2nd person
3SG = 3rd person
AUG = augment
ASVC = asymmetrical verb serialization
CR = Central Ring
D1 = near speaker demonstrative
D2 = near listener demonstrative
D3 = distal demonstrative
EGB = Eastern Grassfields Bantu
EXCL = exclusive
F2 = hodiernal future tense
FOC = focus
H = high tone
HTS = high tone spread
IMP = imperative
IPF = imperfective
L = low tone
M = mid tone
N = nasal
NPX = noun class prefix
OF = out of focus marker
P0 = present/perfect tense
P1 = immediate past tense
P2 = hodiernal past tense
P3 = distant past tense
PB = Proto-Bantu
PF = perfective
PGr = Proto-Grassfields
PL = plural
R = root
SVC = serial verb construction
SG = singular
SM = subject marker
WR = West Ring

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Language contact and evidence of divergence and convergence in the morphology of Usaghade

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Abstract

Usaghade, a Lower Cross (LC) language is, unlike other LC languages, in regular contact with several Bantu languages, particularly Londo, and has a functioning system of noun classification/agreement, whereas other LC languages have only remnants of a former system. A comparison of noun classification in Lower Cross and Usaghade and between Usaghade and Londo suggests that Londo may have played a role in shaping the noun classification system of Usaghade by providing, along with other neighboring languages, an ecology in which Usaghade speakers were able to maintain their own existing system rather than converge with Londo. Usaghade temporal marking and its apparent system of verb classification, also different from other LC languages and hardly attributable to contact-induced convergence, might be a result of contact-induced divergence. The situation of Usaghade supports the view that bound morphology is resistant to borrowing and suggests three possible outcomes of contact: convergence, divergence, and stability.

Keywords: noun classification/agreement; language contact; Lower Cross; Londo; contact-induced change.

1. Language contact, convergence and divergence

The expected outcome of language contact is the modification of one (or more) of the languages in the contact situation, in that it (or they) adopt(s) characteristics of one

(or more) of the other languages; that is, in some respect(s) the languages converge. Less expected and rarely reported are situations where languages in contact diverge, i.e. change occurs in a way that one (or more) of the languages seemingly reacts against the influence of the others. An extreme example would be the deliberate manipulation by speakers of a language to render it less like those of their neighbors; this explicitly appears to be the case among the Sepik languages of Papua New Guinea; as reported by (Laycock 2001: 169), speakers told him "it wouldn't be any good if we all talked the same; we like to know where people are from". Perhaps less consciously deliberate is the creation of Ma'a, an 'ethno-register' of Mbugu (ISO 639-3 [mhd]; Glottocode mbug1240), which as described by Mous "serves to stress the ethnic identity of the Mbugu as being different from their Shambaa and Pare neighbours" (Mous 2001: 313). In this case, speakers are said to have attempted to learn or approximate a language they had already given up. Among the reasons why there are so few reports of divergence in the literature may simply be that they are indeed rare or unrecognized, being counter to expectations; it may also be more difficult to establish divergence compared to convergence given an assumption that divergence must be deliberate. Apart from convergence and divergence, a third possible outcome of contact is that existing features of a language instead be stabilized through influence of contact, a situation that is essentially an areal phenomenon in nature though the latter are typically considered to involve convergence. In the view of Kühl & Braunmüller (2014: 14),

> both stability and divergence occur in contact situations quite frequently, not only independently of language contact, but also as its direct outcome: a language may preserve its structural features due to, or even despite, undergoing contact with other languages.

Usaghade[1] (ISO 639-3 [usk]; Glottocode usag1244), also officially known as Isangele in Cameroon and as Usakedet among the Efik and Ibibio in Nigeria, is a Lower Cross language though, unlike other LC languages, it is in intimate contact with several Bantu languages. Most notable of these, as described below, is Londo (Bantu A11; ISO 639-3 [bdu], Glottocode lond1243), a language of the Oroko cluster. Usaghade differs

[1] As is common in the region one and the same term serves as both ethnonym and glottonym as well as place name.

in interesting ways from other Lower Cross languages, and the question arises as to whether these differences, or some of them, can be attributed to contact, or rather are a result of internal development. While a case might be made for its having been influenced by Londo or other neighboring languages, particularly at the level of the lexicon, other of its characteristics are difficult to attribute to convergence. Indeed, deeper study shows at least one of these, its noun class and agreement system, plausibly represents the third possibility mentioned above; rather than convergence, or divergence, an inherited feature has been stabilized through contact. One goal of this paper is to make the case for this assessment. To do this I look at the noun classification and agreement systems in both Usaghade and Londo, as well as evidence that exists of former noun classification in other Lower Cross languages and in Proto-Lower Cross. Its functioning noun classification and agreement system is the most obvious way in which Usaghade differs from other Lower Cross languages. Beyond this, I examine other characteristics of Usaghade in which it differs from the rest of Lower Cross, such as in its encoding of temporal distinctions, to assess whether or to what extent these may be ascribed to contact with neighboring Bantu languages. From a more general perspective, the situation of Usaghade as described here shows that stabilization of, or support for, a given linguistic structure, is indeed a possible outcome of language contact along with convergence and divergence. The description and discussion given here build on and elaborate that found in Connell (2001).

2. Usaghade and language contact

The contact setting of Usaghade can be understood in terms of its linguistic genealogy, its geographical setting and the associated demographics, described in the following paragraphs.

2.1. Lower Cross affiliation of Usaghade

Usaghade is a small and relatively remote community, accessible to the rest of Lower Cross only by water but it has a particular place in Lower Cross cosmology/mythology; for some it is their place of origin (e.g. this account is found

among the Obolo[2] and the Ọrọ[3]); for others (e.g. the Ibibio) it is a place of mystery and supernatural power. The language is not extensively discussed in the literature, however its place in Lower Cross as well as the classification of Lower Cross within Cross River is well established (Connell 1995, Connell & Maison 1994). Within Lower Cross, Usaghade appears as a relatively early branching, following only Obolo, as shown in Figure 1. The subgrouping of Lower Cross represented in Figure 1 is based on lexical data and arrived at using a Neighbor-Joining algorithm (Saitou & Nei 1987), available in Splitstree (Husan & Bryant 2013). With certain exceptions not germane to the present discussion[4], it is supported in its details by phonological innovations (Connell 1995). The position of Usaghade is confirmed by several phonological innovations.

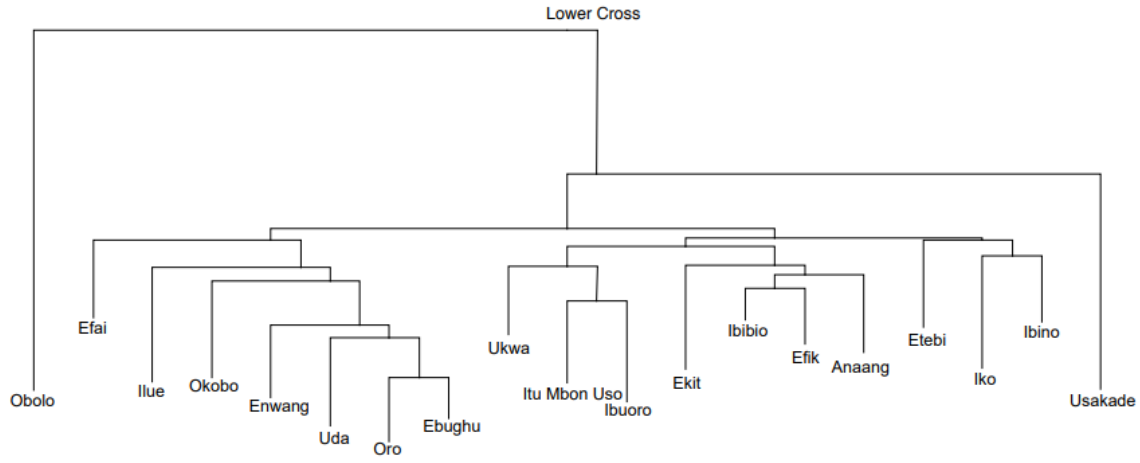

Figure 1: Groupings within Lower Cross based on lexical evidence.

Lower Cross itself is part of the Cross River group, which in turn has been grouped together with Bantoid to form the Bantoid-Cross group within Benue-Congo (Williamson & Blench 2000).

2.2. Location

The Lower Cross subgroup is situated in southeastern Nigeria, covering the lower part of the Cross River basin to the coast, and from the eastern fringe of the Niger Delta

[2] ISO 639-3 [ann], Glottocode obol1243.

[3] ISO 639-3 [orx], Glottocode oroo1241.

[4] For example, the Efai–Ebughu grouping shown in Figure 1 is not supported by phonological innovations.

to the estuary of the Cross River. The confluence of the Cross River (at its estuary) and its tributary the Yafe form the international frontier between Nigeria and Cameroon at this point.[5] Both linguistic evidence and oral traditions (Connell & Maison 1994) suggest a relatively recent dispersal of the majority of the Lower Cross languages from a common homeland, likely reaching the coastal area in the 15th century; this date receives some support in accounts from early European visitors to the Cross River estuary, which report no settlements at locations (e.g. parts of what is now Calabar), which were then found occupied on subsequent visits (Latham 1973).

Usaghade itself is situated to the east of the Cross River (left bank), entirely in Cameroon in the area referred to in early sources as Rio del Rey (Ardener 1968), which includes the Bakassi Peninsula. The immediate coastal area is largely mangrove swamp and not well suited to permanent settlement, though fishing settlements exist representing many ethnolinguistic groups: Lower Cross (particularly Efik[6] and Efai[7], but also others), Bantu groups from along the coast to the south, as well as others from further west, such as Ịjọ groups from the Niger Delta. Slightly inland, the area surrounding Usaghade is home to other languages, in particular several Northwest Bantu languages. The immediate Bantu neighbors to Usaghade in addition to Londo, are Bakole (ISO 639-3 [kme], Glottocode bako1250), Balue (uncoded), and Barombi (ISO 639-3 [bbi], Glottocode baro1252) to the east, and Bima (uncoded) and Ngolo (uncoded) to the north-east. Beyond these but still in the immediate area are the Manenguba languages (Hedinger 1987), also Northwest Bantu languages. Durop (ISO 639-3 [krp], Glottocode koro1304), an Upper Cross language, lies to the north, as shown in Figure 2.

2.3. Demographics

As described in Connell (2001), the Usaghade community comprises three villages, Oron[8], Amoto, and Bateka, and several smaller hamlets and fishing settlements, such

[5] A 2002 ruling by the International Court of Justice declared Bakassi to be part of Cameroon, however dispute over this continues; the region remains part of a Nigerian federal constituency.

[6] ISO 639-3 [efi], Glottocode efik1245.

[7] ISO 639-3 [efa], Glottocode efai1241.

[8] This village, Oron, is not to be confused with the town of Oron [ɔ́rɔ́] located on the Nigerian side of the Cross River estuary in Akwa Ibom State. The similarity in name appears to be coincidental.

as Atabong and Ataiyo. Recent census data are not available however the population figure given in Eberhard et al. (2022) is 5,000. Each of the three main villages has its own tradition of origin, which for Oron and Amoto are similar.

Figure 2: Location of Usaghade and its linguistic neighbors. (Map courtesy of Phil Braun.)

The Oron-Amoto tradition[9] holds that the founders of these two villages were from Enyong, near Idere and Eki on the map in Figure 2; Enyong Creek is a tributary of the Cross River to the north-west of the estuary near Arochukwu and Enyong is today part of the Lower Cross speaking area and constitutes the northmost reaches of the Lower Cross language distribution, where they interface with Upper Cross languages. The Oron-Amoto tradition says they migrated down the Cross River and settled first among the Uda and Enwang on the west bank of the Cross River. The tradition does not tell us how long they stayed among the Enwang and Uda, only that a dispute arose between these two groups, with the migrants supporting the Uda. Fearing Enwang retaliation, the migrants fled in two groups, crossing the mouth of the Cross River at night to the Rio del Rey area. The two groups became the founders of the villages of Amoto and Oron. It is difficult to date this migration with confidence, but one version of the Oron-Amoto tradition has it that they migrated to the coast for

[9] As given to me by Chief Anke of Oron village.

trade purposes, having heard of the arrival of Europeans. This would place it in the late 1500s or early 1600s (see below).

The people of the third village, Bateka, do not claim Lower Cross origin. Their traditions say they are originally Balondo, a Bantu people who inhabit the region adjacent to Usaghade. This is not disputed in Usaghade, and at the time of my research most of the older inhabitants of Bateka, despite having adopted Usaghade as their first language, still spoke Londo as a second language. The Bateka people claim to have been farmers and to have settled their present location while searching for new farmlands. These groups of people came together to form the community now known as Usaghade. I had the opportunity to work most closely with a speaker from Bateka resident in Calabar at the time, though our work together included one field trip to Usaghade (Bateka). Though still a young man in his late 20s, he spoke Londo; his principal language of daily use in Bateka however was Usaghade, and he was also fluent in Efik, English and Pidgin and had passive knowledge of other local languages to varying degrees. Anecdotally, he reported his daughter, aged four at the time, being exposed to these languages on a daily basis and acquiring them simultaneously.

Further insight into the multilingual nature of this region and its development can be had from two sources. Hedinger's (1987) study of the Manenguba languages includes a short description of the sociolinguistic situation as including "considerable complexity with regard to the number of languages used in different contexts" (1987: 31). This complexity includes use of mother tongue in the home and with members of the same clan to the extent that intelligibility permits. In border regions, bilingualism in local languages appear to be the norm. Pidgin English (Cameroon Pidgin, uncoded) is spoken throughout the region and either English or French or both are available as education is in these languages.

Attesting to the historical depth of this contact setting is documentary evidence, as presented in Ardener (1968). Ardener's work establishes that linguistic contact in the area, involving the groups in question (i.e. essentially Lower Cross and Bantu) goes back at least 500 years and presumably longer. Indeed, a part of Ardener's discussion constitutes the first modern linguistic examination of language contact in the Rio del Rey, as he presents an analysis of what appears to be the earliest wordlist collected by European traders in this region. While the origin of the list, i.e. exactly who collected it and whether it is from one or several locations, is subject to debate, Ardener argues it was the work of the Dutch trader Samuel Blommaert, who was active in the early 1600s. It clearly contains words from both Lower Cross and Bantu

languages. This allows Ardener (1968) to conclude that the linguistic situation of the region around the end of the 15th century was much as it is now, i.e. heterogeneous.

Thus, Usaghade demonstrably is and has been in an intense contact situation for several centuries both internally, through its heterogeneous origin, and externally through its being in close proximity to numerous other languages, as described above. It may be expected then that contact has played a part in its development, and those areas in which it differs from other Lower Cross languages may do so as a result of this contact. In the following sections of the paper I look at, in turn, nominal classification and agreement in Usaghade compared to what is found in other LC languages (§4, §5), and in Londo (§6, §7), and offer an account as to why its system has been relatively stable compared to other LC languages (§8). In §9 two other aspects of Usaghade morphology that differ from the LC canon are discussed with a view as to understanding how they came about. §10 moves from morphology to examine cases of lexical influence on Usaghade from Londo or other neighboring Bantu languages. §11 presents the conclusions of the paper concerning what the major influences on Usaghade were that made it different from other LC languages, and offers discussion as to the implications these findings have for a theory of morphological change in situations of language contact.

3. Nominal classification, grammatical agreement

The most interesting feature of Usaghade when considering it as a Lower Cross language is the presence of a fully functioning noun classification and agreement system, only vestiges of which are present elsewhere in Lower Cross. This system bears the hallmarks of noun classification and agreement systems found elsewhere among East Benue-Congo languages and beyond. Nouns and their dependent elements are morphologically marked with a prefix, on which basis they are assigned to a particular class, referred to here as nominal form (NF) classes. Prefixes encode number: singular, plural, or neutral; singular-plural pairings are deriflection classes (DERF; see Güldemann & Fiedler 2021), commonly referred to in the literature as genders. Agreement (or 'concord') exists between a head noun (the trigger) and any of several possible elements dependent on the noun, such as demonstratives, relativized nouns, associative constructions, and numerals, and between subject and verb, according to the subject and grammatical person, and is again marked prefixally. Nouns thus fall into agreement classes (AGR), singular-plural pairings of

which are referred to as genders (GEND). In some languages the AGR prefix is phonologically identical to the NF prefix, i.e. agreement or concord is alliterative, though this is frequently not the case; there is no necessary phonological identity between DERF classes and genders.

4. Nominal classification in Cross River Usaghade, Lower Cross and neighboring languages

4.1. Nominal classification and agreement systems in Cross River

Nominal classification/agreement systems are or were a feature of Cross River languages (see Faraclas 1986); functioning systems exist in several Upper Cross languages (for Durop see Connell 2021, Kastelein 1994; for Hohumono[10] see Sterk 1976; for Lokəə[11] see Winston 1962; for Mbembe[12] see Barnwell 1969). Connell (1987) discusses the state of nominal classification in Lower Cross where, depending on the language, it ranges from the functioning system of Usaghade to vestigial evidence in languages like Obolo where the former noun prefix has disappeared from some nouns; across most of the group fossilized NF prefixes are present on most or all nouns. In the Ogoni languages bordering Lower Cross on the west, nominal prefixes have largely disappeared in Kana (ISO 639-3 [ogo], Glottocode khan1278) and Gokana (ISO 639-3 [gkn], Glottocode goka1239), while Eleme (ISO 639-3 [elm], Glottocode elem1253) and to a lesser extent Baan (ISO 639-3 [bvj], Glottocode baan1241) have apparent fossilized prefixes. It is interesting to note here the rough cline that exists; moving from east to west, the nominal classification/agreement system of languages has increasingly eroded and disappeared. Table 1 includes a representative set of Lower Cross languages and example lexical items to illustrate the loss of nominal classification following this cline; i.e. east-most Usaghade is at the top and west-most Obolo at the bottom, with other languages ordered between these two (see also Figure 1). Where a singular-plural alternation exists, the plural prefix follows the noun; otherwise the prefix is fossilized, or in two examples from Obolo, ‘oil palm’ and ‘water’, and possibily ‘slave’, it has disappeared. The LC languages are followed in the table by Kana (Ogoni) in which former prefixes have all but disappeared. To the

[10] ISO 639-3 [bcs], Glottocode kohu1244.

[11] ISO 639-3 [yaz], Glottocode loka1252.

[12] ISO 639-3 [mfn], Glottocode cros1244.

west of the Ogoni languages are the Ijoid languages which have no identifiable traces of nominal classification and/or agreement systems.

	'ear'	**'head'**	**'person'**	**'slave'**	**'chief'**	**'oil palm'**	**'water'**
Usaghade	ú-tɔ́ŋ / a-	ú-βô / m-	ɔ́-wɔ́m / ɛ-	ò-βúnàŋ / i-	ù-múɔ̂ / a-	ú-tɛ́n	è-mɔ́ŋ
Ọrọ	ú-tɔ́ŋ / ɔ-	ú-búgò / m-	ɔ́-w̃ì / e-	í-vɔ̂n	ɔ́-ǃfɔ́ŋ	á-dà	ḿ-mɔ́ŋ
Enwang	ú-tɔ́ŋ	ú-búgù / m-	á-w̃ú	ɔ́-fɔ̂n / mi-	ɔ́-ǃvɔ́ŋ / mi-	á-dʒì	ḿ-mɔ́ŋ
Ebughu	ú-tɔ́ŋ	ú-búʀò / m-	á-w̃í	ɔ́-vʌ̀n	á-ǃbúŋ / i-	á-ɟè	ḿ-mɔ́ŋ
Efai	ú-tɔ́ŋ	í-búʀò / m-	á-ŋʷɛ́	ɔ́-fʌ̀n	á-ǃbúɔ́ŋ	é-jè	ḿ-mɔ́ŋ
Ibibio	ú-tɔ́ŋ	í-wû:d / ŋ-	á-wó	á-fîn / i-	á-ǃbɔ́:ŋ / m-	á-jôp	ḿ-mɔ́:ŋ
Ekit	ú-tɔ́ŋ	í-búʀò	á-ŋʷé	í-fîn / á-	á-ǃbɔ́ŋ	á-dʒì	ḿ-mɔ́ŋ
Obolo	ú-tɔ́ŋ	í-bòt	é-nè	gúwù	ú-bɔ́:ŋ	kô:	múŋ
Kana	tɔ́	ákóbee	nɛɛ	–	méné	zóo	máá

Table 1: Fossilization/loss of prefixes in Lower Cross following an east to west cline, with Usaghade east-most and Obolo west-most.[13]

There is more, however, underlying the presence or maintenance of the functioning system found in Usaghade than geographical distribution. This system and reasons why it has been maintained, while in other LC languages it has been eroded, are explored in the following sections. First, additional details are given concerning the evidence for nominal classification in LC.

4.2. Retentions of nominal classification in Lower Cross

As just mentioned, for most LC languages, fossilized NF prefixes are present on most or all nouns. In Ọrọ, singular-plural prefix alternations have been maintained for about 10% of nouns in a comparative database comprising 550 glosses. Nominal form prefix alternations on these are suggestive of several DERF class pairings in the history of Ọrọ: u-/N-; u-/i-; u-/a-; o-/i-; o-/e-; i-/N-; and e-/N-. NF prefix alternation in Ibibio is present in most, if not all, [+human] nouns (1), and occasional other nouns (2). With rare exceptions, the prefix associated with the prefix is the same across SG–PL pairings and is determined by the stem tone.

(1) á-ˡbo̱o̱ñ / N- (or i-)ˡbo̱o̱ñ 'chief /chiefs'

[13] Codes for languages not mentioned in the text are: Enwang (ISO 639-3 [enw], Glottocode enwa1245); Ebughu (ISO 639-3 [ebg], Glottocode ebug1241); Ekit (ISO 639-3 [eke], Glottocode ekie1246).

	à-kpáráwà /N-kpáráwà	‘young man /young men’
	à-bóíkpà /ú-bóíkpà	‘young woman /young women’
	á-tâ /N-tâ	‘specialist /specialists’ (of traditional knowledge)
	á-bíà /N-bíà	‘specialist /specialists’ (of traditional knowledge)

(2)	ì-kpàt /N-kpàt	‘foot /feet’
	í-só /N-só	‘face /faces’
	í-kpộ̃ñ /N-kpộ̃ñ	‘cocoyam /cocoyams’
	á-fâñ /N-fâñ	‘leaf /leaves’
	á-kɔ́k /N-kɔ́k	‘branch /branches’

For elements of the noun phrase other than the head noun, generally only fossilized cases of agreement, e.g. with adjectives, are present, as shown in (3), through examples from Ibibio (ISO 639-3 [ibb], Glottocode ibib1240), Ọrọ, and Usaghade. In these, the AGR prefix of the adjective alternates while, except in Usaghade, the (former) NF prefix of the noun has lost the alternation. In these examples the AGR prefix is *N-*, as is the case in most other examples in the data. It is assumed this is a result of merger of AGR prefixes, not that this was the case in an earlier functioning system in Lower Cross or Proto Lower Cross.

(3)		**Ibibio**		**Ọrọ**		**Usaghade**	
	SG	á-búbít	éwà	ì-dìọ́k	áwà	ó-βíè	ó-wá
	PL	ḿ-búbít	éwà	ǹ-dìọ́k	áwà	i-βíè	í-wá
		black	dog	bad	dog	short	dog

Subject–verb agreement is maintained to some degree in all LC languages in which this has been examined, including in Obolo, as shown in (4). Examples show the independent pronoun and the verb ‘buy’ with the subject–verb AGR prefix.

(4)		**Obolo**		**Ibibio**		**Usaghade**		**Gloss**
	1SG	è-mì	ń-lép	à-mì	ń-ˡdép	à-mì	ń-ˡnéí	I buy
	2SG	ò-wò	ó-lép	à-fò	à-ˡdép	à-fò	à-ˡnéí	You buy
	3SG	ò-mô	ó-lép	à-ɲé	á-ˡdép	ó-mò	ó-ˡnéí	He buys
	1PL	è-jì	é-lép	ǹ-ɲìn	í-ˡdép	á-ɲìn	ì-ˡnéí	We buy
	2PL	è-ɲì	é-lép	ǹ-dùfò	è-ˡdép	m̀-bùfò	è-ˡnéí	You (pl.) buy
	3PL	è-mâ	é-lép	á-mmộ	é-ˡdép	é-mmọ̀	é-ˡnéí	They buy

These few examples give some indication of the range and nature of retentions of what must once have been a functioning system of noun classification and agreement in Lower Cross. Further evidence and argument for this is available in Connell (1987).

5. Nominal classification and agreement in Usaghade

5.1. Nominal form classes

Usaghade nominal form (NF) classes are given in Table 2 with the allomorph(s) of each, their number category, and a sample noun for each. Number can be either singular (SG), plural (PL) or neutral (NTR), 'neutral' being those nouns which do not alternate prefixes and are typically non-count, denoting liquids or abstract qualities, or denoting items that are commonly referred to in a non-count sense, such as ŋ́-kúndì 'beans'. Nominal form prefixes have no inherent tone, but rather bear the same tone as the stem. The semantic make-up of classes is typically heterogeneous, the most homogeneous being that for [+human] nouns.

NF	Allomorphs	Number	Examples
U-	u-	SG	ú-fàŋ 'leaf'
		NTR	ú-núŋ 'salt'
O-	o-, ɔ-	SG	ɔ́-wɔ́m 'person'; ó-wá 'dog'
		PL	ó-díáŋà 'curse'
		NTR	ó-bûn 'dust'
E-	e-, ɛ-	SG	é-kép 'navel'
		PL	ɛ́-wɔ́m 'people'
		NTR	ɛ́-mɔ́ŋ 'water'
I-	i-	SG	í-náp 'dream'
		PL	í-wá 'dog'
		NTR	í-mɔ̀m 'laughter'
A-	a-	PL	á-nɛ̀m 'tongue'
		NTR	à-jɔ́ŋ 'sky'
N-	m-, n-, ŋ-	PL	ń-só 'face'
		NTR	ŋ́-kúndì 'beans'

Table 2: Usaghade nominal form classes.

5.2. Deriflection classes

Deriflection classes (DERF) are singular–plural pairings of nouns according to their NF prefix; these are sometimes referred to as 'genders' in the literature (see Güldemann & Fielder 2019 for discussion). The term 'gender' here is reserved for groupings of nouns according to their agreement pattern, i.e. agreement classes (AGR), as is also found in the older literature. Ten DERF classes are found in Usaghade, the pairings shown in Figure 3.[14]

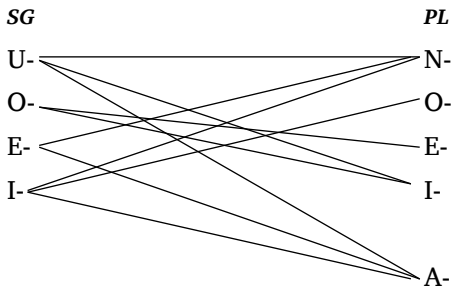

Figure 3: Usaghade deriflection classes

5.3. Agreement in Usaghade

Agreement in Usaghade exists between a head noun and dependent demonstratives, numerals, relatives, associatives, adjectives and subject–verb agreement. It is alliterative agreement: the AGR prefix is a copy of the NF prefix, both segmentally and tonally. While its possible exceptions may exist, there are no counterexamples in the available data. The genders (pairings of AGR markers) mirror the DERF classes shown in Figure 3 and there are thus ten GEND identified in Usaghade: u-/N-; u-/i-; u-/a-; o-/-e-; o-/i-; e-/N-; e-/a-; i-/N-; i-/O-; and i-/a-. Examples from GEND o-/i- are given in (5–10). NF prefixes are in uppercase, as in Table 2, AGR prefixes are in lower case.

(5) DEM

a.	*ó-wá*	*ó-ké*
	O-dog	O-DEM
	'That dog.'	

[14] Four other pairings are present in the data, represented by just one word each. These are 'inquorate classes' (Corbett 1991: 170); their status as DERF (and GEND) is uncertain and in any case not relevant to the present discussion.

b. *í-wá* *í-ké*
I-dog *i-DEM*
Those dogs.’

(6) NUM
a. *ó-wá* *tʃén*
O-dog -one
‘One dog.’
b. *í-wá* *í-bà*
I-dog i-two
‘Two dogs.’

(7) REL
a. *ó-wá* *ó-nò* *ó-ká-dì-nè*
O-dog o-REL o-PST-came-x
‘The dog who came.’
b. *í-wá* *í-nò* *í-ká-dì-nè*
I-dog i-REL o-PST-came-x
‘The dogs who came.’

(8) POSS
a. *ó-wá* *ó-sè*
O-dog o-POSS
‘The dog’s’ / ‘of the dog.’
b. *í-wá* *í-sè*
I-dog i-POSS
‘The dogs’ / ‘of the dogs.’

(9) ADJ
a. *ó-βíè* *ó-wà*
o-short O-dog
‘The short dog.’
b. *í-βíè* *í-wà*
i-short I-dog
‘The short dogs.’

(10) S–V

a. *ó-wá* *ó-dí*
O-dog o-come
'The dog came.'
í-wá *í-dí*
I-dog i-come
'The dogs came.'

Figure 4 shows the relationship between NF prefixes and AGR prefixes, which is consistently alliterative.

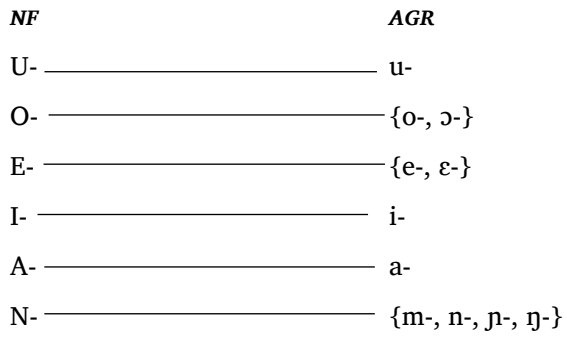

Figure 4: Relationship between NF and AGR prefixes in Usaghade.

5.4. Summary

Summarizing, the system of noun classification and agreement found in Usaghade is typical of those found elsewhere in East Benue-Congo, in that a system of alternating prefixes, encoding singular or plural found on nouns and their dependent elements allows the grouping of nouns into different classes. Usaghade has six NF classes, nine DERF classes and nine genders.

6. Nominal classification and agreement in Londo

Noun classification and agreement in Londo is described in some detail in Kuperus (1985), which follows a form of analysis traditionally used in describing Bantu languages: nouns are grouped into genders following three criteria: first, the form of AGR (concord) prefixes; second, the form of noun prefixes (NF) and, third, the singular-plural class pairings. The NF of Londo are given below.

6.1. Nominal form classes in Londo

Londo nominal form (NF) classes are given in Table 3, with the main allomorph(s) of each, the number, SG, PL, or NTR, and an example of each. The class number they have with respect to usual practice in Bantu studies practice is included. Nominal form prefixes in Londo all bear Low tone, as is usual in Bantu languages, though the L surfaces as High when conditioned by a floating H tone associated with the stem. The semantics of categories are typically heterogeneous.

NF	Allomorphs	Number	Bantu Class
MO-	mò, mɔ̀	SG	1, 3
Ø	Ø	SG	1a
BA-	bà	PL	2
ME-	mè, mɛ̀	PL	4
DI-	dì	SG	5
MA-	mà	PL, NTR	6
E-	è, ɛ̀	SG	7
BE-	bè, bɛ̀	PL	8
N-	ɲ̀	SG, PL	9, 10
DO-	dò, dɔ̀	SG	11
BO-	bò, bɔ̀	PL	14
O-	ò, ɔ̀	SG	17
A-	à	SG	17a
I-	ì	SG	19

Table 3: Londo nominal form classes.

6.2. Londo Deriflection Classes

Singular-plural pairings of Londo nouns as DERF classes are given for Londo in Figure 5. Londo has 10 DERF classes, most of which are simple one-to-one pairings.

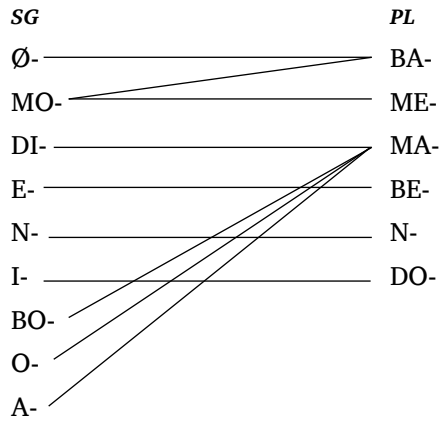

Figure 5: Deriflection classes in Londo.

6.3. Agreement in Londo

Agreement in Londo is present between a head noun and words modifying the noun, marked by a prefix.

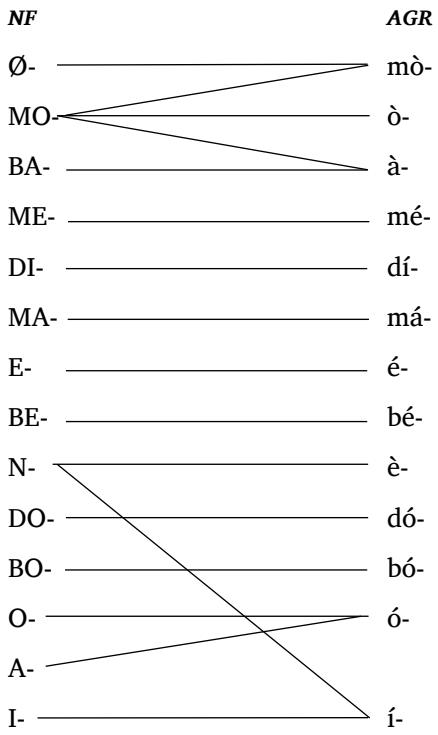

Figure 6: The relationship between NF and AGR prefixes in Londo.

Following Kuperus (1985), word classes subject to agreement are: demonstratives; 3rd person pronouns; adjectives; numerals one to five (one is considered an adjective); demonstratives; possessives; the 'concording conjunctive' 'that'; and verbs (i.e. subject - verb agreement). Here I omit details found in Kuperus not germane to the present discussion. The NF prefixes and corresponding AGR prefixes are set out in Figure 6. It is apparent from the pairings shown here that there is a substantial amount of alliterative agreement but the agreement system is not strictly alliterative.

7. Similarities and differences between Usaghade and Londo

A comparison of the two systems, that of Usaghade and of Londo, shows that beyond the basic characteristics of such systems the two have little in common. The most striking similarity may be the extent to which the two show alliterative agreement,

however even in this the match is far from perfect. Agreement in Usaghade, as far as our data show, is consistently alliterative (Figure 4); Londo, on the other hand, despite being substantially alliterative, is not entirely so. Beyond this, the differences between the two systems are far more striking. Usaghade has six NF classes (Table 2), Londo fourteen (Table 3); five of the six in Usaghade are V-, the other is N-, while those of Londo include eight CV- prefixes. There are nine DERF classes in Usaghade, ten in Londo; the pairings that comprise these classes have only limited commonality across the two languages.

8. Whence nominal classification and agreement in Usaghade?

Given the extent of decay of nominal classification in Lower Cross, with the exception of Usaghade, and the contribution of Londo speakers to the formation of Usaghade outlined above (§2.3), the question arises whether the fully functioning system found in Usaghade is borrowed, i.e. a result of convergence with Londo in particular, or perhaps with other neighboring Bantu languages also contributing. The comparison given in the previous section shows this cannot be the case. The details of systems found in neighboring Bantu languages have not been examined, but if Usaghade speakers did not adopt this characteristic from Londo, whose speakers comprise a part of the make-up of Usaghade, it seems highly improbable they would have adopted it from a third source. One might also wonder whether contact with an Upper Cross language – Durop is in the immediate vicinity – may have had an influence, but without going into detail here it can be said many of the differences here parallel those just described in the comparison with Londo (see Connell 2021). Rather, when comparing Usaghade with the vestiges present in other Lower Cross languages, the system of Usaghade seems to be in a state of 'arrested erosion'. Among the NF prefixes of Usaghade, as mentioned, we find no CV- prefixes, unlike in Londo (and other Bantu languages) or Durop (and other Upper Cross languages), but this is true throughout Lower Cross, though the NF prefixes can be associated with CV- prefixes; at least some are apparent reflexes of Proto Benue-Congo noun class prefixes (Connell 1987)). As noted (§4.2), there are SG-PL pairings among a small percentage of nouns in Ọrọ that point to seven former DERF classes in that language; the match between these and those of Usaghade is shown below in (11).

(11)	Ọrọ	u-/N-	u-/i-	u-/a-	o-/i-	o-/e-	i-/N-	e-/N-	–	–
	Usaghade	u-/N-	u-/i-	u-/a-	o-/i-	o-/e-	i-/N-	e-/N-	e-/a-	i-/a-

Examination of the content of each of these DERF classes would establish more conclusively their genealogical relationship, but the fact of the correspondences, together with other evidence indicating a genealogical relationship between the two languages, is strong evidence that the Usaghade system is an inherited, not borrowed, one. The one area where Londo may have influenced the Usaghade system is that both have alliterative agreement, whereas it is uncertain what form agreement took earlier in Lower Cross.

9. Other aspects of Usaghade inflectional morphology

The evidence for the origin of nominal classification and agreement in Usaghade as presented in the preceding section is reasonably convincing and the system cannot be attributed to convergence through contact with Londo or other language. There are at least two other aspects of Usaghade morphology that deviate from the Lower Cross canon. The available data are limited and therefore discussion and conclusions are tentative. These have to do with the encoding of tense and/or aspect distinctions and an apparent system of verb classification.

9.1. Temporal marking in Usaghade

Usaghade differs from other Lower Cross languages with respect to encoding temporal distinctions. In all Lower Cross languages for which temporal marking has been discussed (Welmers 1966 for Efik; Essien 1990a,b for Ibibio; Aaron 1994, Faraclas 1984, and Rowland-Oke 2003 for Obolo; Kuperus 1978 for Ọrọ), the relevant constituent, whether a tense or aspect marker, is pre-verbal. In Usaghade these are in some cases marked post-verbally, as examples 12-16 illustrate. The relevant tense/aspect markers and associated verbs are indicated in bold. With the exception of the FUT marker in (16) they are considered cognate, though whether this is the case is not critical; it is the position of the temporal marking constituent relative to the verb that is of importance. Whether a given constituent encodes tense or aspect is of potential importance, but determining this is difficult given the insufficient data available for a detailed analysis of temporal reference in Usaghade, and that these categories are not always as clearcut as the literature would have it. Distinguishing tense and aspect in Ibibio, to which Usaghade is compared in these examples, is not always a straightforward matter; Essien for example variously refers to the prefix mé-, (mí- in 14b), as a present tense marker (1990a), or marking proximate past and perfect (1990b, 1991). The contradiction is only apparent however, and may be seen as reflecting the difficulty in distinguishing these categories.

(12)

a. Usaghade

ŋ́-	***kú***	***má***	*ó-íŋwàn*
1SG	see	PFV	woman

b. Ibibio

ḿ-	***màá-kíd***	*áwóŋwáàn*
1sg	PFV	see	woman

'I saw the woman.'

(13)

a. Usaghade

ǹ-súâ	*ǹ-nìàŋ*	*è-kè*	*é-βè*	*ó-*	***ká-***	***bá***
year	four	mother	3PL.POSS	3PL.AGR	PST	die

b. Ibibio

ì-súâ	*ì-nààŋ*	*è-kà*	*á-mmɔ̀*	*á-*	***ké-***	***kpá***
year	four	see	3PL.POSS	3PL.AGR	PST	die

'Their mother died four years ago.'

(14)

a. Usaghade

í-	***mí-***	***kú***	*ú-tín*
3PL	PRF/PRS	see	sun

b. Ibibio

é-	***mí-***	***kíd***	*útín*
3PL	PRF/PRS	see	sun

'They see the sun.'

(15)

a. Usaghade

ó-	***yíré***	***sé***	*ɛ́-mɔ́ŋ*	*ké*	*ú-dûm*
3SG	bathe	HAB	water	PREP	stream

b. Ibibio

á-	***sí-***	***yíè***	*ì-dém*	*ké*	*í-dîm*
3SG	HAB	bathe	body	PREP	stream

'She bathes at the stream.'

(16)

a. Usaghade

é-wóm	*é-*	***í-***	***kă***
men	3PL	FUT	go

b. Ibibio

ídên	*é-*	*yâ-*	*é-*	***kă***
men	3PL	FUT.PROX	3PL	go

'The men will go.'

In (12), what is analyzed as a PFV marker is pre-verbal in Ibibio[15], but post-verbal in Usaghade, and similarly in (15) the HAB marker is pre-verbal in Ibibio, but post-verbal in Usaghade. However in (13), the PST marker is in both languages pre-verbal, and similarly in (14) what might plausibly be analyzed as a PRS marker is pre-verbal and in (16) the FUT marker is preverbal. This suggests that what are tentatively analyzed as aspect markers have undergone a shift in Usaghade, from pre- to post-verbal. However, assuming this is the case, the question arises as to whether this shift is due to influence from Londo. Kuperus (1985: 145) provides the flectional template in (17) to characterize the structure of the Londo verbal complex, showing aspect may be marked both pre-verbally and post-verbally.

(17)	Mood	Person	Polarity	Time/ Aspect	Lexical Core	Aspect Suffix	Aspect/ Mood FV	Plur

Kuperus identifies three markers in Londo, *-mò-*, *-mó-* and *-má-*, as indicating past reference and which occur in the time/aspect slot. Elements occurring in this slot which are referred to as aspect markers are *-ne-* (durative) and *-kèndé-*, *-kèé-*, and *–ˊkà-*, which are indicative of motion, either direct or abstract. The lone aspectual suffix mentioned in Kuperus is *-àk-* referred to as a durative suffix. On the basis of this evidence, it is difficult to argue that the shift from pre- to post-verbal position for aspect markers, if this is indeed what they are, is a result of influence from Londo. The root cause of the change remains unclear.

[15] Essien (1991) refers to it as a past tense marker but elsewhere (1990) treats it as PFV.

9.2. Verb classes in Usaghade

One further characteristic in which Usaghade differs from other Lower Cross languages also has to do with verbal suffixes, but again insufficient data are available to determine their status. Verbs may be grouped into four classes according to the suffix assigned, whether *-sé*, *-dà*, *-já*, or a zero suffix, *-Ø*. Of these, *-sé* defines the largest class (approximately 53% of verbs in the database), followed by *-Ø* (32%), *-dá* (9%) and *-jà* (6.5%). They appear to mark imperatives, though the available data are insufficient to assert this with confidence. The data include only very few instances of imperatives, though for these one of the suffixes is present. Otherwise, they appear only in the wordlist, and not in any sentential examples which are all in the indicative. Further data collection, not possible to this point, would resolve the issue. The important point however is that there are no corresponding forms present in any of the much better studied Lower Cross languages for which grammars or description of the verb phrase are available (e.g. Ibibio, Essien 1990b; Obolo, Faraclas 1984; Ọrọ, Kuperus 1978), nor are they known to occur in Upper Cross and so it seems unlikely they are retentions in Usaghade. On the other hand, there is also no obvious source for them in Londo, where the mood-marking Final Vowel (see (17), above) is *-é*, *-è*, so they cannot be considered to be due to convergence/contact.

10. Evidence of contact leading to convergence

10.1. Lexical borrowings in Usaghade

Thus far this paper has examined characteristics of Usaghade which are conceivably a result of contact leading to convergence, though they have proved not to be. However, in situations of language contact, lexical borrowing is a default expectation, so we turn now to look for convergence in the area of the lexicon. When examining the lexicon of Usaghade, aspects of its history should be borne in mind (see §2). That is, there are at least three possible sources of Usaghade vocabulary: inherited vocabulary, vocabulary possibly borrowed through contact with neighboring Upper Cross languages before the migration to the coast, and borrowing of vocabulary from adjacent Bantu languages after arriving at their current coastal location some centuries ago. The database for the present discussion comprises some 550 glosses

collected for all Lower Cross languages known at the time. Upper Cross material is from unpublished wordlists collected by Jan Sterk, and Londo material from Kuperus (1985). The overlap between the different sources is considerably less than the 550 glosses available for Lower Cross. Sterk's Upper Cross wordlists are based on 400 glosses. Kuperus' Londo-English lexicon is considerably longer but still there are many words in the Lower Cross set that are not found there. A lexicostatistical analysis using a subset of these words (a Swadesh basic vocabulary list) was conducted and presented in Connell & Maison (1994); a similar analysis using a different set of core vocabulary is in Connell (to appear). In both studies, Usaghade is seen to share approximately 65% – 70% cognates with other Lower Cross languages. In other words, as many as 30% – 35 % are potential borrowings. Of these a portion are of apparent Bantu origin while others maybe Cross River (i.e. Upper Cross). Yet others are of uncertain provenance. Table 4 presents words in Usaghade that appear to be of Bantu origin though not all are attested in Londo, possible cognates are found in nearby Bantu languages suggestive either of gaps in the Londo data or contact with these languages.

So, at least a small number of lexical items in Usaghade can be attributed to contact, either with Londo or other neighboring Bantu languages. Most of these can be attributed to the migrating Usaghade finding themselves in a new environment.

11. Discussion

Usaghade differs from other Lower Cross languages with respect to its morphology in at least three interesting ways: in its nominal morphology, there is a functioning noun classification and agreement system, whereas in other Lower Cross there remain only remnants of an earlier system. In its verbal morphology, Usaghade marks at least some temporal distinctions post-verbally while elsewhere in Lower Cross all temporal distinctions are encoded pre-verbally. Usaghade also has a form of verb classification, marked suffixally, which has no parallel among other Lower Cross languages; the precise function of these suffixes is as yet unclear.

I considered the possibility that one or other of these characteristics arose in Usaghade through contact, most probably with Londo, given that a village of Londo

	Usaghade	Londo	Comment
beans	-kúǹdì	-kóndì	PLC kɔ́tì
bone	-síp	-sé	The relation to Londo -sé is unclear; the Usaghade term may be cognate with Ibibio ásîp, 'tendon, vein'
cocoyam	-sɔ́ŋɔ́	-sɔ̀ngú	PLC *í-kpɔ̀ŋ; cognates are not known elsewhere in CR.
compound	-wătʃè	-wóká	The Londo term refers to a temporary house on a farm; as k > tʃ is a regular development in Usaghade this is plausible as a borrowing.
cut (v.)	bì	-bɛ̀-	Londo 'cut meat'; one of very few verbs that may be a borrowing.
farm	-tʃá		Cognate forms are not found in CR, nor does the Londo form look cognate though possible cognates exist in other NW Bantu, e.g. the Manenguba cluster; PM *-jàg (Hedinger 1987)
friend	-kɔ́ɾɔ́	-kɔ́dɔ́	Cognate forms are not found in CR
hat	-kpòtó		Not available for Londo; cf. PM*-bòtV (Hedinger 1987)
heart	-bùmá		a Londo form is not available but nearby Bantu have -bùm 'stomach'; PM *-bùm (Hedinger 1987)
pepper	-dàǹdúŋ		No known cognate in LC; not available for Londo, but cf -dóŋ in other nearby Bantu; PM *-dóŋ (Hedinger 1987)
slave	ò-βúnàŋ	-ɸà	The Usaghade form is a compound, the first element of which appears cognate with the Londo form.

Table 4: Lexical borrowings in Usaghade from Londo or other Bantu languages.

speakers formed part of the nascent Usaghade community. However, as was shown, Londo differs from Usaghade in each of these three characteristics. Despite its having a noun classification and agreement system which is at least broadly speaking typologically similar, the Londo system shows considerable formal difference with that of Usaghade, making it improbable that Usaghade acquired or rebuilt its system through contact-induced convergence. On the other hand, it is plausible, even likely, that the presence of a noun class system in Londo and other neighboring languages

with which the Usaghade community interacted closely, served to help stabilize and maintain the existing system in Usaghade. That is, noun class/agreement systems are essentially an areal phenomenon in the region and this served to buttress and maintain its use in Usaghade.

The origin of the two characteristics of verbal morphology, the order of tense-aspect markers relative to the verb and the seeming verb classification system, in which Usaghade differs from the Lower Cross canon remains unclear. There is no evidence to date that suggests the post-verbal marking of certain temporal relations is retained from Proto-Lower Cross, and while it is not uncommon in the broader Bantoid region to find aspect marked post-verbally, this is not the case in Londo (or, as far as is known, other Bantu languages of the region) and so this too cannot convincingly be attributed to contact-induced convergence. Likewise, with no Londo equivalent or even near-equivalent to the verbal suffixes found Usaghade, it is difficult to attribute this characteristic to convergence. How, then, to account for these changes? Post-verbal marking of aspect is not uncommon and a shift of temporal encoding to a post-verbal position might somehow be seen as a natural development; nevertheless, some form of mediating factor would be expected and none, at present is available. Indeed, it is a *prima facie* instance of divergence and though there is no evidence now to suggest it is a result of deliberate manipulation, one might question whether divergence needs always to be deliberate in the sense of the examples of divergence presented in §1.

If one accepts that the developments in Usaghade reflect, in one case, the third possibility proposed at the outset of this paper, that contact in some circumstances can lend stability to features already present in a language, and in another case possible contact-induced divergence, it is still worth noting that convergence is also evident in Usaghade, at least in its lexicon, with several borrowings from Londo in evidence in the relatively small lexical database available to this study.

12. Conclusions: Usaghade and theories of morphological change in contact settings

The aim of this work has been to reach an understanding of the forces that have shaped Usaghade and made it different from other Lower Cross languages. The results and their interpretation presented here contribute to our understanding of the

maintenance of stability, in addition to convergence and divergence, as an outcome of language contact and are consistent with the view presented in Braunmüller et al. (2014), that all three outcomes are associated with contact and may indeed be present within the same contact setting.

At the same time, the conclusions reached are of interest to a theory of morphological change in situations of language contact. Bound morphology has frequently been considered, though not without debate, resistant to borrowing; Thomason and Kaufman (1988) provide a summary of this debate which tends to the view of its being resistant, though they also offer counter examples. Among the counter examples they cite is one from Thomason's own work, on Ma'a (Mbugu) (Thomason 1983), which is suggested to show the opposite, Bantu bound morphology (viz. the noun class system) having been borrowed into a Cushitic language. However Mous (2001), in his more detailed work mentioned in the introduction, argues for a different analysis and asserts that borrowing "cannot explain the present-day situation" (2001: 299). Mous is even more categorical in a general statement: "The Bantu (or Niger-Congo) noun class system is in its form unique in the world. It is never borrowed by other languages… it is hardly ever enriched" (2001: 298). The evidence presented here, that the system of nominal classification and agreement that exists in Usaghade has not been borrowed, substantiates Mous's view and lends further support to the view that bound morphology is resistant to borrowing. However, the claim that noun class systems are not borrowed does not preclude the possibility that their widespread presence areally provides a setting where they are, in a sense, mutually supporting; i.e. in the present case causing the system of Usaghade to be stabilized.

In short, the evidence from Usaghade suggests three possible influences in situations of language contact: convergence and divergence, as well as a third possibility, the stabilization or maintenance of existing features of a language.

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Abbreviations

1 = 1st person
2 = 2nd person
3 = 3rd person
ADJ = adjective
AGR = agreement (marker)
DERF = deriflection
FV = final vowel
FUT = future
FUT.PROX = proximate future
GEND = gender
HAB = habitual
IMP = imperative
NF = nominal form
NUM = number
NTR = neutral
PFV = perfective
PRF = perfect
PL = plural
POSS = possessive
REL = relative
SG = singu

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Language contact or linguistic micro-engineering? Feature pools, social semiosis, and intentional language change in the Cameroonian Grassfields

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Abstract

With more than seventy named languages, and many more locally distinctive varieties, the Cameroonian Grassfields are known for their impressive linguistic diversity. At the same time, the languages of the Grassfields also show a considerable degree of structural homogeneity and lexical similarity which is suggestive of both genealogical relatedness and prolonged processes of contact-induced convergence. However, fine-grained comparative analyses reveal puzzling situations of similarities and differences among neighboring languages and varieties. Often left unaddressed or viewed as "irregularities", these cases might in fact provide insights into low-level language dynamics that have contributed significantly to the development of the regional linguistic configuration. In this paper, we focus on two such cases involving noun classes and tense-aspect marking and propose a model of language change based on a notion that we term the *social semiosis layer*, which is viewed as a specific part of a linguistic feature pool. When paired with the existing notion of neighbor opposition, it can account for situations where there is evidence that specific forms have been deliberately manipulated to create salient distinctions among varieties in a given local sociolinguistic context.

Keywords: contact-induced change; deliberate change; neighbor opposition; Cameroonian Grassfields; noun classes; tense-aspect marking

1. Language change in highly multilingual contexts

Two basic patterns have shaped the study of language change: genealogical inheritance (i.e., tree-like change) and areal diffusion (i.e., wave-like change). These linguistic patterns are implicitly or explicitly seen as co-occurring with identifiable community events (Ross 1997). For example, differentiation between related languages may take place through geographic or social separation between two populations which previously shared a common language, or the spread of features of a language among neighboring languages may result from an increased influence or prestige that one community exerts on another community. Events like these are commonly invoked (or even simply presupposed) in linguistic investigations of genealogical relationships and contact-induced language change, respectively.

Of course, this dichotomous approach to modeling processes of change represents a rather extreme simplification of a more complex reality. On the one hand, the events that are potentially associated with language change are extremely diverse in nature. On the other hand, these models do not account for the role of linguistic differences themselves in defining the structure of communities and their role in creating a linguistic ecology that constrains the possible trajectories of change. The traditional two-way model of change rests on an assumption that the default social situation in which language change takes place is one where there is some kind of "ethnic" continuity in the composition of a language community over time. In such a context, change passively *happens* to a language as a result of larger cultural forces, e.g., a split of one community into two new ethnic groups or a change in prestige relations among two neighboring groups. Perhaps the most obvious way in which this model oversimplifies historical reality relates to the processes through which communities incorporate foreign populations whose patterns of shift may leave an impact on the speech practices of the community which they have joined (see, e.g., Thomason & Kaufman 1988: 89).

One possible response to such complications would be to suggest that the traditional approach to language change is basically correct—or at least highly useful—even if it needs to be amended to handle the details of certain attested patterns of change. Our impression is that this is, in fact, the dominant response, as evidenced, for example, by the accounts of change provided in commonly used historical linguistics textbooks (see, e.g., Campbell 2013: Ch. 7), which continue to give prominence to the traditional split between the notions of tree-like and wave-

like diversification. More striking is the increasing adoption of phylogenetic models to analyze language change which are based on the assumption that it can be usefully analogized to evolutionary change in biology (Dunn 2015). In these models, languages stand in for organisms and change can be represented through the use of network representations depicting *lateral* (i.e., contact) relationships alongside *descent* (i.e., genealogical relationships). A key assumption of work of this kind is that the ways that change operates in populations of language communities maps well onto models designed for the study of biological evolution.

In this paper, however, based on our observations of patterns of linguistic diversification and change in the Cameroonian Grassfields, along with our knowledge of the sociolinguistic features and the social formation dynamics of its communities, we will propose a radically different additional mechanism of change, which builds on the notion of the *social semiosis layer* (henceforth semiosis layer) and is based on the idea that, at least in this part of the world, teleological (i.e., deliberate, goal-oriented) processes are more common in language change than traditional approaches would suggest.[1] In particular, we will argue that the social structure of these communities enables—and, under the right conditions, encourages—high status individuals to initiate processes of language change for social ends. In making these claims, we do not mean to supplant traditional approaches but, rather, to complement them as a step towards developing models of change that are appropriate for small-scale multilingual societies of the sort that have historically characterized the Grassfields. We believe that the sociolinguistic context of this region, and the complications that its patterns of linguistic diversity pose for traditional models of change, provide an opportunity to explore new models that will help us more fully understand the dynamics of language evolution.

We begin by providing a general overview of the comparative linguistic situation of the northern Cameroonian Grassfields in Section 2. In Section 3, we build on existing work in language evolution to develop the notion of the *semiosis layer*. In Section 4 we summarize the group formation dynamics that are attested in the history of the Grassfields societies in order to situate our proposals regarding language

[1] In the theoretical literature on language change, the meaning of the term "teleological change" fluctuates between, on the one hand, planned and conscious change on the part of the speakers (see, e.g., Keller 1994: 139) and, on the other, unplanned and unconscious but functional change that is due to systemic pressures on speakers (like, e.g., restoring symmetry in a phonological system, cf. Martinet 1952). The meaning we intend in this paper is the former.

change in their sociolinguistic context. In Section 5, we apply the notion of the semiosis layer to the analysis of a pattern of noun class variation in the northern Grassfields. In Section 6, we look at variation in tense-aspect marking in one region of the Grassfields from the perspective of the semiosis layer. Concluding remarks are provided in Section 7.

2. The diversity of the Cameroonian Grassfields

The linguistic situation of the Cameroonian Grassfields strongly informs the arguments made in this paper. This region roughly corresponds to the West and North West Regions of Cameroon, and it is one of the most linguistically dense areas of Sub-Saharan Africa as explicitly observed at least as early as Stallcup (1980). In an area roughly the size of Belgium, one finds dozens of southern Bantoid languages, with speaker populations ranging from the hundreds to the hundreds of thousands.[2] Moreover, underlying this diversity of languages is a much larger number of locally distinctive varieties (see, e.g., Good 2013 on the Lower Fungom region of the Grassfields for relevant discussion).

There is a significant amount of shared lexicon among the languages of the region, both in terms of basic vocabulary and with respect to lexical innovations in comparison with related languages spoken outside of the region. Even though regular correspondences are overall difficult to find, these lexical similarities set the core group of languages occupying the region, referred to as the Grassfields group, apart from the rest of the southern Bantoid languages, including Bantu. By contrast, the noun class systems of certain subgroups of Grassfields languages differ from each other across some key features, for instance, in showing a merger of Classes 6 and 6a, the presence of a nasal in the prefixes of noun Classes 1, 3, 9, and 10, and the generalization of low tones on all the noun class prefixes (cf., e.g., Watters 2003). Figure 1, based on Warnier (1979), aims to graphically represent the surprising contrast between the lexical and grammatical evidence in the Grassfields languages. From a lexical perspective, the Western Grassfields group and the Mbam-Nkam group (also referred to as Eastern Grassfields) appear to belong together as part of a Grassfields subgroup. However, from the perspective of their noun class systems, the

[2] See Blench (2014) for an overview of the Bantoid languages.

Mbam-Nkam languages pattern with many northwestern Bantu languages, while the Western Grassfields languages pattern with certain other Bantu languages as well as other languages spoken in nearby areas.

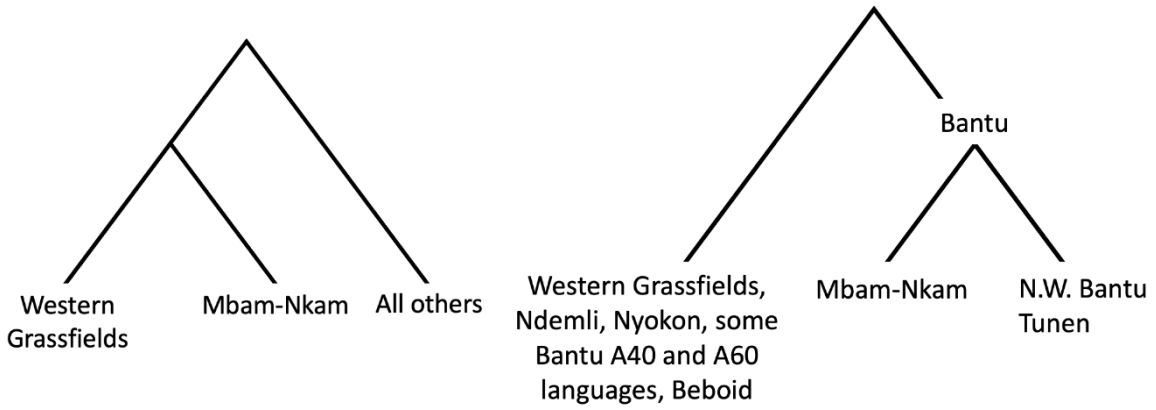

Figure 1: Schematic genealogical trees of Grassfields languages (adapted from Warnier 1979: 418) based on lexical data (left); and noun class patterns (right).

Warnier (1979) is a particularly instructive attempt to address the difficulties that linguists still face in analyzing language change in the Grassfields region. He quite clearly sets out the hypotheses to explain the lack of convergence between the lexical and grammatical patterns using the basic conceptual toolkit discussed in Section 1. This involves three possible accounts: (i) language-internal change as captured by the tree-based model, (ii) contact between languages resulting in grammatical diffusion, or (iii) actual migration of people speaking different languages followed by relexification of languages of the earlier inhabitants. He ultimately concludes that the intense contact among multilingual Grassfields people makes it hard to determine what the right historical account is.

In part due to the linguistic diversity of the Grassfields and nearby parts of Nigeria, Greenberg (1972) suggested that this general area was the homeland for the Bantu languages before they spread south and east to dominate Sub-Saharan Africa—a proposal that continues to be accepted up to this day (e.g., Bostoen 2020) (though see Idiatov & Van de Velde 2021: 98 for a recently proposed alternative location). His suggestion was based on a logical argument regarding linguistic geography where it is assumed that the greater time depth of the presence of a language group in its

homeland will be correlated with greater diversification in that region, whether of languages or dialects. However, this is not the only possible way in which such a diversity can come into being. As discussed in Di Carlo & Good (2014: 237, fn. 5), rather than seeing the linguistic diversity of the Grassfields as driven primarily by *fragmentation* (i.e., the breaking up of a former unity) (see Dalby 1970: 163), detailed comparative investigation informed by ethnographic and historical data suggests that the region's cultures were instead characterized by a pressure towards "linguistic singularity" (Fowler & Zeitlyn 1996: 1), and, in particular, traditional political independence has required a community to be associated with a speech variety that is seen as distinctive in the local sociolinguistic space (i.e., each political unit should have its own "language"). From this perspective, whether or not the Grassfields were part of the Bantu homeland, its current linguistic diversity cannot be seen as good evidence of this since we cannot know how much of this diversity is due to ancient patterns of diversification rather than shallower historical processes linked to contemporary socio-political formations.

Our own observations of the linguistic diversity of this region, and, in particular, the linguistic diversity of a small area of the northern Grassfields known as Lower Fungom, which has seen particularly detailed investigation in recent years, suggests, in fact, that linguistic diversification is not solely, or even primarily, due to a kind of asocial historical drift or patterns of random change that may be retroactively linked to specific communities. Rather, we will argue here that it is also, at least in part, the product of conscious or semi-conscious efforts of linguistic convergence and divergence. These linguistic processes parallel Fowler & Zeitlyn's (1996: 1) characterization of Grassfields' culture more generally as being built out of "the seemingly idiosyncratic parcelling up in individual polities of elements from a common core of cultural forms and practices," and it is this kind of observation, in particular, which has motivated us to develop the notion of the semiosis layer below in Section 3. The linguistic analogs to these cultural processes have been considered in some previous work, such as Mve et al. 2019's discussion of the role of linguistic esoterogeny (see Thurston 1989) in the history of some of Lower Fungom's languages as well as Good (to appear), where insights of Kopytoff (1987) were extended to the realm of language change.

3. Feature pool and the semiosis layer

3.1. The pool metaphor

Tree-based and wave-based models of change are implicitly based on approaches that model the structure of language communities in a way that posits ethnic continuity to be the default situation. This extralinguistic assumption is intrinsically linked to a second fundamental linguistic assumption of these models that entire languages are the units which evolve during the course of language change. On this view, splits in a tree are associated with the fission of a community into multiple new ethnic groups, and wave-like change involves the borrowing or transfer of linguistic patterns across pre-existing groups and their associated languages. Crucially, the size of foreign linguistic elements that are incorporated into the community in these approaches is assumed to be relatively small compared to the overall structure of the community's language as a whole, and the frequency of such events of incorporation is assumed to generally be relatively low.

For reasons that will become clear in the following sections, these views are problematic for the study of language change in the Grassfields. However, there is already another well-known group of languages where it has been established that these views of the dynamics of group formation and language change are unable to capture the events that co-occurred with the formation of a language community, namely creoles, and we build on Mufwene's (2001) work on creole formation here. He reconstructs the emergence of creoles as being characterized by two related events that have both linguistic and social reflexes. The first is the koinéization of the lexifier language caused by the mixing of speakers of different varieties of the same lexifier. This is depicted in Figure 2, which is adapted from Mufwene (2001: 4). The second involves the contact between the varieties undergoing koinéization and the substrate languages that contributed to the formation of the creole. This is depicted in Figure 3, which is adapted from Mufwene (2001: 5). A key element of his approach is the notion of a feature pool, where different lexical and grammatical features of the contributing languages are brought together in the social space of the newly forming community and are drawn upon in the creation of a new variety.

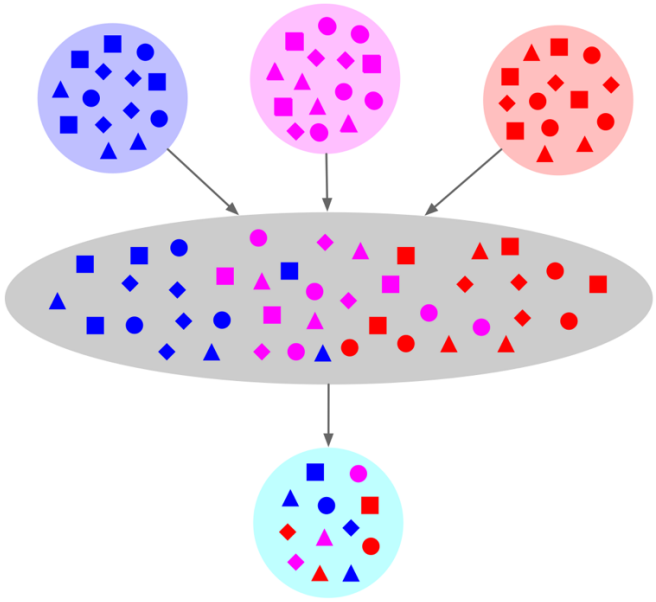

Figure 2: Representation of a prototypical koinéization process (adapted from Mufwene 2001). Increased interaction among speakers of different varieties of a language (the three circles at the top of the figure) creates a *feature pool (*the middle oval) where features of the different varieties associated with the same or similar grammatical functions compete with each other. The result (the circle at the bottom) represents one possible way of reassembling the material from the feature pool into a new variety.

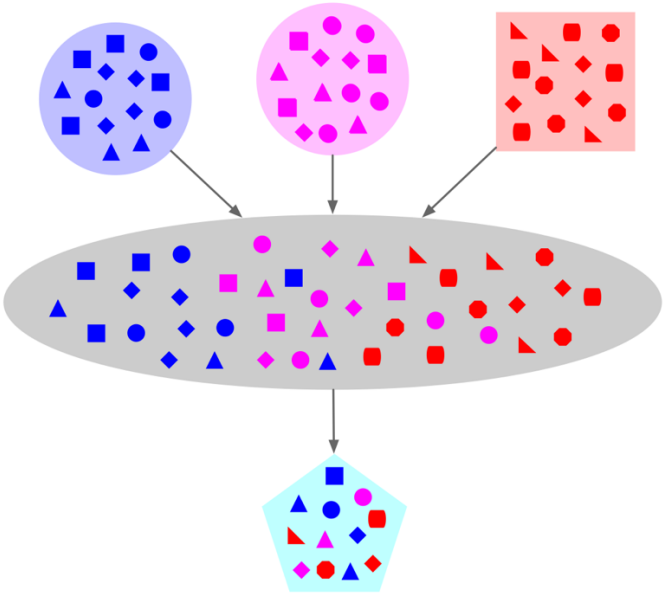

Figure 3: Representation of the process of creole formation (adapted from Mufwene 2001). Varieties of different historical origins (represented by different shapes) contribute to the feature pool resulting in the formation of a new language (also given its own shape).

The notion of feature pool shifts the focus away from languages and instead targets language features or linguistic items, i.e., "any piece of structure that can be independently learned and therefore transmitted from one speaker to another, or from one language to another" (Nettle 1999: 5) as the central units in processes of change. Under this model, the new lexicogrammatical codes that emerge from either koinéization or creolization cannot be directly associated with any single variety that contributed to the contact situation. From this perspective, one might view the codes that we generally refer to as *languages* as comprising sets of linguistic items (or features) enjoying a certain diachronic continuity.

This leads us back to the discussion in Section 2 about the apparent incongruence between lexical and grammatical evidence with respect to the classification of the Grassfields languages. We believe that a feature-based, rather than a language-based, approach should be seriously considered in this context since it "allows us to capture all types of linguistic change in a single framework" (Nettle 1999: 8). In Section 3.2, we develop an extension to the feature pool approach to language change that we think is suitable for the situation seen in the Grassfields.

3.2. The semiosis layer model and neighbor-bias selection

3.2.1 Defining the semiosis layer

Like other notions built on the pool metaphor—e.g., the *linguistic pool* (Nettle 1999) or the *meme pool* (Dawkins 1976)—Mufwene's *feature pool* is conceptualized as an *undifferentiated* pool of linguistic features, a term encompassing any kind of linguistic element including lexical items, phones and phonemes, morphological and syntactic constructions, formulaic expressions, etc. The pool metaphor has the advantage of detaching individual features from languages, thus allowing more fine-grained and nuanced analyses of change processes, but it specifies nothing regarding which features may be more likely to be selected as norms in a newly emerging variety (though see Matras 2009: 310–312 for relevant considerations). We coin the term *semiosis layer* as a way of complementing the feature pool notion to partly fill this gap, with a focus on the interaction between feature selection and social meaning.

As defined here, the semiosis layer is the subset of linguistic items present in a feature pool that, in a particular sociolinguistic situation, are more likely to be leveraged by a language community in order to respond to *neighbor-bias* pressures,

i.e., ideological pressures to either imitate or be distinctive from other languages present within the local linguistic ecology. We use this notion here to generalize on Larsen's (1917) term *naboopposition* ('neighbor opposition'), which focuses on the pressure to be distinctive only (see Section 3.2.2 for further discussion). The items present in a feature pool are accessible to multilingual individuals through their linguistic repertoires, but some of them will be more salient than others in their linguistic and sociolinguistic knowledge with respect to which features are associated with which groups and the relationships that different language communities have to one another. The latter subset of items forms what we call here the semiosis layer. For reasons that will become clear in the following, we opt for the term *semiosis*, i.e., the action of producing signs, in order to stress that our view of the types of change that are connected to the semiosis layer are not evolutionary in the sense of being the consequence of cumulative, invisible hand processes where individual intentions progressively contribute to a general but unplanned change (Keller 1994: 139–141). Rather, they are teleological—i.e., made consciously for a purpose—and, therefore, entail an active engagement in producing (social) meaning on the part of a community or some influential components thereof.

In the remainder of this section, we will first contextualize change that draws on the semiosis layer within language change processes in general and, then, we will provide some further clarifications as to how we think it is possible to detect semiosis layer change.

3.2.2. Contextualizing semiosis layer change

In Table 1, we situate language change that draws on the semiosis layer with respect to well-known models of change in the literature. The table classifies such models across two broad dimensions: (i) whether they primarily apply within monolingual or multilingual contexts (at least from an idealized perspective) and (ii) the nature of the process of selection through which variants become conventionalized within a variety. The first type of selection included in the table is labeled *functional selection*, which we use as a broad cover term for changes which are linked to the broad communicative function of language, and we intend it to encompass the kinds of changes that have been the focus of most work in historical linguistics (e.g., regular sound change, analogical leveling, grammaticalization, etc.). The second is labeled *social selection*, and this is intended to cover changes that impact a language due to

the social relationships among communities associated with different varieties, such as prestige hierarchies or other kinds of culturally significant categories. The third class of selection, which is the one that is central to this paper, is what we termed *neighbor-bias* in Section 3.2.1. Unlike the other kinds of selection, neighbor-bias selection involves the direct comparison of lexicogrammatical codes themselves by individuals or groups to either achieve convergence or divergence of the codes. Whereas social selection involves changes to the codes as a secondary outcome that reflects non-linguistic social relations, this is the intended primary outcome in neighbor-bias selection. The presentation in Table 1 is provided primarily to help contrast change that we model via the semiosis layer with other kinds of change rather than being intended to serve as a complete model of language change.

	Functional selection	**Social selection**	**Neighbor-bias**
Monolingual	Drift	Sociolinguistic variation	State-based language engineering
Multilingual	Sprachbund-like change, borrowing to fill a lexical gap	Feature pool change, borrowing resulting in lexical replacement	Lexical divergence without grammatical divergence, esoterogeny, contact-induced stability, semiosis layer change

Table 1: Situating neighbor-bias change with respect to other kinds of change by classifying processes of change across two dimensions involving monolingual communities and multilingual communities and different types of variant selection.

As indicated in Table 1, we see well-known patterns of change such as *drift* (see Joseph 2013 for discussion), the grammatical convergence found in large Sprachbund areas, and lexical borrowing to fill gaps (e.g., a term for an item being newly introduced to a society) as the result of functional selection. Social selection encompasses sociolinguistic variation within a society that can be tied to specific social categories (e.g., race, class, etc.) as well as feature pool change of the sort modeled by Mufwene (2001) and discussed in Section 3.1. It would also include borrowing in cases where a word from one language replaces an existing word in another for social reasons (e.g., perceived differences in social prestige across language communities).

In addition to our proposed category of semiosis layer change developed in this paper, we have identified several other types of change that we believe can be classified as involving neighbor-bias selection. The first of these, in a monolingual context, is state-based language engineering where explicit efforts are made to create a national variety that is clearly distinct from the languages associated with any other state. In fact, the outcomes of state-based language engineering can be accounted for in terms of a semiosis layer, though we do not apply that label to them here. Take for instance the case of the re-introduction of the feminine in Nynorsk (norw1262; Indo-European, Germanic).[3] The feminine had disappeared in Swedish (swed1254; Indo-European, Germanic), Danish (dani1285; Indo-European, Germanic), and in the Danish-influenced form of Norwegian that was the official language of Norway from the 16th to the 19th centuries (Hagège 2005: 110). Motivated by nationalist claims, nineteenth century Norwegian intellectuals reintroduced the feminine as a feature of the newly emerging Nynorsk (Neo-Norwegian) taking it from southwestern dialects of Norwegian that had maintained it. This process is in line with the perspective offered by the semiosis layer approach since (i) feminine forms were among the available linguistic features that could be drawn in processes of change in the local linguistic ecology and (ii) those involved in reintroducing it to the language associated with Norway were aware that this would make Nynorsk distinctive from other Scandinavian languages that it was in close contact with.

In fact, practically all of the examples of language engineering discussed in Hagège (1982, 2005) can be characterized in these terms. Such cases are normally not addressed by historical linguists due to the perceived artificiality of the processes that engendered them, and the fact that they seem particular to nation-states where the power of political and intellectual elites, combined with diffusion of new forms via mass-media and compulsory schooling, can create widespread norms on a scale which would be impossible with other forms of social organization, such as those found in traditional African societies, where language change is assumed to have been *natural* rather than *artificial*. This probably accounts for the absence of this kind of perspective in the study of "tribal" African languages. However, as we will see in the next section,

[3] To assist with the identification of the language varieties discussed in this paper, we include Glottocodes as found in Glottolog (Hammarström et al. 2023) but, for purposes of presentation, we include a more fine-grained classification for the languages of focus and use more widely accepted classificatory labels than those proposed by Glottolog. However, we follow Glottolog for the other, non-African languages cited.

in the small-scale societies of the Cameroonian Grassfields, where pressures for cultural distinctiveness are comparable to those associated with nation-states, there is evidence for processes analogous to state-based language engineering—i.e., what one might call *linguistic micro-engineering* given the small-scale nature of these societies—which we refer to under the heading of semiosis layer change here.

Unlike all the other classes of change in Table 1, the mechanism of actuation in neighbor-bias selection is explicitly teleological, i.e., the change is initiated for a specific purpose, in this case a social purpose targeting inter-group distinctiveness. In addition to the cases discussed in detail below, other cases that we are aware of where neighbor-bias is an important factor in the dynamics of language evolution in small-scale societies of the sort found in the Grassfields include the unexpectedly low levels of shared vocabulary among neighboring languages sharing substantial parts of their semantics and structure, as found in Vanuatu (François 2011) and the northwest Amazon (Epps 2009, 2020). By being an especially consciously accessible part of language, the lexicon is clearly the linguistic domain in which neighbor-bias phenomena can be most readily observed, although they have also been found in phonology (e.g., Gomez-Imbert 1999).

Below, we will focus on apparent cases where neighbor-bias is manifested morphologically in both affixes and function words. Morphological divergence between related and neighboring languages has also been previously described in the literature (see, e.g., Evans 2019 for an example of how variation in gender assignment of body-part nouns was socially recategorized as shibboleths distinguishing Iwaidja from Mawng, respectively iway1238 – Iwaidjan Proper, Central Iwaidjic – and maun1240 – Iwaidjan Proper). Linguistic esoterogeny (see Thurston 1989), where language change adds complexity to a language in ways that make it harder for outsiders to learn would also be classified as an instance of neighbor-bias change in this classificatory scheme.

While we use the term neighbor-bias here as a cover term for both neighbor opposition and neighbor attraction, all of the cases just discussed involve neighbor opposition. We believe that this is, on the one hand, because it would be hard to identify semiosis layer convergence from either shared retention or lack of change from a purely practical perspective in cases where historical records are lacking and, on the other hand, due to the fact that there is a general bias in linguistic investigation to more readily notice cases of linguistic divergence rather than linguistic convergence or maintenance of non-distinctiveness.

3.2.3 Composition of the semiosis layer

As discussed at the beginning of Section 3.2, a semiosis layer is a part of a feature pool composed of linguistic items that, once certain linguistic and extralinguistic premises are satisfied, are more likely to be leveraged by a language community in order to respond to neighbor-bias pressures. We claim that what makes semiosis layer change different from other neighbor-bias phenomena—such as contact-induced stability (cf., e.g., Connell 2001; this volume) or divergence in the lexicon but not grammar, as in Vanuatu (François 2011) or in the Vaupés region of the Amazon (Epps 2009) (see Table 1)—is that it cannot be readily ascribed to cumulative, invisible-hand processes and instead is the result of conscious change initiated by some group of influential community members whose speech practices spread rapidly in a language community.[4]

That being said, due to the fact that we do not have access to the mental state of the individuals whose linguistic behavior initiated a change, either consciously or unconsciously, a key question emanating from our proposals here is how we can determine what characteristics differentiate semiosis layer items from the rest of the linguistic items found in a multilingual feature pool and, on this basis, what kinds of changes are good candidates for being classified as instances of semiosis layer change. Since the semiosis layer is defined on the basis of a finalistic, teleological process, the items that can or cannot be a part of it will depend on their relationship to social and linguistic differences in the specific case under analysis. What we propose in (1), by contrast, is an outline of some general properties of linguistic items that would make them good candidates for the deliberate construction of linguistic similarity or

[4] As Evans (2019) points out, neighbor-bias selection in and of itself does not necessarily entail that the speakers are always conscious agents of the change. For instance, psycholinguistic experimental evidence (Ellison & Miceli 2017) suggests that bilinguals who are motivated to monitor their production to respond in a particular language avoid vocabulary that is common to their two languages—a phenomenon called "doppel avoidance", where "doppel" is any item that is close in both form and meaning in two languages regardless of the reasons for their resemblance—and that this happens largely below their level of awareness. Low-level pressures like these could potentially lead to neighbor opposition via lexical divergence across two languages that had previously been more similar, but this would not necessarily mean that the change is teleological and, as a consequence, that we are dealing with semiosis layer change.

difference—i.e., having characteristics which we might generally expect of semiosis layer items.

(1)

a. **Neighbor-bias potential**
In order to be considered effective at the level of semiosis layer change, linguistic items should be readily perceived by users as encoding social meaning of similarity or difference among languages used within a community. This kind of potential manifests in two, potentially interrelated characteristics: namely, inherent and frequency derived neighbor-bias potential.

   i. Neighbor-bias potential is *inherent* in items that stand out for their perceived peculiarity. Phonological shibboleths (beginning with the biblical one) are cases in point. An example from the Lower Fungom area is the presence of pharyngealized vowels in Mundabli (mund1340; Niger-Congo, Yemne-Kimbi) but not in the otherwise extremely similar (and geographically very close) Mufu variety (mufu1234; Niger-Congo, Yemne-Kimbi) nor in any of the other languages of the northern Grassfields (Voll 2017: 41–43).

   ii. Neighbor-bias potential is high in items that are high in *frequency* in usage and, therefore, likely to be noticed even in short exchanges. This could include specific morphemes and sets of covariant morphemes (like in patterns of agreement), sounds, content words, common expressions (such as greetings), or basic constructions such as agreement patterns (like, e.g., in the case of the variation in noun class assignment as shibboleths in Iwaidja and Mawng mentioned in Section 3.2.2, which surfaces in nominal and verbal agreement patterns, see Evans 2019: 576). By targeting such items, a change would instantly become frequent in everyday speech and therefore effectively encode neighbor-bias.

b. **Straightforward acquisition**
For an item to be effectively employed in a process of semiosis layer change, it should quickly propagate through a language community in a small-scale society lacking the coercive forces of the state. This implies that it needs to be readily

acquirable in the context of community members' existing linguistic knowledge. Among the characteristics that can facilitate straightforward acquisition, salient ones are semantic and structural congruence—i.e., items that, regardless of their source, fulfill the same function or have the same semantic value or both—and predictability both in terms of their morphosyntactic positioning and aspects of their phonological form.

c. **Minimally disruptive of existing system**
Related to the characteristic of straightforward acquisition, for a feature pool item to be part of the semiosis layer, it should not otherwise be disruptive to the encoding of other kinds of meanings that community members are accustomed to expressing linguistically. For example, if, in a multilingual feature pool, there are candidate items from a number of languages exhibiting ATR harmony and one item from a language not exhibiting ATR harmony, within a set of highly frequent and semantically congruent items, the one that comes from the language without ATR harmony language would be a less likely member of a semiosis layer due to the fact it would clash with the existing phonologies of the languages from which the feature pool items are drawn and, therefore, be less easily acquired across a community.

These general properties should be interpreted with respect to the social backdrop of our area of focus, as discussed in Section 2, namely the presence of relatively small language communities and where individual-level multilingualism is the norm. The extent to which a planned semiosis layer change will actually propagate through a community clearly depends on both the extent to which both these conditions are met, and will, all things being equal, be easier to implement in a community with fewer individuals and where a high proportion of members have knowledge of the neighbor-bias target languages.

The membership of an item in the semiosis layer should be viewed as probabilistic rather than deterministic. We do not assume that all feature pool items having the three characteristics provided in (1) will necessarily be leveraged by a community for encoding neighbor-bias. Rather, if a community consciously encodes neighbor-bias then it is more likely than not that the items that it will leverage will have those three characteristics. Also, the three characteristics in (1) say nothing about which types of speech community events will result in a semiosis layer change as this will depend entirely on extralinguistic factors.

However, we believe that these characteristics can be used in order to detect whether a specific pattern of change is due to semiosis layer change. Just to take one example, if we consider point (1a ii) above (frequency-derived potential), we realize that semiosis layer change becomes a reasonable research hypothesis when in a language one finds several apparently borrowed inflectional morphemes of high or very high frequency but few or no borrowings in the lexicon from the same source. By targeting high-frequency items with the only constraints that they should be easy to acquire and minimally disruptive of the existing system, semiosis layer change would be expected to normally transcend both borrowability hierarchies (e.g. Field 2002: 25–48; Matras 2009: 153–165)—as we will see in the cases discussed in Section 5 and Section 6—and the conventional wisdom on the degree of conservatism of items of the so-called *core vocabulary* (e.g. Swadesh 1952, McMahon & McMahon 2006: 31–50, Heggarty 2010), which, due to their high frequency, might be targeted more effectively than non-core vocabulary for encoding neighbor-bias.

Some final remarks should be made concerning the nature of the notion of the semiosis layer. We do not think it will always be possible to provide a clear-cut identification of the extent to which any change may be a semiosis layer change because this will generally require access to information that is not found in the historical record. In addition, we should be clear that our main goal in the application of the semiosis layer model is that it may provide an opportunity to structure inferences about the social underpinnings of specific instances of language change that cannot be accounted for satisfactorily by traditional language-internal and contact-based analyses. Finally, we do not assume that multiple motivations could not be at play in a single change where, for example, a sound change following a common pathway could result in an alternation that enters the semiosis layer and is then used to encode neighbor-bias.

3.3. Modeling semiosis layer divergence

In order to make the discussion more concrete, we provide a schematic representation of one possible route of semiosis layer divergence in Figure 4 below. The figure represents the split of one linguistic community into two, and, for the sake of the argument, we provide a simplified example. It should be kept in mind that the sociopolitical realities that it is purported to represent—i.e., small-scale chiefdoms—are common in traditional societies of the Grassfields (Fowler 2011) as well as in

much of sub-Saharan Africa as a whole (e.g., de Heusch 1987), where kin groups of diverse provenance form a community under the authority of a political and spiritual leader—i.e. a "sacred chief".

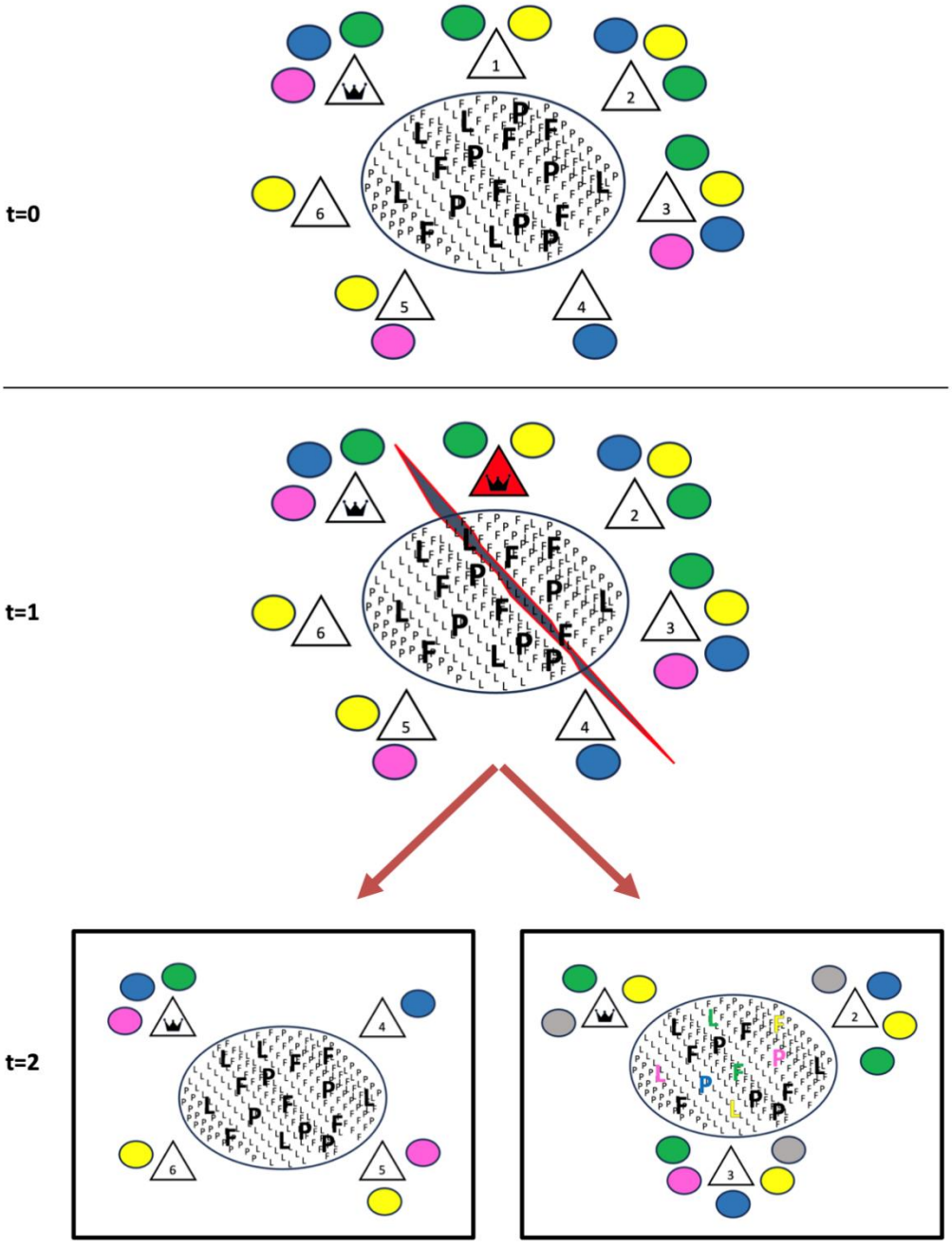

Figure 4: Schematic representation of semiosis layer divergence.

The initial situation (t = 0) is one in which multiple kin groups (triangles) form a community headed by a "royal" kin group (indicated by the crown symbol). In each kin group, there are individuals who have competence in languages spoken in other, neighboring communities (colored circles surrounding the triangles). While the

community as a whole has a shared code (the main oval in the center), its members have an aggregate repertoire of additional four other codes (blue, green, purple, and yellow), associated with their respective communities.

The situation depicted at t = 1 is that of a fission of the community caused by a conflict over leadership between the existing royal kin group and a second kin group (indicated by the crown icon in a red triangle). At t = 2, we see the consequences of the fission: The initial community no longer exists as it is now split into two autonomous communities, each headed by a royal kin group. The diagram on the left-hand side represents what is left of the initial community—i.e., the original royal kin group, three kin groups allied with it, and the initial shared code. The diagram on the right-hand side represents the newly formed community—i.e., a royal kin group (no longer in conflict with another kin group and, because of this, not depicted in red) with two allied kin groups. A crucial difference between the two representations is that the new community has changed some of the high-frequency items of its shared code by drawing on forms from the multilingual feature pool at its disposal due to the multilingual repertoires of its members. This is semiosis layer change because (i) the forms targeted have high neighbor-opposition potential and (ii) the new forms are drawn irregularly from among the pool available to the community—taken from languages that are known also by members of the "mother" community—with the primary goal of obtaining a code that is distinctive of the new community in its sociolinguistic context. This change is made abruptly and both intersects with and sets the stage for further, cumulative, invisible-hand changes that may take place in this code.

What is required for semiosis layer divergence is the formation of a new group in one way or another, not necessarily that one group split directly into two groups. In Section 5, we will argue that a specific semiosis layer change in the Munken variety (munk1244; Niger-Congo, Yemne-Kimbi) of Mungbam (abar1238; Niger-Congo, Yemne-Kimbi) took place in a different context and was the result of the formation of a new group when outsiders entered an existing community.

4. Sociolinguistic group formation in "frontier" settings

Our proposals regarding the semiosis layer are informed not only by linguistic evidence but also a range of other cultural features of Grassfields societies that are

connected to broader observations about communities in sub-Saharan Africa, in particular regarding the historical dynamics that lead to the formation and dissolution of sociopolitical groupings there.

For example, phenomena such as the spatial mobility of groups and the incorporation of outside elements into societies have been amply discussed in African anthropological literature as extremely widespread among both African traditional and postcolonial societies (Cohen & Middleton 1972, Brooks 1993). One particular pattern of mobility and incorporation that has characterized the history of a great many traditional societies of sub-Saharan Africa has been characterized in terms of "the African internal frontier" by Kopytoff (1987). This model of community formation can be broadly described as follows: A group grows demographically until internal conflicts lead to its fission, where one part of its population—usually tied together by a relationship characterized in terms of kinship—leaves the settlement and either founds a new political unit or is incorporated into an existing group. If it forms a new political unit, in the ideal case, it does so in a region that is seen as outside the political control of any other group and grows by "attracting to itself the ethnic and cultural detritus produced by the routine workings of other societies" (Kopytoff 1987: 7). Conflict between groups can lead them to become more distinctive from each other across cultural, linguistic, and spatial dimensions, while groups seeking to grow may take steps to attract and incorporate newcomers who are seeking a new group to be part of.

On the one hand, the newly formed communities are founded around the same cultural models as the communities from which their component groups are drawn. On the other hand, they must have cultural features that make them clearly distinctive in the local cultural space as a means of justifying their independent status. This creates a fundamental tension due to a need to exhibit difference in the context of broad cultural similarity. This is achieved through rich patterns of variation overlaid on a common sociocultural configuration. Linguistic distinctiveness is one element of this, and it also involves variation in kinship structures, economic specialization, and secret societies, among other sociocultural domains (Nkwi & Warnier 1982; Röschenthaler 2011).

Focusing on linguistic variation in these contexts specifically, we can first consider what can be reconstructed with respect to a group's attitudes towards its community language in precolonial times in this part of the world. Regarding the Bamileke societies of the southern Grassfields, for example, Voorhoeve (1971: 1) writes: "Each

chiefdom considers its own language as the only possible linguistic norm. Dialect differences are often exaggerated by the speakers, and the use of a specific dialect seems to constitute a man's very identity as belonging to a certain chiefdom (or tribe). It does not seem conceivable for the inhabitants of a certain village to regard their mother-tongue as a dialect of the language of some other village. Remarks of this nature would certainly be interpreted as a kind of improper cultural imperialism from the side of the competing village." Di Carlo & Good (2014) reviewed evidence indicating that very similar attitudes were still prevalent in the language ideologies of Lower Fungom at the time.

A second aspect of historical patterns of language use that can be reconstructed is the extensive presence of multilingual competences among speakers of Grassfields languages in the past. Before the introduction of lingua francas to the region (in particular, French in the south and Cameroon Pidgin English in the north), inter-community communication was possible only through multilingualism in the various local languages. Based on a wealth of ethnographic data, Warnier (1980) concludes that more than half of the inhabitants of the region were proficient in two local languages, and that individuals who could speak three, four, or even five distinct languages were not rare (Warnier 1980: 834). More recently, research on patterns of traditional multilingualism in areas like Lower Fungom (e.g., Esene Agwara 2020, Ojong Diba 2019) and Lower Bafut (e.g., Chenemo 2019; Chenemo and Neba 2020) have confirmed that multilingualism in neighboring languages was the norm and has been relatively widespread in local populations.[5]

If we look at these historical patterns together two key points emerge. On the one hand, the prevalence of an ideology of linguistic singularity (see Section 2) manifested itself in pressure for a group to be linguistically distinct from neighboring groups, in line with the notion of neighbor-bias selection discussed in Section 3.2. On the other hand, widespread multilingualism meant that speakers would frequently have knowledge of the lexicons and grammars of neighboring languages and were,

[5] Since 2016, the northern half of the Grassfields has been at the center of armed conflict between separatist groups and the state army (Pommerolle & Heungoup 2017). Over time, this conflict has pushed a great number of people to seek refuge in safer areas of Cameroon. There are no exact figures, but the exodus from peripheral areas such as Lower Fungom has been massive. For example, refugees from the area report that the village of Buu has been completely abandoned, and other villages are currently inhabited by only a few families (Ikom Christopher, p.c.). The effects that this process of forced displacement will have on the local forms of multilingualism can hardly be foreseen.

therefore, able to target them in order to develop and maintain such distinctiveness, in line with the idea that patterns of change in small-scale societies characterized by high degrees of multilingualism can involve mechanisms, such as semiosis layer change, that are different from more well-known kinds of change.[6]

Having developed the conceptual approach that forms this paper, in the following sections we consider two patterns of linguistic differentiation in the languages of Lower Fungom, one targeting the nominal domain (Section 5) and the other the verbal domain (Section 6). In particular, we will focus on how an approach employing the semiosis layer model can allow us to make sense of patterns of variation that are otherwise difficult to describe in traditional terms.

5. The historical development of the *ki-/a-* noun class in Mungbam

5.1. The linguistic context

Mungbam is a cover term for a language cluster comprising five dialects, each of which is restricted to a single village, in the Lower Fungom region of North West Cameroon (see Figure 5) at the northern edge of the Cameroonian Grassfields. The language name is an acronym based on the beginnings of the English names of the five villages where it is spoken: Munken, Ngun (ngun1279; Niger-Congo, Yemne-Kimbi), Biya (biya1235; Niger-Congo, Yemne-Kimbi), Abar (abar1239; Niger-Congo, Yemne-Kimbi), and Missong (miss1255; Niger-Congo, Yemne-Kimbi). Within Lower Fungom, each of these varieties is recognized as a distinctive *talk*, and there is no perceived linguistic unity among them. Mungbam, as a label, is restricted to scholarly linguistic sources such as Lovegren's (2013) grammar of the language.

As is clear from the description presented in Lovegren (2013), the Mungbam varieties are all lexicogrammatically quite close while also being clearly distinctive from each other—put differently, dialect differences among the varieties are not subtle. One of the varieties, Missong, is especially distinctive to the point where scholarly criteria would probably group it as a distinct language from the other four, which could then be characterized as a dialect cluster (see Di Carlo & Good 2014 for further contextualization).

[6] This echoes Warnier's (1980) speculation that, in the Grassfields, lexical items were borrowed to the extent that they did not reduce the distinctiveness of a variety with respect to neighboring varieties—or even enhanced it (Warnier 1980: 842).

A set of varieties such as those associated with Mungbam presents us with a good opportunity to explore the semiosis layer approach to the development of linguistic differentiation. The five dialects are associated with villages which are geographically quite close to each other. (The journey between the two most distant Mungbam villages is only around two hours on foot during the dry season.) Before recent patterns of displacement (see fn. 4), speakers of the different varieties were frequently in contact, and many individuals are multilectal in multiple Mungbam varieties (see Esene Agwara 2020 for a general overview of multilingualism and multilectalism in Lower Fungom). This provides an ideal sociolinguistic setting for exploring the ways that languages might be impacted by dynamics of change where a semiosis layer of features is exploited to create salient differences among local varieties. Our focus will be on a specific feature of the noun class systems of Mungbam varieties.

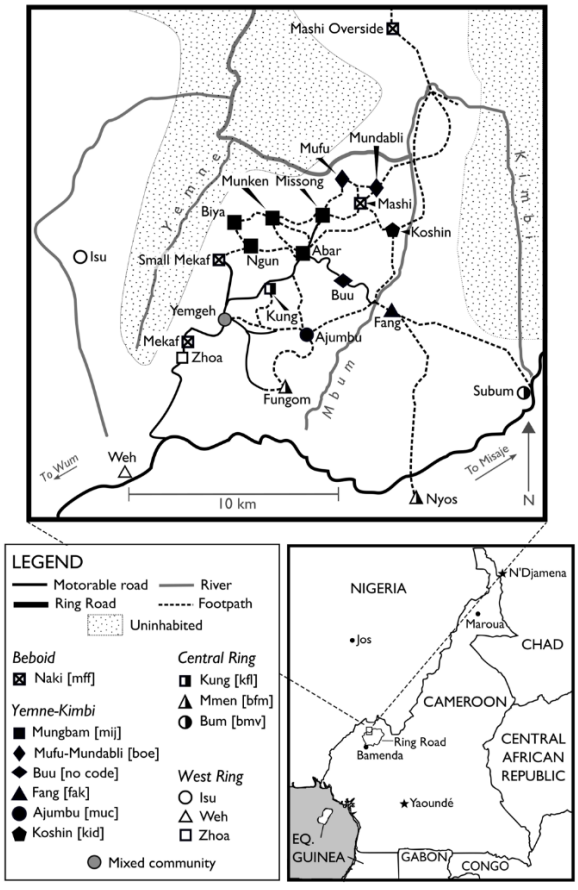

Figure 5: Language map of Lower Fungom and surrounding areas.

5.2. Mungbam noun class systems and Class 7~12

Consistent with their classification in the Bantoid group of languages, the Mungbam varieties show Bantu-like noun class systems where nouns appear with a prefix coding their class, and class pairings are part of the encoding of a singular/plural distinction. Each class is also associated with a specific pattern of agreement on elements such as demonstratives and pronouns. The Mungbam noun class systems are described in more detail in Lovegren (2013), and our presentation of them here leaves out various complications, none of which critically impact the arguments being made here.

The noun class systems for each dialect of Mungbam are summarized in Tables 2–6 below. The shape of the prefixes appearing on noun stems is provided in the first column for a class and a representation of the shape of the associated concord is in the second column. Class numbering conventions follow those of Lovegren (2013), which attempt to relate Mungbam noun classes to those reconstructed for Proto-Bantu, though these should not be taken as definitive statements on cognacy. Typical singular/plural class pairings are indicated via their placement in the same row. Diacritics on the concords in the tables indicate that they are associated with a higher or lower tone as compared to other concords, with the precise tonal realization depending on the stem that they combine with. A capital *N* indicates a nasal which assimilates to the place of a following consonant. The *j* is used for a palatal glide. Classes listed with more than one prefix show lexical variation in prefix choice. Class 13 can show circumfixal coding, as indicated. Classes 5L and 5H seem to be associated with Proto-Bantu Class 5, but they lack a consistent tone in Mungbam, which is why they are separated into a low (L) and high (H) class here (see Lovegren 2013: 121). Classes 6a and 14 are associated with nouns that do not encode a singular/plural distinction, and are, thus, presented as unpaired in the tables.

The noun class systems of the Mungbam varieties display segmental noun class prefixes across all classes and are also similar to each other with respect to class marking on the noun and agreement patterns.[7] However, a noteworthy high-level difference is found in the phonological shape of the marker of the singular class pairing with plural Class 8. Lovegren (2013) labels this Class 12 for all Mungbam varieties except Missong, where the label Class 7 is used. The use of the Class 12 label

[7] The presence of segmental prefixes across all classes has been considered a conservative feature if compared to other Yemne-Kimbi and Beboid languages where some classes are either not coded on the noun or marked only suprasegmentally (cf. Good et al. 2011).

associates this class in Mungbam with a reconstructed Proto-Bantu noun class with the shape *ka-, while the Class 7 label associates it with a reconstructed Proto-Bantu noun class with the shape *ki- (see Maho 1999: 247 for an overview of reconstructions of the Proto-Bantu noun classes). Class 7 would normally be expected to be paired with Class 8 to encode a singular/plural distinction, which would argue in favor of this reconstruction more broadly. However, except for Missong, the vowel seen in the relevant forms is not in line with what would be expected for Class 7. For purposes of exposition, we will refer to the singular class that is paired with Class 8 in Mungbam languages as Class 7~12 here, as a way of signaling the lack of clarity in its reconstruction.

Abar					
1	ù-/Ø-	w`-	2	bwe-/bə-/a-	bw-
3	ú-	w´-	4	í-	j´-
5L	ì-	j`-	6	mwe-/məN-/a-	mw´-
5H	í-	j´-	13	i-/ki-…(-lɔ)	kj´-
12	kə-/a-	k´-	8	bi-/i-	bj´-
9	ì-	j`-	10	í-	j´-
19	ɕi-/i-	fj´-	18a	m͡N-	mw´-
6a	məN-/aN-	mw´-			
14	bu-/u-	bw`-			

Table 2: The noun class system of Abar.

Biya					
1	ù-/Ø-	w`-	2	bə-	bɥ´-
3	ú-	w-	4	í-	j´-
5L	ì-	j`-	6	a-	w´-
5H	í-	j´-	13	kə-…(-lə)	kj´-
12	kə-	k´-	8	bi-	bj´-
9	ì-	j`-	10	í-	j´-
19	fi-	fj´-	18a	mN-	mw´-
6a	N-	mw´-			
14	bu-	bɥ`-			

Table 3: The noun class system of Biya.

Missong					
1	ù-/Ø-	w`-	2	ba-	bu´-
3	ú-	w´-	4	í-	j´-
5L	ì-	j`-	6	a-	w´-
5H	í-	j´-	13	ki-…(-Cə)	kj´-
7	ki-	k´-	8	bi-	bj´-
9	ì-	j`-	10	í-	j´-
19	fi-	f´-	18a	mu-	mu´-
6a	aN-	mu´-			
14	bu-	bu-			

Table 4: The noun class system of Missong.

Munken					
1	ù-/Ø-	w`-	2	bə-	b´-
3	ú-	w´-	4	í-	j´-
we5L	ì-	j`-	6	a-	n´-
5H	í-	j´-	13	ki-…(-lə)	kj´-
12	a-	k´-	8	bi-	bj´-
9	ì-	j`-	10	í-	j´-
19	ɕi-	ɕ´-	18a	mu-	mw´-
6a	N-	m´-			
14	bu-	bw`-			

Table 5: The noun class system of Munken.

Ngun					
1	ù-/Ø-	w`-	2	bə-	bw´-
3	ú-	w´-	4	í-	j´-
5L	ì-	j`-	6	a-	mw´-
5H	í-	j´-	13	kə-…(-Cə)	k´-
12	kə-	k´-	8	bi-	bj´-
9	ì-	j`-	10	í-	j´-
19	fi-	fj´-	18a	mN-	mw´-
6a	N-	mw´-			
14	bu-	bw`-			

Table 6: The noun class system of Ngun.

Lovegren (2013: 132–137) lays out in detail the problems involved with understanding the historical source of Class 7∼12 in Mungbam. First, a scenario involving different patterns of sound change from a common ancestral form is not tenable if one makes the standard assumption that sound correspondences should be regular in the context of genealogical change (Campbell & Poser 2009: 4). All of the varieties show *i* as the reflex of *i in their class markers, as is most easily seen in their use of the *bi-* prefix for Class 8, which can be straightforwardly associated with Proto-Bantu *bi-. Class 7∼12 reflexes with the form *kə-* cannot, therefore, be seen as a regular reflex of Proto-Bantu Class 7 *ki-. Associating them with Class 12 *ka- is not problematic, in particular since this same vowel correspondence is seen in these varieties in the Class 2 prefix form *bə-*, where the Proto-Bantu reconstruction is *ba-. However, Missong Class 7∼12 *ki-* cannot be seen as a regular reflex of Proto-Bantu Class 12, but can be associated with Proto-Bantu Class 7 without any complications regarding sound correspondences.

The *a-* form of the prefix, which is found in Munken (Table 5), poses further problems. While a *ka > *a-* sound change would not necessarily be unusual in general historical terms, there is no evidence for such a change outside of this one prefix. The *a-* realization of the prefix in Abar is associated with an optional process where prefixes with initial consonants can be dropped, in which case *ə* alternates with *a*, as seen not only for Class 7∼12 in Table 2, but also Classes 2, 6 and 6a. However, no such process is found in Munken.[8]

We are left, then, with the following question regarding the Class 7∼12 prefixes in Mungbam: Why do there seem to be two different reflexes of Class 12, either *kə-* or *a-*, with no clear way to account for them in terms of regular sound change across all varieties?

In contrast to our own point of view, an anonymous reviewer suggests that this pattern is not historically problematic for two reasons: (i) The different noun class prefix in Munken can be viewed as the result of a language-internal process in Munken comparable to what is still seen in Abar, whose endpoint was the current attested

[8] Lovegren's (2013) data on Ngun includes *a-* as an alternate prefix form for Class 7∼12. His data for Ngun was more restricted than for other varieties of Mungbam, and it is not clear what forms prompted the inclusion of the *a-* form in that variety in his description. More recently collected data by Tschonghongei (2022) suggests this is a relatively marginal pattern, which is why we do not include it in Table 6. We do not have a specific account for the presence of this form in this paper, though we can speculate that it entered Ngun via lexical borrowing.

situation in Munken. And, (ii) this kind of minor irregularity is often encountered in noun class prefixes of Bantu languages, especially in the northwest Bantu area which is adjacent to the Grassfields.

However, we believe that what we have presented in this section is sufficient to make the case for a relationship between Munken *a-*, Abar/Ngun/Biya *kV-*, and Missong *ki-* that cannot be accounted for in traditional genealogical or contact-based terms. Furthermore, in a database collected as part of the larger research program that informs the work described here, of about 400 respondents to a sociolinguistic survey on local patterns of multilingualism, 73% of those who reported to be proficient in Abar (n = 124) and 88% of those who reported proficiency in Munken (n = 92) claimed knowledge of both lects. (See Esene Agwara 2020 for the research methods underlying this data collection and a report on patterns found in a subset of the currently available data.) If we also consider that the two villages are relatively close to each other (less than two hours' walk on footpaths), and that the ethnographic fieldwork of the first author has found that intermarriages between them are common, that both communities mostly relied on the same weekly market (the Abar market) before the current period of conflict (see fn. 4), then the idea that social factors were not involved with the development of this high-frequency feature that differs between them seems to us to be relatively implausible. While this does not necessarily mean that the difference arose due to semiosis layer change, it is not consistent with the categorization of such a difference as a minor irregularity rather than a linguistically significant one.

We, therefore, believe that a detailed historical account of this difference across the varieties is warranted, and we will propose one involving semiosis layer change in Section 5.5. Before doing so, however, we look at these patterns in the wider areal context in Section 5.3 and provide relevant non-linguistic information about Lower Fungom cultures and history in Section 5.4.

5.3. Noun Class 7~12 prefixes with shape a- in the northern Grassfields

Far from being just a minor analytical discrepancy, the presence of different markers for this class has in fact been seen as a historical problem for some time, and this pattern is not isolated to Mungbam. The map in Figure 6 and the data presented in Table 7 summarize the known distribution of markers of Class 7~12 and Class 8 in

the northern Grassfields. Below, we summarize three proposals that were advanced to account for the presence of marker *a-* instead of the expected *kV-*.

No.	Language	Subgroup	Class 7∼12 marker	Class 7 concord	Class 8 marker	Class 8 concord	Source
1	Bebe	Beboid	kə-	k-́	bi-	b-́	Hombert 1980
2	Kemezung	Beboid	kɨ-	k-	bi-	b-	Smoes 2010
3	Mbuk	Beboid	kɪ- / kə-	k-	bi-	b-	Tschonghongei 2022
4	Naki	Beboid	a-	k-́	bi-	by-́	Hombert 1980
5	Nchanti	Beboid	ki-	k-́	bi-	by-́	Hombert 1980
6	Noni	Beboid	ke-	k-́	bi-	by-́	Hombert 1980
7	Nsari	Beboid	ki-	k-́	bi-	by-́	Hombert 1980
8	Babanki	Central Ring	kə̀-	kV-	ə-	(ə-)	Akumbu & Chibaka 2012
9	Bum	Central Ring	a-	a-	u-	u-	Hyman 2005
10	Fungom	Central Ring	a-	?	ɪ- / e- (cl.	?	pers. comm.
11	Kom	Central Ring	a-	a-	ɨ-	ɨ-	Shultz 1997, Jones 1997
12	Kuk	Central Ring	kə̄-	k-	o-	w-	Hyman no date
13	Kung	Central Ring	kə̀-	kV-	ù-	wV- / ù-	Tatang 2016
14	Mmen	Central Ring	a-	k- / a-	e- (i- cl.	e- / ə-	Hyman 2005, no date
15	Oku	Central Ring	ke-	k-	e-	w-	Hyman 2005, no date
16	Limbum	Mbam-Nkam	Ø-	y-	b- (cl. 2)	w- (cl. 2)	Fransen 1995
17	Aghem	West Ring	kí-	k-́	ó-	w-́	Hyman 1979
18	Isu	West Ring	ká-	k-	ó-	w-	Hyman 1979
19	Weh	West Ring	ká-	k-	ú-	u-	Hyman 2005, no date
20	Abar	YK	kə- / a-	k-́	bi- / i-	bj-	Good et al. 2011
21	Ajumbu	YK	kə-	k-	bə-	b-	Good et al. 2011
22	Biya	YK	kə-	k-́	bi-	bj-	Good et al. 2011
23	Buu	YK	kə-	kə-	bə-	bə-	Tschonghongei 2022
24	Fang	YK	Ø/kə-	k-	bə-	b-	Good et al. 2011
25	Koshin	YK	kə-	k-	bə-	b-	Good et al. 2011
26	Missong	YK	ki-	k-́	bi-	bj-	Good et al. 2011
27	Mundabli-	YK	ø-	k-	ø-	b-	Good et al. 2011
28	Munken	YK	a-	k-́	bi-	bj-	Good & Lovegren 2017
29	Ngun	YK	kə-	k-́	bi-	bj-	Good et al. 2011

Table 7: Distribution of noun class prefixes and concord markers of class 8 and the singular class associated with it (i.e., class 7∼12) in the languages of the northern Grassfields. The abbreviation YK stands for Yemne-Kimbi.

Lovegren (2013: 132–137) summarizes two previous proposals for the development of Class 7∼12 and also provides his own. We provide an overview of these analyses here to contrast how the development of Class 7∼12 has been analyzed from a

traditional perspective on language change in comparison to a semiosis layer approach.

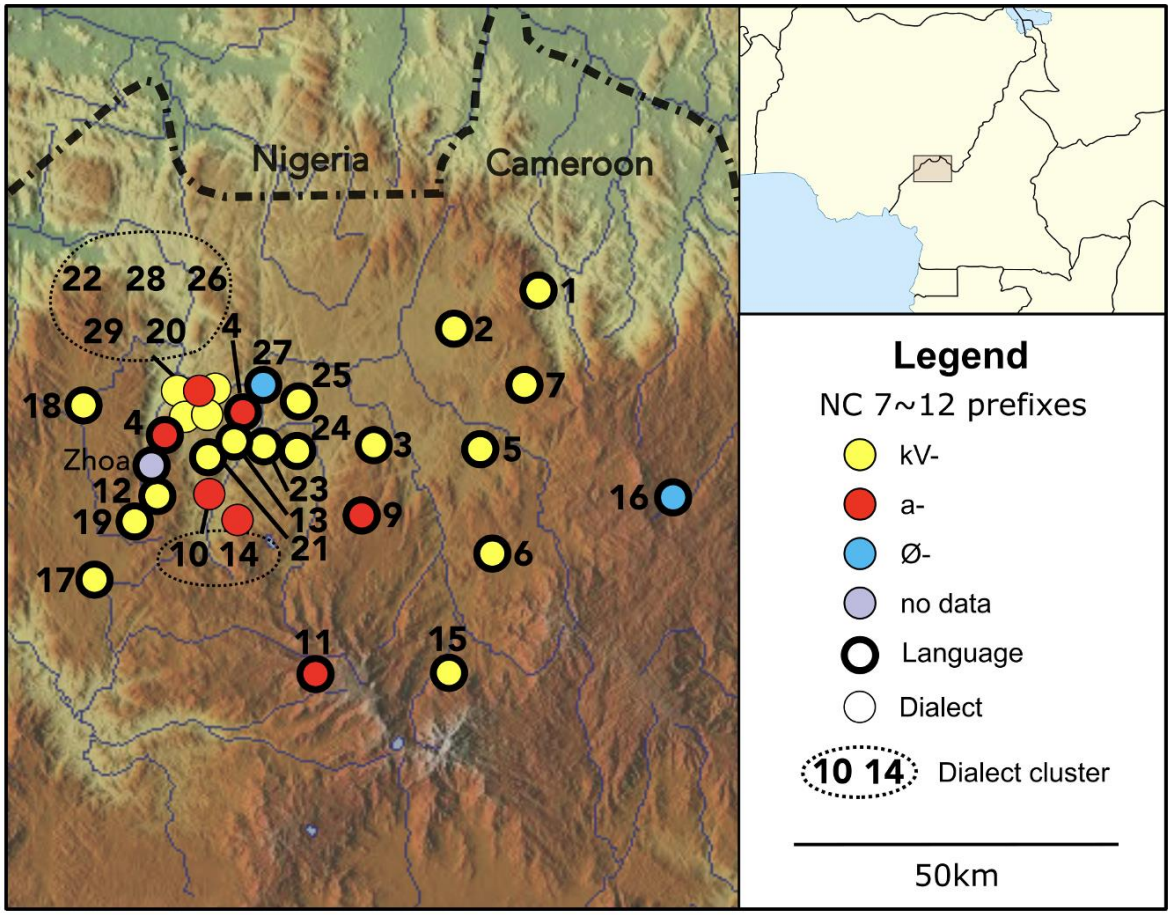

Figure 6: Map showing the distribution of prefixes of noun class 7~12 across languages of the northern Grassfields. Languages are numbered as in Table 7 (Babanki not on map).

As discussed by Lovegren (2013), Hombert (1980) approached the problem by proposing that the *kə-* and *a-* forms of the prefix represent distinct reflexes of Class 12, while, in a variety like Missong, which shows a *ki-* form, the prefix is a reflex of Class 7. He further suggests that an ancestral language had both Class 7 and Class 12, where Class 12 specifically had diminutive function but that this diminutive function was lost with some nouns still appearing with the Class 12 prefix without it having a clear semantic function. The overlap between Class 7 and Class 12 agreement markers would then have led to Class 12 nouns being pluralized with Class 8. As Lovegren (2013) points out, a problem with this proposal is that it requires a given language to have leveled all Class 7 and Class 12 nouns towards either Class 7 or Class 12, rather than having a mixed prefixal pattern. While it is perhaps plausible that some

languages would have uniformly leveled the prefix one way or another, it would be surprising not to find at least one variety that retained a mixed pattern where some nouns showed a reflex of *ki-* and others a reflex of *ka-*.

Hyman (2005) provides an alternative scenario in his study of comparable patterns in a number of Ring languages (Niger-Congo, Narrow Grassfields). The core of his proposal is that Class 7∼12 nouns should be viewed as historically connected to Class 7 where the Class 7 prefix had developed to have a morphologically complex form *á-ki- where the *á- is a morphological initial vowel that appears on nouns in some contexts. Hyman (2005: 329) hypothesizes that this vowel was originally used on nominal modifiers but became extended to nouns and replaced the historical Class 7 marker. While Hyman's proposal works in the context of the Ring data that he considers, where the relevant alternation across varieties is that some show an *a-* prefix for historically Class 7 nouns and others show *k*V- prefix, it does not extend naturally to the Yemne-Kimbi situation where there is not only a lack of evidence for an initial vowel of the sort found in Ring but where the contemporary forms across varieties point also to the presence of at least two different *k*-initial prefixes.

Lovegren's (2013) own proposal is comparable to Hombert's (1980) proposal in assuming that the presence of historical Class 7 and Class 12 are needed to account for the patterns found in Yemne-Kimbi languages. He suggests that the leveling towards reflexes of Class 12 in many varieties could have been due to homophony avoidance with plural Class 13, which can appear as a *ki-* prefix in some varieties. However, his proposal is clearly tentative.

One commonality to all three proposals is that they emphasize the role of language-internal processes to account for variation associated with Class 7∼12—i.e., they are instances of what Möhlig (1981: 251) defines as the "unilinear monogenetic model of language history". The proposals of Lovegren (2013) and Hombert (1980) emphasize sound change and analogy as primary explanatory factors. Hyman's (2005) analysis also invokes analogy alongside the reconstruction of a morpheme that was not originally part of the noun class system but became integrated within it. None of these analyses consider the possible role of language contact. They also cannot fully account for all of the observed patterns which are resistant to an account purely in terms of traditional approaches to language change.

In the rest of this section, we will focus specifically on the fact that, among Mungbam varieties, only Munken generally shows *a-* as the prefix on nouns for Class 7∼12. We start with the assumption that the presence of the *a-* marker in Munken

represents an innovation in comparison to the other Mungbam varieties, in particular because a *ki-* marker is found in the Missong variety of Mungbam that is most distinct from all the others, which strongly suggests that the *kV-* markers represent a shared retention rather than a subgroup-specific innovation.

Since an account based on regular sound change does not appear to be well motivated for a Class 7∼12 alternation, as discussed above, we can then consider the possibility of some kind of borrowing or related type of contact-induced change. If we look at Figure 6, which shows the spatial distribution of the data shown in Table 7, we can see some potential candidate donor languages. In Lower Fungom, Munken is not the only lect in which the singular of Noun Class 8 plurals is prefixed with *a-*, as this is also seen in Naki (naki1238; Niger-Congo, Beboid). In addition, relatively close to Lower Fungom to the south, we find four Central Ring languages that have *a-* instead of the most common *kV-*: Bum (bumm1238; Niger-Congo, Narrow Grassfields), Kom (komc1235; Niger-Congo, Narrow Grassfields), Fungom (fung1247; Niger-Congo, Narrow Grassfields), and Mmen (mmen1238; Niger-Congo, Narrow Grassfields).[9] Should we consider the hypothesis that Munken has borrowed the 7∼12 noun class prefix *a-* from one of these languages? If so, how can contact-induced change be so selective and what was the precise process through which it was borrowed? Is there anything in the history of these communities that might suggest that such a hypothesis is in fact tenable? To answer these questions, we first present information on the ethnographic features of Lower Fungom's communities, as well as their history, in the next section.

5.4. Ethnographic and historical considerations

Available ethnographic, archival, and archaeological evidence for Lower Fungom and its immediate surroundings (e.g., Chilver & Kaberry 1968, Di Carlo 2011, Di Carlo & Pizziolo 2012) indicates that social formation dynamics in Lower Fungom largely reflect the internal African frontier model (see Section 4). Nearly all of today's village communities are either the outcome of incorporation that took place locally between groups of firstcomers and newcomers (e.g., Biya, Munken, Missong) or have settled in Lower Fungom as a consequence of earlier splits from larger communities (e.g.,

[9] For the sake of simplicity, in Table 7 we have generalized the use of the term "language" to refer to any named language regardless of its status. As is shown in Figure 5, though, Fungom is considered as a variety of Mmen.

Koshin, Kung, and the Naki-speaking Mashi).[10] Oral traditions reporting individuals or entire families being incorporated in a larger group are commonly encountered in all the villages. Data from genealogies, toponymy (see e.g., Di Carlo & Pizziolo 2012), and the existence of strong relationships between individual kin groups settled in different villages further contribute to view this area as one of past and present—at least until 2016 (see fn. 4)—intense cross-village contacts, flow of individuals and families, and incorporation of outsiders.

Ideological pressures for linguistic singularity have also been clearly documented as they emerge at the level of both explicit and implicit ideologies (see Pakendorf et al. 2021: 3–5). Regarding explicit ideologies, a one-to-one correspondence between *village-chiefdoms* and *languages* surfaces in metalinguistic remarks stressing that only a group that is associated with a distinctive speech form can aspire to political independence (see, e.g., Di Carlo & Good 2014). With respect to implicit ideologies, analyses of spontaneous multilingual language use have shown that, in Lower Fungom, switching between local lects during one and the same interaction is a rare event and, when it is observed, it co-occurs with significant changes in the situational context such as the arrival of a new interactant or a disagreement of some kind (see, e.g., Ojong Diba 2019, Di Carlo et al. 2020).

All the communities of the area show broadly similar cultural patterns otherwise found in the Grassfields. In an attempt to capture the cultural diversity found in the area Di Carlo (2011) proposed the adoption of a heuristic Lower Fungom "canon" meant to measure diversity along dimensions such as settlement patterns, social organization, attributes of village chiefs, and names and key features of village-based secret associations. With the exception of Missong, the Mungbam-speaking villages all align quite closely with the Lower Fungom canon and are culturally very similar to each other.

One of the few features breaking this Mungbam unity is the name of one of the village-based secret associations with mainly ritual functions. See Table 8 for relevant data. In Munken, this is called *ntələ*, which is unknown to the other Mungbam-speaking villages and, by contrast, finds its closest analogs in Fang (*ntol*) (fang1248;

[10] The only exception seems to be Fang, which is reported to have been founded by a community of fugitives seeking to escape from the control of other, neighboring groups (Di Carlo 2011, Mve et al. 2019). It is hard to say, however, if this community was actually closed off enough to outside influence to actually escape the processes of incorporation of outside groups that pervade the whole of the Grassfields.

Niger-Congo, Yemne-Kimbi), Koshin (*nti*) (kosh1246; Niger-Congo; Yemne-Kimbi), and Kung (*ntul*), none of which is a Mungbam-speaking village. Interestingly, the form *ntələ* most closely resembles forms referring to very similar social institutions found in larger and highly centralized chiefdoms located to the south of Lower Fungom, i.e., Bum *ntul* (Chilver 1993: 8–9 June 1960) and Kom *ntul* (Nkwi 1976: 32 and Chilver & Kaberry 1968: 85), as well as in the small chiefdom of Fungom, where the form *ntələ* is found (see Chilver & Kaberry 1968: 92–93). The languages associated with these chiefdoms—i.e., Bum, Kom, and the Fungom variety of Mmen—are all Central Ring languages.

Village (Language)	**Secret associations with mainly political functions**	**Secret associations with mainly ritual functions**	**Inner circles**
Abar (Mungbam)	əkpwinan	eko	itshung
Biya (Mungbam)	əkponənang	eko	itshung, kwifantɔ
Missong (Mungbam)	olam / nlyam	olam, eko	itsang
Munken (Mungbam)	?	ntələ, ikwæ	itshung, ube
Ngun (Mungbam)	əkponənə	ikwæ	?
Ajumbu	ntshuin	ntshuin	?
Buu	kə (?)	kə	tzang, ntənəyən
Fang	kwifon	ntol, təmì	təm (?)
Koshin	kwifon	nti̩	?
Kung	kwifon	ntul, fəbafə	?
Mashi	ntshu	ntshu	?
Mufu (Mufu-Mundabli)	ji (?)	ntshu	?
Mundabli (Mufu-Mundabli)	kwal (?)	ntshu	?
Bum	kwifon	ntul	chum, ?
Fungom	kwifon	ntələ	?
Kom	kwifoyn	ntul	nggvu, kwifoyn ntu'u

Table 8: Distribution and names of the higher male secret associations in Lower Fungom villages and in the three nearest centralized chiefdoms—i.e., Bum, Fungom, and Kom (table updated from Di Carlo 2011: 69). Mungbam-speaking villages are bolded.

Limiting ourselves again to the case of Munken, which is our main focus in the linguistic analysis of the development of class 7~12, oral traditions report that the

founders of the village formed a group that originally split from Tabenken, a chiefdom located some 50 kilometers as the crow flies to the east where Limbum (limb1268; Niger-Congo, Narrow Grassfields) is spoken (Fransen 1995). Oral traditions also report that those who later founded Munken took a southern route to get from Tabenken to Lower Fungom and that Munken grew through unions with local women, mainly from Abar and Ngun. Based on this evidence, Di Carlo (2011: 86) concluded that "at some time in the past Munken must have had important relations, though of an unknown kind, with groups settled generally to the south, probably outside of Lower Fungom."

Having presented this ethnographic and historical overview, in Section 5.5, we provide a semiosis layer change analysis of the development of Class 7∼12 in Munken.

5.5. Account for the development of Class 7∼12 in Munken

Up to this point, we have seen how language-internal reconstructions of the development of Class 7∼12 in Mungbam proposed by Hombert (1980) and Lovegren (2013), as well as Hyman's (2005) hypothesis of *a-* as a pre-prefix to account for this form in other languages of the area, are associated with a number of unresolved issues. At the same time, the overall picture outlined just above in Section 5.4 suggests that Munken's founders had important relations with groups settled to the south of its present location, where it is likely that Central Ring languages were spoken at the time (as they are today). If we add the fact that Munken was founded about one century before the arrival of Naki speakers in the area and that there is no evidence indicating significant relationships between the village of Munken and the Naki-speaking villages of Mashi and Mekaf (Di Carlo 2011, Di Carlo & Pizziolo 2012), then the most initially straightforward hypothesis for the development of Class 7∼12 prefix *a-* in Munken, under standard approaches to language change, might be to suggest that it was borrowed from some Central Ring language. However, we believe there are a number of reasons to reject this hypothesis on linguistic grounds.

In order to make our argument clearer, we should clarify different potential routes for the *a-* prefix to have entered Munken, as summarized in (2), building on terminology developed in Seifart (2015) for the first two scenarios, which we take as representative of the standard historical approach to patterns of the kind seen in Munken, along with our own proposal in the third scenario.

(2)

a. **Indirect borrowing:** The prefix would have entered Munken via borrowing of whole words from some Central Ring variety (or varieties) and then have been extended to all Class 7∼12 nouns. This scenario would additionally need to assume that these nouns were assigned to Class 7∼12 in terms of agreement as well.
b. **Direct borrowing:** The prefix would have been directly borrowed from a Central Ring variety into Munken via speakers with knowledge of the grammars of both languages. This scenario would additionally need to assume that the borrowing resulted in the replacement of the prefix earlier found on Class 7∼12 nouns with this new prefixal form in a way that ultimately impacted all Class 7∼12 nouns.
c. **Semiosis layer change:** Munken was founded by a diverse community. Within the feature pool that linguistically co-occurred with this demographic diversity, there were also (at least) two variant forms for coding noun class on nouns, neither of which had strong semantic associations and which appeared, in different varieties, on stems with similar shapes and meanings. As a response to pressures for linguistic singularity, the variant that ensured the highest distinctiveness from neighboring lects was selected.

Both (2a) and (2b) can be straightforwardly understood in terms of contemporary theory on contact-induced affixal change but are disconnected from the sociolinguistic and ideological specificities of the relevant speech communities as discussed in Section 5.5. Scenario (2c), by contrast, gives precedence to extralinguistic evidence that is specific to the relevant communities but proposes a teleological mechanism that is outside of the scope of typical approaches to contact-induced change in the domain of affix borrowing. All three proposals must therefore be considered speculative to some extent, though in different directions, which is why none of them can be immediately dismissed without further consideration.

There are two main reasons why we think that scenarios (2a) and (2b) above are unlikely. In the case of (2a), while it would not be unreasonable to view borrowings as a possible route through which a new prefix could enter a language, for the prefix to not only enter the language but also be extended systematically to all nouns in the noun class with the most members in the language would be a very unusual change.

In a dataset of around 500 nouns from Munken, for example, about one third were assigned to this Class 7~12/8, one fifth to the Class 1/2, with the remaining 50% distributed over five other class pairings showing a singular/plural distinction and the two unpaired noun classes (6a and 14) (Tschonghongei 2022, see Figure 7).[11] If a process like the one outlined in (2a) were to have taken place, we would expect at least some nouns in Munken to retain the earlier form of prefix. The scenario in (2b) is associated with the same problem. While direct borrowing of an affix in a highly multilingual setting like Lower Fungom is plausible, the complete replacement of the original prefixal coding on nouns still cannot be readily accounted for under this scenario. Furthermore, both these hypotheses are problematic for another reason. A comparison of about 100 core vocabulary items from several Central Ring languages (Hyman no date) with their equivalents in Munken does not seem to yield a single clear case of lexical borrowing, and it would be difficult to justify that contact would materialize in one isolated inflectional morpheme of the most populous noun class without also affecting at least part of the basic vocabulary.

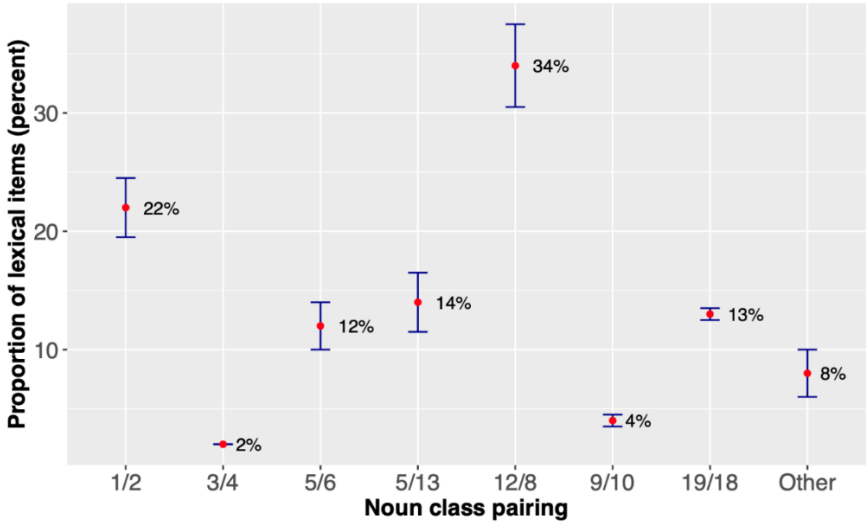

Figure 7. Distribution of the proportion of nominal concepts across singular/plural class pairings in two speakers of Munken (entire wordlist n = 612, speaker 1 = 564 data points, speaker 2 = 333 data points; the two speakers are not identified in the chart as its goal is to provide information on the overall patterns of noun class membership and a rough representation of individual-based variation). Each red dot represents the average value for the distribution of singular/plural class pairing across the two speakers. The percentage refers to the proportion of lexical items that are found in that class pairing out of the total number of lexical items considered. The lines around the points the range of percentages across the two speakers regarding the percentage of lexical items in each class.

[11] Figure 7 was created using the ggplot2 R package (Wickham 2016).

In fact, the latter point suggests a completely different interpretation. Due to the large number of nouns assigned to the Class 7∼12/8 pairing, nouns in these classes are likely to occur frequently in discourse, which means that any indices associated with this gender—i.e., singular and plural class prefixes and their corresponding agreement markers—are also very likely to occur with a frequency in discourse that is higher than those of any other class pairing. This claim finds further support in the fact that membership in the Class 7∼12/8 pairing is semantically unconstrained—nouns in this class have human, animal, and inanimate referents—unlike pairings like Class 1/2, Class 9/10, and Class 19/18 which are almost entirely composed of nouns referring to humans, animals, and diminutives respectively. From a teleological point of view, this makes the coding of Class 7∼12/8 a strong candidate for creating and maintaining linguistic distinctiveness. Within the framework of our semiosis layer model (Section 3.2.3), this means that a prefix with form *a-* in the Mungbam context has high neighbor-opposition potential, can be acquired straightforwardly, because the relevant forms are semantically and structurally congruent (in this case simply being two noun class prefixes, one with form *kV-* and the other with form *a-*), and is minimally disruptive because, on top of being congruent, these are each indices of a semantically unconstrained noun class.

Given this, what we propose is that the Class 7∼12 pattern, and, in particular, the presence of the *a-* form in Munken, is not due to well-known processes of linguistic change such as regular sound change, analogy, or borrowing, but, rather, is the result of semiosis layer change. Specifically, during the creation of the sociopolitical unit that would become the village of Munken, an individual, a group of individuals, with knowledge of other languages that used an *a-* prefix for the equivalent class in other languages engaged in a kind of linguistic "micro-engineering" to replace a *kV-* prefix on all nouns in Class 7∼12 with an *a-* prefix, without otherwise altering the noun class system. This would seem to be in line with what Warnier (1980: 842) identified as a general pattern in the Grassfields where "des chefferies crées par scission d'une autre chefferie ont dévéloppé, en quelques générations, des différences linguistiques telles qu'elles permettent d'identifier immédiatement un locuteur [the chiefdoms created by splitting off from another chiefdom have developed, in few generations, linguistic differences that allow a speaker to be immediately identified; translation by the authors]".

One thing this analysis leaves open is what the original source of the *a-* variant was. On the basis of the data that we have available to us, we have no definite answer

for this. However, in a society characterized by high degrees of individual-level multilingualism, there are many possible ways for variation to enter the semiosis layer. For example, a regular sound change in one language could produce a morphological form that is selected for in a different language, or analogical leveling in one language could result in a morphological pattern which is only partly adopted into another language. As is the case with *wanderwörter* (see Blench 2008 in an African context), this may be a situation where there is evidence for borrowing of a form even in the absence of a specific source for it.

In the next section, we look at another domain of grammar in the languages of Lower Fungom, namely tense-aspect marking. In this case, we consider the overall structure of the systems found across languages of the region and argue that accounting for the observed patterns also requires an appeal to neighbor-bias change and the semiosis layer.

6. Tense-aspect marking in Lower Fungom

6.1. Overall structure of Lower Fungom tense and aspect systems

In order to provide another example of linguistic variation which we think can be usefully examined from the perspective of a model of language change based on semiosis layers, in this section, we will consider the encoding of tense and aspect in the verbal systems of languages of Lower Fungom, with a particular focus on the referential Yemne-Kimbi group. Like other languages of the Grassfields, Yemne-Kimbi languages have relatively complex tense-aspect systems, in particular due to the presence of remoteness distinctions in the past and future tenses. For the discussion of this section, we build, in particular, on the work of Botne (2021), who synthesized the information available in a number of descriptive works on Yemne-Kimbi languages and incorporated the data into a general framework for modeling tense and aspect systems with remoteness distinctions.[12] While the grammatical subsystem being examined in this section is functionally quite distinct from noun class marking, the historical issues raised by the observed variation in the encoding of tense and aspect in these languages are quite similar. The formal encoding of tense–aspect

[12] The tense-aspect system of one Yemne-Kimbi language, Fang, is not sufficiently well-described to be discussed in this section. The same is also true for the Mufu variety, whose most closely related variety is Mundabli.

categories is not amenable to straightforward interpretations in terms of inheritance or simple patterns of contact, though there is a shared semantic foundation on which the systems are built.

Broadly speaking, tense and aspect are primarily coded in Yemne-Kimbi languages through the use of preverbal markers and tonal inflection on the verb along with other kinds of morphological marking such as segmental alternations in the verb or postverbal markers. Relevant examples, drawn from Voll's (2017) description of Mundabli are provided in (3a) and (3b). In the tense-aspect data presented in this section, the glossing abbreviations P0, P1, P2, and P3 are used for past tenses at differing degrees of remoteness (with P0 being just after utterance time and P3 being the most distant from utterance time, though not all languages will necessarily encode all possible degrees of remoteness). The abbreviations F1, F2, and F3 are used in the same way for different degrees of remoteness in the future (though see Botne 2021 for a specific way to analyze remoteness distinctions that does not assume that they strictly encode remoteness on a simple linear timeline).

(3) Mundabli (Niger-Congo, Yemne-Kimbi; Voll 2017: 197, 200)

a. *wù* *à* *tʃŭ* *kpɔ́* *wū-dzú* *w-ɔ́* *ŋgɔ̀*
CL1.PVB P2 come(b) CL3/7a.week CL3-other CL3-DET upon
'He arrived last week.'

b. *bɔ́* *kā* *mú* *ʃí* *ā* *bɔ̌*
CL2 F2 take(a) descend(a) COM CL2
'They shall bring them down.'

Table 9 and Table 10 adapt Botne's (2021: 13) summary presentation of tense-aspect marking in Yemne-Kimbi languages. Table 9 presents an overview of past tense marking, and Table 9 presents an overview of present and future tense marking, as well as present progressive aspect. The data in the table is based on the following sources: Ousmanou (2014) for Koshin, Voll (2017) for Mundabli, Ngako Yango (2012) for Buu (buuu1246; Niger-Congo; Yemne-Kimbi), Lovegren (2013) for the five Mungbam varieties (see Section 5.2 for more information on these varieties), and Tschonghongei (2019) for Ajumbu (mbuu1238; Niger-Congo; Yemne-Kimbi). In the table, the symbol V is used to represent the position of the verb. Where relevant, it is additionally indicated if the verb stem in a given construction appears in either an

Imperfective form (IMPV) or Irrealis form (IRR), and, when Botne (2021) indicated an additional tonal feature on a verb, this indicated using a superscript L or H following his presentation. The level of descriptive detail available for Yemne-Kimbi languages varies by language, and further work may demonstrate a need to refine the presentation of some details of these systems, in particular with respect to tonal patterns. However, we do not expect any such refinements to significantly impact the general points being made here.

Botne's (2017: 32) overall assessment of the tense-aspect systems of the Yemne-Kimbi languages is that "the linguistic exponents marking temporal domains and regions vary significantly across the Yemne-Kimbi languages." At the same time, "what is striking, apart from the individual changes, is the convergent development in the organization of the tense/aspect systems to the extent that there is a nearly one-to-one correspondence between forms in all but the most recent arrival to [Lower Fungom], Koshin." An examination of Table 9 and Table 10 reveals some areas of clear similarity both formal and functional across the languages, such as the coding of the Present forms and the Future forms, which do not show an F1 and F2 distinction in most cases. At the same time, in other tenses, while there is clear functional similarity, there is also significant formal variation. Focusing on the Mungbam varieties, in particular, Missong and Abar pattern one way with respect to P2 and P3 forms, with *k*-initial forms, while Ngun and Munken pattern a different way, with *l*-initial forms, and Biya showing a form with *l*, as well, but also with an initial *à* not found in the other varieties.

	Variety	P3	P2	P1	P0
	Koshin	*nə* = *nyā* = V^H	*nə́* = ^{L}V	*yə́* = ^{L}V	
	Mundabli	*kə̀* V	*nà*V ~ *à* V	*fə̋* V	Ø V
	Buu		*fə̀* V	*kə̀* V	
Mungbam	Missong	*kà* V_{IRR}	*kà* V	*ká* V	Ø V
	Abar	*kə̀* V_{IRR}	*kə̀* V	*hə́* V	Ø V
	Ngun	*lē* V_{IRR}	*lē* V	*fə̋* V	Ø V
	Munken	*lē* V_{IRR}	*lē* V	*fə̋* V	Ø V
	Biya	*àlə̄* V	*àlə̀* V	*fə̋* ~ *fə̄* V	Ø V
	Ajumbu	*à* V	*á* V	*ǹ* V	Ø V

Table 9: Simple Pasts in Yemne-Kimbi languages.

Variety		Present	Prog	F1	F2
Koshin		Ø ^{L}V	V-*lə̄-lɛ̄*	*kə̄(=lə̄)*=V	*bə́*=*kə̄*=V(-*lɛ́*)
Mundabli		Ø V	*fə̋ ā* ɴ-V	*dɨ̋* V	*kə́* V
Buu		Ø V	V *kə*	*á* V^{H}	
Mungbam	Missong	Ø V_{IMPV}	V_{IMPV} *ɲàŋ*$_{IMPV}$	*á* V	
	Abar	Ø V_{IMPV}	V_{IMPV} *lànɔ*	*á* V	
	Ngun	Ø V_{IMPV}	V_{IMPV} *lan/kə*	*á* V	
	Munken	Ø V_{IMPV}	V *ɲà*$_{IMPV}$	*á* V	
	Biya	Ø V_{IMPV}	V_{IMPV} *ɲì-ɲà*	*á* V	
Ajumbu		Ø V	V *kà*	*ń* V̄	

Table 10: Simple Present and Futures in Yemne-Kimbi languages.

In the P1 forms, Abar and Missong no longer pattern together, but Ngun, Munken, and Biya do, on the whole. Looking outside of Mungbam, the Buu system is only described as having a two-way Past tense distinction, and its system uses similar forms to some Mungbam varieties, but they appear to be flipped with respect to what they encode, with an *f*-initial form for a P2 form and *k*-initial form for a P1 form. The Mundabli forms, again, overlap with forms found in other varieties, but not in any way that results in a clear isogloss. Ajumbu is somewhat different from the other languages in the past tense in the form of its markers, though there are some areas of overlap, such as with Mundabli in P2 and a partial overlap with Biya in P3 and P1.

In the Progressive forms, with the exception of Mundabli, all languages show a postverbal marker coding progressive aspect, and, while there is some formal overlap, there are also some formal differences among all the varieties, with the exception of Ajumbu and Buu, which show some differences in tone, where the Buu postverbal marker's tone is predictable based on its phonological context (Ngako Yango 2013: 99–100).

Notably, the patterns of formal convergence in tense-aspect marking do not overlap with lexical similarities among the varieties, at least on the basis of the most up-to-date analyses of lexical variation among Lower Fungom varieties, as discussed in Good et al. (under review). Within Mungbam, Missong is the unambiguous lexical outlier and does not form any kind of low-level grouping with Abar. Ngun and Biya form a relatively clear unit, as well, and while both are also relatively close to Munken, this is not the same grouping that is implied by the tense-aspect marking. The other varieties are otherwise relatively distant from each other in lexical terms

on the whole, making it hard to detect any obvious mismatches between the tense-aspect systems and the lexical data.

6.2. Interpreting the similarities and differences among the tense-aspect systems

Botne (2021) develops a historical proposal for the development of salient formal aspects of the tense-aspect patterns discussed just above in terms of standard notions of genealogical inheritance and borrowing. His proposal for tense and progressive markers is summarized in Table 11, which is adapted from his original table (Botne 2021: 29).

In Table 11, rows labeled *Common form* are for forms appearing in multiple Yemne-Kimbi languages with no obvious single source. The label *Innovation* is applied to two changes. The first is the development of the progressive marker in Abar, which appears to transparently derive from a verb meaning ‘go’ (Lovegren 2013: 450).

Change	**Particle**		**Recipient**							**Source**
Common form	*á*	FUT	Ngun	Abar					Buu	
Innovation	*lànɔ*	PROG		Abar						
Borrowing	*làn*	PROG	Ngun							(< Abar)
Borrowing	*hấ*	P1		Abar						(< Biya)
Borrowing	*fə̃*	P1	Ngun			Munken				(< Biya)
Borrowing	*fə̃*	P1			Biya					(< Mmen)
Common form	*ɲà*	PROG			Biya	Munken	Missong			
Borrowing	*lē*	P2			Biya	Munken				(< Ngun)
Borrowing	*á*	FUT			Biya	Munken	Missong			(< Ngun, Abar)
Borrowing	*kà*	P2					Missong			(< Abar)
Innovation	*ká*	P1					Missong			
Borrowing	*fấ*	P1						Mundabli		(< Limbum?)
Borrowing	*kə̀*	P3						Mundabli		(< Abar?)
Borrowing	*nà*	P2						Mundabli		(< Koshin ?)

Table 11: Proposed changes using a traditional model of descent and contact (Botne 2021: 29).

The second is the Missong P1 form, which Botne (2021: 18) treats as a Missong-specific extension of a *ka* form to P1 contexts after being borrowed from Abar in P2 and P3 contexts. As indicated in the table, he treats many of the other forms as a result of extensive borrowing across different language pairs, including two donor languages from outside of Lower Fungom, namely Mmen and Limbum.

Some of the proposed borrowing patterns are plausible from a sociolinguistic perspective, such as claims that some Mungbam varieties may have borrowed forms from Abar, the most widely spoken Mungbam variety. Other proposals are less plausible, such as the proposal that Biya *fə̋* is the source of an Abar form *hə́*. Not only does this proposal require sound change to have affected the Abar form, but it is also sociolinguistically problematic given that Biya is associated with a much smaller village than Abar and is not especially socioculturally powerful in the Lower Fungom region. More striking is the proposal that the entire Mundabli past tense marking system is borrowed, especially given that one of the proposed scenarios, involving Mundabli adopting a *nà* marker from Koshin is a poor fit for the social reality that Mundabli and Koshin have historically had an antagonistic relationship. More broadly, Botne's (2021) rests on the rather striking assumption that borrowing of tense and aspect markers within Yemne-Kimbi languages is a common phenomenon even though this runs counter to general observations regarding the fact that functional elements, such as tense markers, are less prone to borrowing than content elements (see, e.g., Tadmor 2009: 60).

In a manner parallel to our analysis of Class 7∼12 patterns in Section 5, we are less interested in critiquing the details of Botne's (2021) analysis than in recognizing the ways in which a semiosis layer approach can provide a more insightful account of the observed patterns than one which is limited to viewing the development of linguistic systems primarily through the lens of genealogical inheritance and borrowing. As is the case with noun class systems, tense and aspect marking in Yemne-Kimbi languages has three key characteristics: (i) there is a common set of functional distinctions encoded across all of the languages of the region, (ii) these distinctions are encoded using markers with broadly similar formal properties, and (iii) the actual sets of formal markers found are drawn from a relatively limited set of patterns that show non-systematic recurrences across languages. The Class 7∼12 case involved only two markers, an *a-* and *kə-*, while the tense and aspect markers discussed here are more varied. However, the same basic patterns remain.

From the perspective of a semiosis layer approach to language change, the explanation for these patterns involves a relatively straightforward extension of the account offered for Class 7∼12 markers in Section 5.5. They share several key features with Class 7∼12 markers. The relevant elements are relatively high frequency items given the nature of tense-aspect marking in Yemne-Kimbi languages, resulting in high neighbor-bias potential. They encode semantic categories that are largely aligned across the varieties, which means that each variety will have a means for expressing them, which will also make it easy to acquire a new variant occupying a slot that speakers have already acquired independently. Finally, their predictable syntactic positioning and phonological structure (e.g., as CV elements) means that replacing them with forms with similar shapes will be minimally disruptive to the overall system. Taken together, these features make tense-aspect markers good candidates for encoding neighbor-bias selection, which is precisely where we expect to see semiosis layer change.

Adopting a semiosis layer approach to the development of tense and aspect marking in Yemne-Kimbi languages allows us to account for the obvious similarities found across the languages without need to propose complex, and largely unsupported, borrowing scenarios such as those presented in Table 11. This is because we do not need to identify any one specific variety as the source for a given set of variants or assume that variation is purely the result of regular internal changes creating new forms which are then transferred across varieties in a neat chronological fashion where such borrowings are seen as discrete and independent events. Rather, we can view the variation as resulting from the availability of a layer of "floating" variants in the local sociolinguistic space which are assembled to create tense-aspect systems which show formal overlap across the group of languages but not in a way that creates clear higher-level divisions. The resulting differences also result in systems where each variety has at least one element that distinguishes it from each other variety while also having forms which overlap with many other varieties.

We realize that we are again replacing a complex and speculative scenario with another admittedly speculative scenario. However, our proposal at least has the advantage of relating linguistic events with speech community events—i.e., situations of increased ideological pressure for linguistic singularity—that existing knowledge on the societies of the Grassfields portrays as the norm in precolonial times. In this sense, it can account for both the observed grammatical patterns while also explaining why they have some properties (e.g., those in line with neighbor-opposition) but not

others (e.g., broader lexical convergence), whereas earlier accounts lack such potential explanatory power. Therefore, while we certainly would not say that the current state of the evidence is consistent only with our account, we believe that, for any competing account to be stronger, it must not only be able to provide a structural linguistic mechanism through which the relevant patterns were produced but also a sociolinguistic account as to why those patterns are found instead of other logical possibilities.

7. Conclusion

We have taken the first steps to model a mechanism of language change, involving semiosis layers and neighbor-bias, which we believe is needed to account for the entirety of the dynamics of change in the small-scale societies of the Cameroonian Grassfields and, most likely, beyond. We are aware that our proposals here may be controversial from the perspective of traditional approaches to historical linguistics, in particular the idea that much more language change in the Grassfields is likely to be consciously directed than previous work has assumed. We also acknowledge that our proposals also are somewhat speculative in nature insofar as the data we have provided does not rule out other pathways of change that would result in the observed patterns. Nevertheless, we think they offer a promising way forward to provide a full, socially embedded, account of the operation of language change in this part of the world.

From a methodological perspective, studying potential instances of semiosis layer change requires data that are not typically available from traditional descriptive resources. For instance, on the structural linguistic side, in order to determine if a change will have high neighbor-bias potential, having data on the frequency of the use of a specific linguistic feature can be crucial. However, this may not always be readily available. Noun class system descriptions, for example, do not always provide detailed information on the proportion and frequency of usage of the nouns that belong to the class, which can be important for assessing whether change in the form of a noun class marker is a candidate for analysis as a semiosis layer change. On the sociolinguistic side, it is important to have information on the patterns of multilingualism found within an area as well as the ways that linguistic difference is linked to local identities. We, therefore, hope that work along the lines of what has

been presented here may stimulate kinds of data collection in highly multilingual areas that have not typically been prioritized.

The analyses presented above also suggest the importance of looking at patterns of language change in forms without significant (or any) change to the semantic distinctions expressed within a linguistic system from a strongly sociolinguistic perspective. The semiosis layer approach suggests that it is precisely these kinds of forms that should be targets for changes intended to construct new social identities mediated, at least in part, through linguistic difference.

With respect to the situation of the Grassfields specifically, we believe the approach presented here can address longstanding problems of historical analysis. Despite the fact that the languages are clearly related on some level, it has proven difficult to assign languages of the region to clear-cut subgroups. We believe that this is likely not due to the fact that insufficient work has been done to find such subgroups. Rather, widespread semiosis layer change would create patterns of variation that simply do not align with the family tree model (see also Schadeberg 2003: 156 for comparable observations for Bantu languages).

More broadly, given that we understand the semiosis layer change to be directly tied to the construction of social identities and to the internal workings of societies, the way that the diverging and overlapping patterns of tense and aspect marking parallel the crisscrossing structures of social alliances in frontier societies (in the sense of Kopytoff 1987, as discussed in Section 4) is striking. This suggests a possible long-term research agenda that looks at the ways that patterns of language change align with abstract social structures, and this may, in turn, allow for a more complete view of language change in small-scale societies, in particular, than has been possible to date.

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Abbreviations

CL*n* = noun class *n*
COM = comitative
DET = determiner
F1 = hodiernal future tense
F2 = post-hodiernal future tense
F3 = remote future tense
FUT = future tense
IMPV = imprfective
IRR = irrealis
P1 = hodiernal past
P2 = pre-hodiernal
P3 = remote past
PROG = progressive aspect
PVB = preverbal
V = verb base
V^{H} = verb base associated with a high tone
V_{IMPV} = imperfective
V_{IRR} = irrealis verb base
^{L}V = verb base associated with a low tone

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Divergence across Bade Varieties – A Case of Nabooppositon?

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Abstract

In a dialect survey of Bade (Chadic), Schuh (1981) lists several morphosyntactic, phonological, and lexical innovations differentiating Bade varieties. While certain innovations may be attributed to the influence of Kanuri, e.g., a sound change $r > \tilde{r}$ in Western Bade, other features are difficult to accommodate in terms of convergence with neighboring languages. Probably the most striking innovation concerns so called nunation in Western Bade, i.e., common nouns in their indefinite citation form take a suffix *-n*, a feature which is not only absent in all other varieties of the Bade-Ngizim group, but also in other non-related languages of the region. Divergence across varieties of the Bade language cannot be sufficiently explained in terms of language-internal processes (e.g., analogy), or contact, or extra-linguistic factors like prestige and attitudes. This paper explores the significance of Larsen's (1917) hardly noticed concept of nabooppositon (neighbor-opposition) in filling this gap.

Keywords: Bade; Kanuri; Wider Lake Chad Region hyperdialectalism; neighbor-opposition.

1. Introduction

Bade [bde] belongs to the Bade-Ngizim group of West Chadic B.1 (Afro-Asiatic)[1] and is spoken in Yobe State, northern Nigeria, along the Kəmadugu Yobe "River of Yo", a

[1]The ISO-code 639-3, the genus and the family of each language mentioned have been retrieved from Glottolog.

major tributary to Lake Chad. The administrative, commercial, and cultural center of Bade speakers is Gashua, which became the headquarters of the Bade Division in 1946. Other languages of the group are Duwai [dbp] spoken in a contiguous region east of Bade, and Ngizim [ngi] which is spoken in an area somewhat separated 80 to 100 kilometers to the south around Potiskum. Extinct members of the Bade-Ngizim group are Auyo, Shira, and Teshena, which were spoken somewhat west of the present-day Bade speaking area (cf. Schuh 2001, Broß 1997) (see Figure 1).

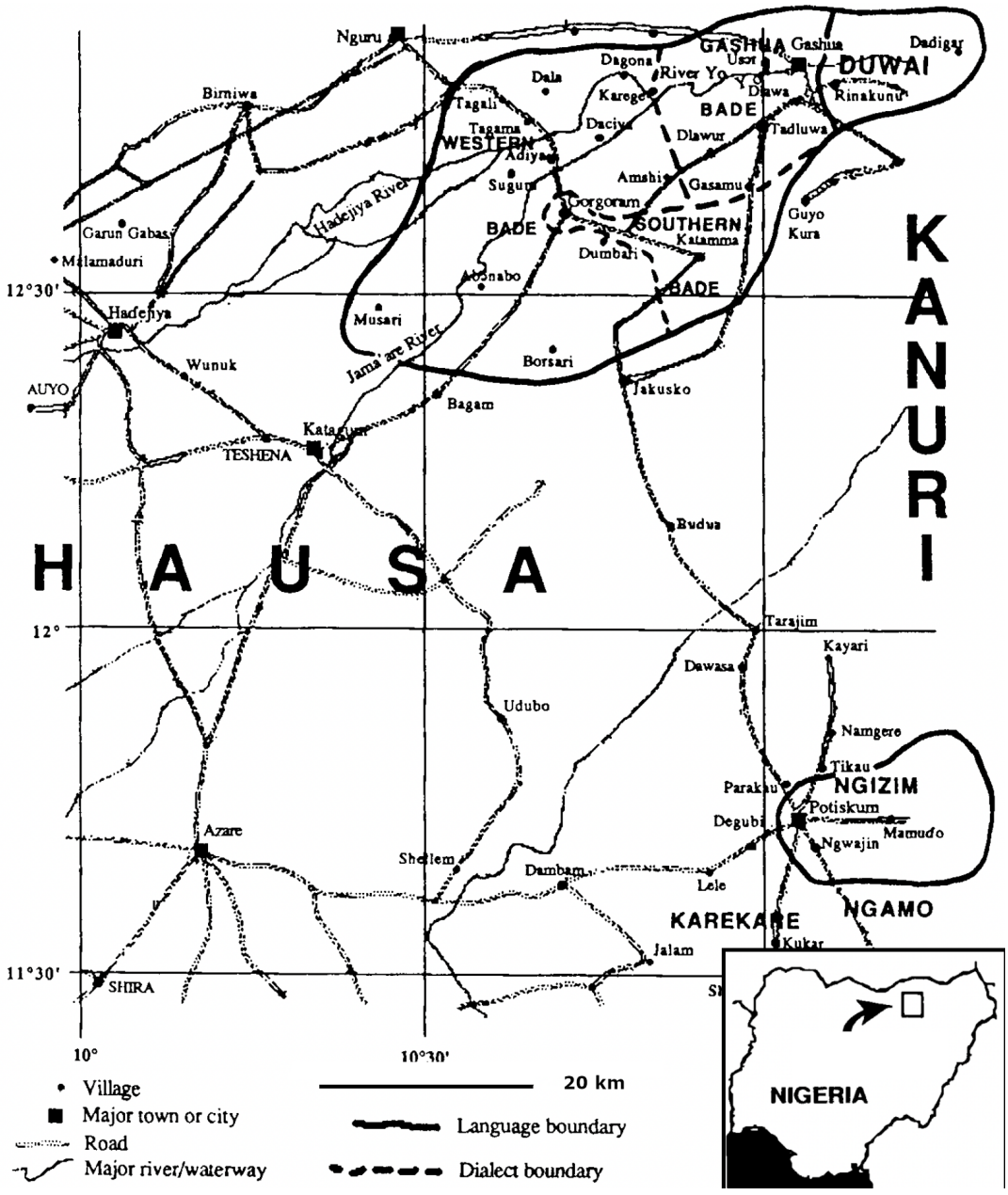

Figure 1: Language map of the Bade and surrounding languages in northeastern Nigeria (based on the map published in Schuh 2001: 389 and used with permission of Rüdiger Köppe Verlag).

While Duwai and Ngizim are dialectally rather homogeneous, Bade is linguistically very diverse to the extent that one could speak of different Bade languages. On the basis of morpho-syntactic, phonological, and lexical innovations, Schuh (1981) subdivided varieties into Western Bade, Southern Bade, and Northern Bade, and he stated (1981: 203) that: "in some respects Bade 'dialects' look at least as distinct from each other as Bade does from Ngizim". Northern Bade includes the demographically large dialect of Gashua, which is the present-day capital of the Bade society and the hometown of the Mai Bade ("King of Bade") and his royal court.

There is hardly any information on Southern Bade, except from what has been written in Schuh's dialect survey (1981), since most publications on Bade deal with the western variety—e.g., Lukas (1968, 1974/75), Wente-Lukas (1967/68), Schuh (1975, 1977, 1981, 2003, 2005), and the dictionary by Dagona (2004). Information on Gashua Bade is provided in a dictionary by Tarbutu (2004), and in several articles by Ziegelmeyer (e.g., 2010, 2013, 2014, 2015a, 2015b, 2017a, 2018)[2]. The data presented and discussed here come from Schuh (1981, 2003, 2005), Ziegelmeyer (2013, 2014), and the dictionaries by Dagona (2004) and Tarbutu (2004).

According to Schuh (2003: 4): "[a]s with most peoples who have not exercised power and influence beyond their own region, little is known about the early history of the people who speak languages of the Bade-Ngizim group". Bade speakers trace their origin to the town of Badr in present-day Saudi Arabia, from where they were expelled by the Prophet Mohammed because of their denial to accept Islam. However, we assume that speakers of Chadic languages have a long history in the Wider Lake Chad Region, and believe, with the widely accepted scenario (cf. Jaggar 2010), that speakers of Chadic languages began to spread westwards across the Sahara into the Lake Chad basin after proto-Afro-Asiatic split up into subfamilies (probably some six thousand years ago when the Sahara started gradually transforming into an arid desert). According to Jaggar (2010: 47):

> historically Chadic languages were probably spoken from northwest Nigeria to their present extent in the Chad Republic, i.e., to the west and south of Lake Chad, and over time some were replaced by Hausa in the west, and by Kanembu and Chadian Arabic to the east.

[2] My own data on Gashua Bade were collected during several field trips between 2007 and 2010 as part of the project "Dynamics of Linguistic Change in northeastern Nigeria". I gratefully acknowledge the sponsorship of the Austrian Science Funds (FWF) [P 19408].

"Kanurization" of Bade speakers is corroborated by the fact that one of the present-day Kanuri clans is named "Bedde", or as Migeod (1924: 109) put it:

> As to the tribes along the River Yobe, first [moving east to west] come the Mobber, who are largely Bedde by origin, but now only speak Kanuri, though not very purely. Nobody ever says, "I am Mobber." He will say he is Bedde or some other tribe, or a man of some particular town, generally the latter.

Historical accounts on Bade society, e.g., Campbell-Irons (1914) go back to the mid of the 18th century and mention the Gidgid clan settling in Gidgid, a village south of the present-day Bade speaking area. The Gidgid clan became the ruling clan of the Bade confederation, and according to Schuh (1981: 204), their modern dominance emerged as follows:

> the Bades were continually subject to the predations of the politically and numerically superior Kanuri from Bornu and Hausa from Hadejiya. Finally, in the mid-19th century (my sources conflict as to dates, but it must have been between 1825 and 1840), the powerful and warlike Gidgid chief, Lawan Babuje moved his capital to the site of the town now called 'Gorgoram' on maps.

Gogaram actually means 'without chopping' and is located in an area of dense, uncleared bush. Note that the language of the court of the Mai Bade is called Gogarambu, which is linguistically not Bade, but (Manga) Kanuri (cf. Schuh 2003). Thus, we are confronted with a situation similar to that of England after the Norman invasion, when the court was speaking French, while the masses used English. Today speakers of different Bade varieties use the term "Bade" as a general ethnic designation, regardless of clan, dialect, etc.

As already briefly mentioned above, in terms of language contacts all Bade varieties were under strong influence of Kanuri [knc], a Saharan language (Nilo-Saharan, Western Saharan) spoken mostly in the Borno and Yobe States of Nigeria. Kanuri influence is heavily manifested in the vocabularies of Bade varieties, as well as in several other neighboring languages, mostly of the Chadic branch, but e.g., also in eastern Fulfulde varieties [fub, fuv] (Atlantic-Congo, Atlantic), and Nigerian, or Shuwa Arabic [shu] (Afro-Asiatic, Semitic).

We are able to determine that the period of heaviest borrowing from Kanuri must have been between the 16th and the 18th century—i.e. when the Kanem-Borno Empire exercised its greatest power—because the loanwords in Bade varieties lack several phonological features that emerged in Kanuri in somewhat more recent periods (cf. Schuh 2003). Thanks to an early description of Kanuri by Koelle (1954), we are able to

determine that changes like labial vocalization and velar weakening started to become active not earlier than the beginning of the 19th century. Table 1 shows a few examples of consonant weakening in present-day Kanuri and the respective loanwords in Gashua and Western Bade.

Gloss	**Modern Kanuri**	**Koelle 1854**	**Gashua Bade**	**Western Bade**
friend	sawà[3]	sōbà	sōbà	sōbān
medicine	kùrwûn	kargùn	kàr̃gûn	kàrgùnən
sword	kàshə̀r	kashə̀gàr	kàsakàr̃	gasakarən

Table 1: Consonant weakening in Modern Kanuri.

While Schuh (2003) mentions that in the 60ies and early 70ies many Bade speakers (male and female) still had a good command of Kanuri as second language, things have changed dramatically during the past 50 years. Today Hausa [hau] (Afro-Asiatic, Chadic, West-Chadic A.1) has become the major lingua franca all over northern Nigeria and, especially in urban centers, it was quickly establishing itself as the first language for many of the inhabitants (cf. Newman 2000).

Bade varieties are part of a broader linguistic contact zone which has been labelled the "Wider Lake Chad Region" by Ziegelmeyer (2014). In general, the Wider Lake Chad Region is characterized by various language contact settings, which lead to lexical borrowing, as well as structural and semantic convergence mediated by bi- or multilingual individuals.

With respect to Bade varieties, as noted above, heavy borrowing of lexical material from Kanuri is attested, e.g., in Schuh (2003). In addition to this, Bade partly also converged towards Kanuri in its morpho-syntactic structures, especially with respect to co- and subordination strategies (see e.g., Ziegelmeyer 2010, 2015b). While Kanuri did not take over many loanwords from its neighbors it, nevertheless, partly converged in its typological structures towards Chadic languages, e.g., loss of ATR vowel harmony,

[3] Transcription: vowel length is marked with a macron, e.g., **ā**; low tones with grave accent, e.g., **à**; falling tones with circumflex accent, e.g., **â**; high tones remain unmarked, e.g., **a**; **ə** represents a central mid vowel; implosives are represented by hooked letters, e.g., **ɓ**; the voiced lateral fricative [ɮ] by **jl**; the retroflex flap [ɽ] by **r**, and the tapped or trilled [ɾ] by **r̃**; **c** and **j** are the palato-alveolar affricates [ʧ] and [ʤ], and **sh** represents the postalveolar fricative [ʃ].

development of *exceed comparatives*, pluractionals formed by reduplication, and calquing of semantic concepts of the verbs 'eat' and 'drink' (see e.g., Ziegelmeyer 2017b).

Having outlined Bade varieties and the general contact scenarios of languages in the Wider Lake Chad Region, we will present selected divergent features across languages of the Bade-Ngizim group, especially from Western and Gashua Bade.

2. Divergence in Bade varieties

In this section, we outline selected morpho-syntactic innovations, which separate Western from Gashua Bade. The question which comes up is of course what motivated individual innovations, e.g., can specific innovations be interpreted as convergence towards other languages of the region, especially the languages of wider communication like Hausa, and Kanuri, or alternatively, do we have to look at other motivations to account for them?

2.1. Loss of distinctive "r-sounds"

Like Hausa, Gashua Bade, Southern Bade, Ngizim, and Duwai have two distinct "**r**" sounds, a retroflex flap [ɽ] (represented here as [**r**]) and a tapped or trilled "**r**" (represented here as [**r̃**]). Tapped or trilled [**r̃**] is totally absent in Western Bade and Schuh (1981) attributes the loss to contact with Kanuri where an [**r̃**] sound is also missing. Examples are shown in Table 2.

Gloss	Western Bade	Gashua Bade	Ngizim	Duwai
undo, untangle	pàrtu	pàr̃tu	pàr̃tu	pàr̃to
join	ràptu	r̃àptu		r̃àpto

Table 2: Loss of distinctive "r-sounds" in Western Bade.

2.2. Voiced second person subject pronouns

In languages of the Bade-Ngizim group, second person STAMP morphemes in the singular can be reconstructed with initial **k-** for the completive, subjunctive, and second subjunctive. While Southern Bade, Gashua Bade, and Ngizim still preserve

the unvoiced velar **k-**, Western Bade employs the voiced velar **g-**. Examples are provided in Table 3.

Language	**Completive**			**Subjunctive**	**2nd Subjunctive**
Western Bade	*gə* 2SG.PFV	*ju* go	‘you went’	*gà, gā* 2SG.SBJV	*gə̀* 2SG.SBJV2
Southern Bade	*kə* 2SG.PFV	*ju* go	‘you went’		
Gashua Bade	*kə* 2SG.PFV	*ju* go	‘you went’	*kà, kā* 2SG. SBJV	*kə̀* 2SG.SBJV2
Ngizim	*ka* 2SG.PFV	*ju* go	‘you went’	*ka* 2SG. SBJV	*kà* 2SG.SBJV2

Table 3: Voiced and unvoiced second person singular STAMP morphemes.

2.3. Prefix a- on all independent pronouns

In Western Bade a prefix **a-** is used on all independent pronouns, while elsewhere in languages of the Bade-Ngizim group the prefix appears only in third persons. This is shown in Table 4.

	Western Bade	**Gashua Bade**	**Southern Bade**	**Ngizim**
1 SG	ayù	niyù	iyù	iyù
2 SG.M	agì	gì	gì	cì
2 SG.F	agə̀m	gə̀m	gə̀m	kə̀m
3 SG.M	acì	acî	acî	acî
3 SG.F	atù	atû	atû	atû
1 PL.EXCL	ajà	jà	jà	jà
1 PL.INCL	agwà	gwà	gwà	wà
2 PL.	awùn	wùn	wùn	kùn
3 PL.	akcì	aksì	aksì	akshî

Table 4: Independent pronouns in Bade-Ngizim languages.

2.4. Prefix a- in third person direct and indirect object pronouns

An innovation, which has taken place in Gashua Bade, is the use of a prefix **a-** in third person direct and indirect object pronouns. This is probably due to an extension of the independent pronouns, which employ the prefix **a-** in third persons in all dialects.

While with third person direct object pronouns Gashua Bade, as well as Ngizim use the same form as in independent pronouns, in Western Bade "a-less" pronouns are suffixed. Indirect object pronouns in Gashua Bade differ in as far as the prefix **a-** merged with the vowel **-ī-**, i.e., [**ē**] < /**ī** + **a**/. Examples are provided in Table 5.

Language	**Direct object pronouns**			**Indirect object pronouns**		
	3 SG.M	3 SG.F	3 PL	3 SG.M	3 SG.F	3 PL
Gashua Bade	aci	atu	aksi	-ē-ci	-ē-tu	-ē-ksi
Western Bade	-ci	-tu	-ksi	-ī-ci	-ī-tu	-ī-ksi
Ngizim	acî	atû	akshî	-ī-cî	-ī-tû	-ī-kshî

Table 5: Prefix a- in third person direct and indirect object pronouns.

2.5. Gender in the second person singular imperative

In contrast to other languages of the Bade-Ngizim group, Western Bade shows a gender distinction in the second person singular imperative. This is remarkable insofar as no apparent source for this change is available. Neither the languages of wider communication (Hausa, Kanuri), nor surrounding varieties of the Bade-Ngizim group exhibit this distinction. Examples are given in Table 6.

Language	**2 SG.M**	**2 SG.F**	**2 PL**	**Gloss**
Western Bade	*à gàf-ī* IMP-catch-2SG.M	*à gàfə-m* IMP-catch-2SG.F	*à gàfa-wun* IMP-catch-2PL	catch!
Southern Bade	*a-kf-i* IMP-catch-2SG		*à-kf-a* IMP-catch-2PL	go in!
Gashua Bade	*a-jlàɓ-i* IMP-catch-2SG		*a-jlàɓ-a* IMP-catch-2PL	sit down!
Ngizim	*a-tə̀f-i* IMP-catch-2SG		*a-tə̀f-a* IMP-catch-2PL	enter!

Table 6: Imperatives in languages of the Bade-Ngizim group.

2.6. The subjunctive

In the subjunctive mood, several innovations have taken place in Western Bade. While all other Bade varieties have a (…L)H tone pattern on subjunctive verbs[4], in Western

[4] Unlike other classes, verbs in Bade do not exhibit lexical tone; instead, tone patterns on verbs are conditioned by tense-aspect-mood categories.

Bade tone of subjunctive verbs is conditioned by the initial consonant, i.e. verbs beginning in a voiced obstruent have a low tone on the first syllable, all other verbs have a high tone. In addition to this, preverbal subject agreement clitics exhibit a polar tone to the first syllable of the verb, except for first-, and second-person plural which always bear low tones. This is exemplified in Table 7.

Language	**Verb with voiced obstruent**			**Verb with voiceless obstruent**		
Western Bade	*ga* 2SG.SBJV	*gàfì* catch	‘that you catch’	*gà* 2SG.SBJV	*karmì* catch	‘that you chop’
Gashua Bade	*kà* 2SG.SBJV	*gàfi* catch	‘that you catch’	*kà* 2SG.SBJV	*kàrmi* chop	‘that you chop’

Table 7: Subjunctive in Western and Gashua Bade.

2.7. Negation of the perfective

Negation of the perfective aspect in Western Bade has become *-m* suffixed to the end of the verb, while elsewhere in languages of the Bade-Ngizim group, negation is expressed by *bai* (or something very similar such as *ɓai, pai, be*). According to Schuh (1981: 214): “this took place through reduction of *bái to a syllabic nasal -ḿ, a pronunciation still obvious in Karage and heard to a lesser extent in some WB villages”. In addition to this, negated clauses with a perfective predicate in Western Bade require a special negative perfective verb form rather than the affirmative perfective verb form (see below). Examples are provided in Table 8.

Gloss	**Western Bade**		**Gashua Bade**			**Ngizim**		
I went	*nə* 1SG.PFV	*ju* go	*nən* 1SG.PFV	*ju* go		*nà* 1SG.PFV	*ju* go	
I didn’t go	*nə* 1SG.PFV	*jàja-m* go\NEG-NEG	*nən* 1SG.PFV	*ju* go	*bai* NEG	*nà* 1SG.PFV	*ju* go	*bai* NEG
I caught (it)	*nə* 1SG.PFV	*gàfo* catch	*nən* 1SG.PFV	*gàfau* catch		*na* 1SG.PFV	*gàfau* catch	
I didn’t catch (it)	*nə* 1SG.PFV	*gàfàfa-m* catch\NEG-NEG	*nən* 1SG.PFV	*gafa* catch	*bai* NEG	*na* 1SG.PFV	*gàfa* catch	*bai* NEG

Table 8: Negation of the perfective in languages of the Bade-Ngizim group.

2.8. Loss of negative perfective verb forms

Languages of the Bade-Ngizim group probably all had a special form of verbs used to express negation of completed actions or events. The verb final vowels **-u** or **-o**, depending on verb class used in the affirmative perfective are replaced by a suffix **-àCa**, where **C** is a copy of the root-final consonant. While Western and Southern Bade still have special negative perfective verb forms, they got completely lost in Gashua Bade, Ngizim, and also in Duwai. This is shown in Table 9.

Language	**I went**		**I didn't go**		
Western Bade	*nə*	*ju*	*nə*	*jə̀ja-m*	
	1SG.PFV	go	1SG.PFV	go\NEG-NEG	
Southern Bade	*nə*	*ju*	*nə*	*jə̀ja*	*ɓai*
	1SG.PFV	go	1SG.PFV	go\NEG	NEG
Gashua Bade	*nən*	*ju*	*nən*	*jə̀*	*bai*
	1SG.PFV	go	1SG.PFV	go	NEG
Ngizim	*na*	*ju*	*na*	*ju*	*bai*
	1SG.PFV	go	1SG.PFV	go	NEG
Duwai	*yi*	*jùwo*	*yi*	*jù*	*ɓai*
	1SG.PFV	go	1SG.PFV	go	NEG

Table 9: Loss of negative perfective verb forms.

2.9. Previous reference marker in the imperfective

In all varieties of the Bade-Ngizim group, except for Western Bade, transitive verbs in the imperfective aspect are reconstructed as carrying the previous reference marker (PRM) **-ku* when not followed by a direct object. Thus, a simple imperfective sentence, e.g., 'I will tie' is realized as illustrated in Table 10.

Language	**I will tie**	
Western Bade	*na*	*taksà*
	1SG.IPFV	tie
Gashua Bade	*nà*	*taksà-w*
	1SG.IPFV	tie-PRM
Southern Bade	*nà*	*taksà-w*
	1SG.IPFV	tie-PRM
Ngizim	*nə̀*	*takwsà-w*
	1SG.IPFV	tie-PRM

Table 10: Previous reference marker in the imperfective.

2.10. Progressive/habitual in Gashua Bade

In Chadic languages the basic function of the imperfective is to express incompleteness and often comprises future, progressive (or durative), and/or habitual notions. Typically, the imperfective employs a verbal noun or a form allied to verbal nouns. In Ngizim the imperfective still expresses future, progressive or habitual events, while in Western Bade the imperfective does not express habitual meaning[5].

In Gashua Bade, however, we can distinguish between imperfective expressing future events, and progressive/habitual conveying ongoing and habitual meanings. The primary mark for imperfective in languages of the Bade-Ngizim group is an auxiliary ā + verbal noun. Historically, the auxiliary **ā** goes back to a preposition 'in, at, on' and still is used as such in the modern languages. In Gashua Bade the primary indicator for the progressive/habitual is a preverbal auxiliary *và/va* which is preceded by an independent pronoun. According to Tarbutu (2004) the auxiliary *và/va* = *gvà* goes back to the verb *àgvu* 'fall'. Examples are provided in Table 11.

Language	**Aspect**	**Example**						
Gashua Bade	future	*Pātəmà*	*ā*	*bənàk*		*àwai*		
		Fatima	3SG.IPFV	cook[VN].of		sauce		
		'Fatima will cook sauce.'						
	progressive/habitual	*əbjləm*	*də*	*kayak*	*aksì*	*và*	*nē*	*balà*
		hyena	and	squirrel	3PL	PROG	go	hunt
		'The hyena and the squirrel used to go for hunting.'						
Western Bade	future	*Sāku*	*ā*	*bənà*	*kàm?*			
		Saku	3SG.IPFV	cook	Q			
		'What will Saku cook?'						
	progressive	*Sāku*	*ā*	*bənà*	*kàm?*			
		Saku	3SG.IPFV	cook	Q			
		'What is Saku cooking?'						
Ngizim	future	*nə̀*	*wanà*					
		1SG.IPFV	work					
		'I will work.'						
	progressive	*nə̀*	*wanà*					
		1SG.IPFV	work					
		'I am working.'						

Table 11: Progressive/habitual in Gashua Bade.

[5] Western Bade has a habitual extension taking on this function.

It is likely that the split in Gashua Bade into imperfective and progressive/habitual is conditioned by contact with Hausa, which exhibits future expressing tense (future-time reference) and a range of modal (attitudinal) meanings, as well as imperfective encompassing dimensions of durativity (action-in-progress) and habituality.

2.11. Nunation

Perhaps the most sensational feature separating Western Bade from Gashua Bade is nunation, i.e., common nouns in Western Bade take a suffix **-n** (and a high tone on the syllable containing the **-n**) in citation forms. Wente-Lukas (1967/68), following Johannes Lukas (1968), adopted this term used in traditional Arabic scholarship to refer to final **-n** on Arabic indefinite nouns, i.e., nouns in classical Arabic, which do not take a definite article, are pronounced with a final **-n**. Note, however, that nunation largely disappeared in most modern Arabic dialects. While Lukas (1968) rules out a direct link between nunation in Semitic languages and Bade, he, nevertheless, sees the possibility that nunation is an old and resistant element, which was used for different purposes during various stages of language development.

Nunation finally took over the same functions in two languages far apart from each other in the large territory of the same language phylum. Today nunation in Western Bade is functionally similar to Arabic nunation and probably developed through similar historical processes, though in Bade it is a relatively recent innovation, which affected only Western Bade after its separation from other Bade dialects. Schuh (2005: 590), following his previous works (Schuh 1975, 1977, 1983) states that:

> Nunation arises historically from a demonstrative that has become what Greenberg (1978) called a "Stage II Article", i.e., a determiner that has become a grammaticalized affix on nouns and whose presence or absence is conditioned by the types of grammatical constructions the noun appears in. A cognate of nunation is found in the Gashua Bade masculine distal demonstrative suffix, *-ân̂i*, e.g., *kwàm* 'bull', *kwàmân̂i* 'that bull', but in Western Bade, nunation has extended to all nouns, not just masculine.

Thus, Western Bade has developed a Stage II article, which, itself, is now gender neutral. Examples shown in Table 12 are taken from Schuh (2005) and show several Western Bade nouns with nunation and their cognates in Gashua Bade without nunation.

Gender	**Western Bade**	**Gashua Bade**	**Gloss**
masculine: *-ān*	ə̀vjān	ə̀vji	monkey
	kùnān	kùnu	stomach
feminine: *-an*	ə̀ktlan	tlà	cow
	dan	dà	eye
masculine: *-ən*	mazàrən	mazàl	castrated goat
	dà̀cən	‘yat	hair
feminine: *-ən*	gùmcən	gùmci	chin
	jì̀jə̀mən	jə̀jə̀m	thorn
masculine: *-en, -on*	ùgzen	ùgzai	pubic hair
	fəfon	fəfau	breast
feminine: *-en, -on*	gùnən	gunai	hip
	àpson	ə̀psau	*Bauhinia reticulata*
masculine: *-īn*	mə̀̀pəndīn	mə̀̀pəndì	young man
feminine: *-īn*	dàbīn	dàbi	hoe

Table 12: Nunation in Western Bade.

Wente-Lukas (1967/68) called nunation *die unbestimmte Form*, i.e., the indefinite form, and according to Schuh (2005) this is a reasonable characterization of the function of nunation. This may be exemplified best by showing the primary environments where nunation is absent. Examples come from Schuh (2005: 591-592).

- Proper names and vocatives
  Gə̀̀ji (youngest sibling); note, however, that proper names may take nunation in the sense of ‘a person called …’, e.g., *Gə̀̀jān* ‘a person named Gaji’.
  Madàwi! ‘Oh, shepherd!’, cf. *madàwān* ‘a shepherd’.

- Nouns with overt determiners
  For instance, *gwàmā-w* ‘the ram in question’, *gwàmə̀̀-mso* ‘this ram’, *gwàmə̀̀-ri* ‘his ram’, cf. *gwàmān* ‘a ram’.

- Repeated mention of a referent in narrative
  In narrative, the first mention of a referent usually has nunation, but subsequent mentions of the same referent cannot have nunation:

(1) *Làbārən mì̀na-n dɛ̀k dəlā-n. Dəlā vàru*
story-NUN lion-NUN and jackal-NUN jackal go.out
'Story of a lion and a jackal. The jackal went out …'

- Nouns used adverbially
  E.g., *dàmànən* 'rainy season', but:

(2) *dùwau nàhu ā dàman*
river fill in rainy.season
'The river fills during the rainy season.'

2.12. Predicative possession with 'have'

Predicative possession, which is expressed by a transitive verb 'have', is rather rare in the languages of the Wider Lake Chad region. With the exception of Gashua Bade and Duwai it is also absent in the languages of the Bade-Ngizim group where predicative possession usually uses a conjunctional strategy, i.e., a subject noun phrase is directly followed by an associative conjunction 'with' ('be with something' = 'have something').

In Gashua Bade such constructions have been replaced by an actual verb *zu* 'have' which, however, is aspectually restricted, occurring only in the completive aspect with this meaning. Duwai also has a true verb *dà̀mo* 'have', and it is quite puzzling why these two languages developed in this manner. According to Schuh (1981: 247):

> the 'be with' type of construction to mean 'have' is reconstructable for the Bade/Ngizim/Duwai group and probably for proto-(West-)Chadic. So far I have not uncovered any etymologies for the roots *zu* and *dà̀mo* that help in understanding this.

Some examples are shown in Table 13.

Language	Example			Gloss	Strategy
Gashua Bade	*nən* 1SG.PFV	*zə̀* have	*dàbi* hoe	'I have a hoe.'	have
Duwai	*kì* 2SG.M.PFV	*dām* have	*tàgwda?* money	'Do you have money?'	
Southern Bade	*aci* 3SG.M	*də̀k* with	*dàbi* hoe	'He has a hoe.'	conjunctional
Ngizim	*ī* 1SG	*nā* with	*dʉ̀kà* horse	'I have a horse.'	

Table 13: Predicative possession.

3. Discussion

In the preceding section we have illustrated selected features across languages of the Bade-Ngizim group which show divergence between the different varieties, especially between Western and Gashua Bade. For the sake of convenience, I summarize the crosslinguistic distribution of these features in Table 14 below.

Features	Hausa	W. Bade	Gashua Bade	S. Bade	Ngizim	Duwai	Kanuri
Loss of distinctive "r-sounds"	A	B	A	A	A	A	B
Voiced second person subject pronouns		A	B	B	B		
Prefix a- on all independent pronouns		A	B	B	B		
Prefix a- in third person direct and indirect object pronouns		A-A	B-B	A-B			
Gender in the second person singular imperative	B	A	B	B	B		
Subjunctive		A	B	B	B		
Negation of the perfective		A	B	B	B		
Loss of negative perfective verb forms		A	B	A	B	B	
Previous reference marker in the imperfective		A	B	B	B	B	
Progressive/habitual	A	B	A	B	B	B	

Table 14: summary of the crosslinguistic distribution of the features discussed in §2.

The question that comes up now is, what mechanisms and motivations triggered divergence between those varieties? Generally, it is often assumed that convergence of languages or dialects is the basic development in multilingual contact settings, while the opposite process, i.e., divergence, often remains unexplained. For instance, Kaufmann (2010: 481) states that: "divergence […] in language contact […] is probably a rare element".

We believe with Braunmüller (2014: 2):

> […] that multilingual speakers are the ultimate source of all outcomes of contact between languages. Multilingualism, including the cognitive processes of multilingual language processing, are crucial for the types of development that may occur. Nevertheless, Kühl and Braunmüller mention language-internal (i.e., linguistic characteristics), language-external (i.e., contact) and extra-linguistic (i.e., political and economic factors, prestige and attitudes) factors and mechanisms as dimensions that shape the contact setting and thereby set the stage for multilingual speakers' linguistic behaviour.

In the absence of socio-linguistic studies and detailed accounts on Bade history, it is difficult to evaluate extra-linguistic factors. However, we have no hints that political or economic factors, prestige or language attitudes might be responsible for innovating divergent features across Bade varieties.

Language-internal factors may account for some features, e.g., the prefix **a-** in third person direct and indirect object pronouns used in Gashua Bade (see section 2.4) could be seen as an extension of the independent pronouns, which employ the prefix **a-** in third persons in all dialects. Likewise, in Western Bade the prefix **a-** is used in analogy on all independent pronouns, while elsewhere in languages of the Bade-Ngizim group the prefix appears only in third persons (see section 2.3). Nevertheless, while language-internal factors may explain the extension of the prefix **a-**, we still cannot explain why this process was only applied in a single variety, i.e. Western Bade, whereas other varieties remain stable in this respect.

Language-external factors, i.e., contact, may account for some innovations, e.g., the loss of distinct r-sounds in Western Bade has been attributed to contact with Kanuri (see section 2.1). Likewise, the development of a progressive/habitual aspect in Gahsua Bade might be imputed to more recent contact with Hausa, which basically distinguishes between a continuative/progressive and future aspect (see section 2.10). However, again we do not have a sound explanation why the loss of distinct r-sounds

only affected Western Bade, while the development of a progressive/habitual aspect took only place in Gashua Bade. There are no reasons to believe that speakers of the western variety had more contacts with Kanuri speakers than speakers of other Bade varieties, e.g., according to Schuh (2003) the number of Kanuri loanwords in Gashua Bade (8.5%) is even slightly higher than in Western Bade (7.92%). Similarly, there are no reasons to think that speakers of Gashua Bade had, or still have, more contact with Hausa speakers than speakers of the other Bade varieties.

The development of some other divergent features, which have been presented above, could neither be explained with language-internal, language-external, nor extra-linguistic factors. For instance, nunation in Western Bade (see section 2.11) cannot be traced to language-internal analogy nor to contact with other languages of the region. Moreover, marking indefiniteness on nouns is extremely rare in languages of the Wider Lake Chad Region, and certainly does not exist in the former and present languages of wider communication, i.e., Kanuri and Hausa. Arabic as a source for nunation in Western Bade can be ruled out, i.e., there is no indication at all that speakers of Western Bade had, or have, intense contact with speakers of Arabic. Moreover, Islamisation among the Bade is rather a phenomenon of the second half of the twentieth century, i.e., during the times when nunation developed in Western Bade access to Islamic discourse was, if at all, restricted to members of the urban upper class.

Similarly, as far as we know, possessive predication by means of a transitive verb ‘have’ (see section 2.12) does not exist in any language in the area of investigation. Possessive predication is typically expressed by comitative constructions (i.e. “to be with something”), e.g., in Hausa, or by constructions like “at someone’s place there exists something”, e.g., in Kanuri.

Thus, we believe that, at the current stage of knowledge, some divergent features across varieties of the Bade language have to be explained through recourse to Larsen’s (1917) concept of nabooppositon, i.e., neighbor-opposition, or what Trudgill (1983) called *hyperdialectalism*. This is to say that distancing oneself from neighbors should be considered a constant factor in the development of language. The principle behind this concept is according to Braunmüller (2014: 25) that:

> speakers actively enlarge salient differences between local dialects, thereby creating a greater linguistic distance to the varieties spoken by their closest

> neighbours. These so-called hyperdialectisms are intended to mark one's own dialect as being unique and different from any other surrounding dialects.

For instance, in order to explain the emergence of nunation in Western Bade, or the use of a transitive verb meaning 'have' in Gashua Bade and Duwai, we are inclined to invoke Larsen's (1917) hypothesis about neighbor-opposition, whereby speakers of a language introduce some features to distinguish their language from surrounding languages. While this is a plausible hypothesis, we nevertheless, do not have strong evidence for it, as there is no data to provide clear answers at present.

4. Conclusions

In conclusion we believe that with respect to varieties of Bade neither language-internal factors, e.g., analogy, nor language-external factors, i.e., contact, nor extra-linguistic factors, e.g., prestige or language attitudes may sufficiently explain the development of divergent features. Instead, neighbor-opposition might be the principle which comes in to fill this gap, and we think that the fact that nearly every Bade village can be assigned different phonological, morpho-syntactic, or lexical idiosyncrasies corroborates this view. While our working hypothesis of neighbor-opposition among Bade varieties seems to be attractive in the first instance, it nevertheless, is negatively defined, i.e., in the absence of other sources we suppose that neighbor-opposition might come in to fill this gap. In order to get a clearer picture much more work on the internal relations within the Bade society would be necessary.

Abbreviations

1 = 1st person
2 = 2nd person
3 = 3rd person
EXCL = exclusive
F = feminine
IMP = imperative
IPFV = imperfective
INCL = inclusive
M = masculine
NEG = negation
NUN = nunation
PFV = perfective
PL = plural
PRM = previous reference marker
Q = question word
SG = singular
STAMP = subject-tense-aspect-mood-polarity
SBJV = subjunctive
SBJV2 = 2nd subjunctive
VN = verbal noun

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