

Chapter 2

East Benue-Congo noun classes, with a focus on morphological behavior

Jeff Good

University at Buffalo

Comparative studies of noun class systems in East Benue-Congo languages go back at least as far as the mid-nineteenth century work on comparative Bantu undertaken by Wilhelm Bleek. In the wider Benue-Congo context, the most significant work is de Wolf (1971), which reconstructs a noun class system for Proto-Benue-Congo and remains the most detailed study on the topic available today. This paper summarizes the results of De Wolf and also looks at various morphosyntactic aspects of Benue-Congo noun class systems en route to consideration of the possibilities for reconstruction of abstract features of the noun class system of the proto-language. These include patterns of change in the structure of these systems, the fact that both prefixing and suffixing noun class systems are attested in the family, domains of noun class concord, different series of noun class markers appearing on different morphological hosts, and the issue of how attested classes can be linked to reconstructed classes.

1 Overview of previous comparative work

Comparative studies of noun class systems in East Benue-Congo languages go back at least as far as the mid-nineteenth century work on comparative Bantu undertaken by Wilhelm Bleek (Maho 1999: 13–14). In the wider Benue-Congo context, the most significant work, by far, has been that of de Wolf (1971), who reconstructed a noun class system for Proto-Benue-Congo on the basis of an examination of representatives from languages of the Plateau, Jukunoid, Cross



River, and Bantoid subgroups (de Wolf 1971: 19–20).¹ While this work was only intended to serve as a starting point (de Wolf 1971: 21), rather than a definitive reconstruction, it remains the most detailed study on the topic available today.² Without intending to detract from his efforts in any way, the reason for this is not that further work was deemed superfluous but, rather, as has so often been the case with Niger-Congo studies, the limited energies of specialists have been spent on other topics.

The core comparative results of de Wolf (1971) center on the reconstruction of a number of noun class prefix forms (for nominal prefixes and some concords), typical singular/plural pairings for these noun classes, and a set of nouns belonging to each class. This reconstruction is summarized in Table 1 and draws in part on the presentation provided in Williamson (1989: 38–39), in particular with respect to the assignment of class number labels. The full treatment can be found in de Wolf (1971: 50–59), and any reader interested in the full details is advised to consult the original, where additional complications are discussed.³ Partial results are given here since they should be sufficient for illustrating the most important points regarding the reconstructions and to allow more space to be devoted to other areas of East Benue-Congo noun class system reconstruction. The table gives (i) canonical singular/plural pairings for the various reconstructed classes or indicates if the class is one that is not associated with clear singular/plural pairings (e.g., for mass nouns), (ii) reconstructed nominal prefix and concord forms (including indication of tone in some cases), and (iii) exemplary reconstructed nouns for each of the various classes.

The class numbering conventions in Table 1 draw heavily on those associated with Proto-Bantu noun class reconstructions (see, e.g., Maho (1999: 246–255) and

¹There are complications in using the term Benue-Congo that are hard to avoid in a work like this one. While the focus of this chapter is East Benue-Congo, the group of languages referred to by this term has also been labeled Benue-Congo (Williamson & Blench 2000: 30–31). Here, I will generally refer to East Benue-Congo, over Benue-Congo, in reference to the language group of primary focus here, though Benue-Congo will be used in some places where the larger group is under consideration. For the sake of brevity, Proto-Benue-Congo will be used throughout to refer to the proto-language associated with East Benue-Congo. Many points made here for East Benue-Congo will apply to larger groups, such as Benue-Congo or Niger-Congo, though this is not generally made explicit given that the focus of this volume is on the properties of East Benue-Congo rather than the similarities between East Benue-Congo and the superordinate groups that it is associated with.

²Williamson (1993) is a notable attempt to amend de Wolf's (1971) work. However, it appears to have received relatively little attention.

³For instance, de Wolf (1971: 52–53) suggests that Classes 5, 6, 8, 9, 10, 12, 14, and 15 may have also occurred as unpaired classes, alongside Class 6a which is reconstructed as only being an unpaired class, and that there may have been an additional possible Class 7/6 pairing.

2 East Benue-Congo noun classes, with a focus on morphological behavior

Table 1: Overview of de Wolf's (1971) Proto-Benue-Congo noun class system

LABEL	PFX	CONC	PFX	CONC	EXAMPLE
1/2	*ù-, *ò-	*gwu-, *à-	*bà-	*ba-	*-lume 'man'
5/6	*li-	*zì- (?)	*à-	*ga-, *a-	*-tama 'cheek'
7/8	*ki-, *ke-	*ki-	*bì-, *bè-	*bi-	*-kupe 'bone'
9/10	*e-, *i-	*zì-	*í-	*í-, *zi- (?)	*-name 'animal'
3	*ú-	*u-, *gu-	(plural 10 or 13)		*-sene 'back'
11	*lu-	*lu-	(plural 10)		*-z(w)ana 'sun'
12	*kà-	*ka-	(plural 10 or 13)		*-kama 'monkey'
13	(singular 3 or 12)		*ti-	*ti-	*-kwon 'tree'
14	*bù-	*bu-	(plural 6 or 10)		*-su 'face'; *-bogo 'fear'
15	*ku-	*ku-	(plural 6 or 10)		*-tuŋi 'ear'
6a	*mà-, *nà-	*ma-, *nà-	(unpaired)		*-luŋ 'blood'

Katamba (2003: 104)) and are not found in de Wolf (1971). They are included here due to the long-standing significance of Proto-Bantu for comparative studies of East Benue-Congo under the assumption that Bantu languages are relatively morphologically conservative (see, e.g., Williamson (1985), Jungrauthmayr (1990: 29), and Hyman (2004)). I have collapsed a possible Class 4 with Class 10 in the presentation since de Wolf (1971) does not explicitly separate these, though see Williamson (1989: 38). Class 4 will be referred to here in reference to specific noun class system analyses which treat it as distinct from Class 10, even in cases where they are formally equivalent, or nearly equivalent, as is the case with Noni (Hyman 1981: 33), to be discussed below.

While Table 1 does not present the full range of the details of the reconstructions of de Wolf (1971), it should suffice to give a general impression of his proposals. Since there has not been extensive debate regarding these reconstructions since their publication, it is difficult to know which should be considered more or less secure as representing key parts of the Proto-Benue-Congo noun class system. However, to the extent that a number of these pairings have close analogs in other branches of Niger-Congo, e.g., Classes 1/2, 3/4, and 6a (see Williamson (1989: 38–39)), they seem quite likely to have been present in Proto-Benue-Congo as well.

De Wolf (1971) does not discuss semantic patterns with respect to the noun classes in detail, though his reconstructions of specific nouns as belonging to the various classes do indicate that some of the classes would have had fairly clear-

cut semantics. On the whole, these class semantics are not particularly surprising from a Niger-Congo perspective (see, e.g., the semantic labels given to the various classes and pairings across Niger-Congo presented in Williamson (1989: 38–39)). The Class 1/2 pairing is associated with nouns referring to humans, and de Wolf (1971: 53) even suggests two of the Class 1/2 noun reconstructions **-tata* ‘father’ and **-mama* ‘mother’ were likely to have not been coded with a prefix in the singular, thereby implicitly reconstructing something along the lines of the class designated as Class 1a in the Bantuist literature (see, e.g., Maho (1999: 74) and Van de Velde (2006)). The Class 1a is used to classify nouns not showing the usual Class 1 coding but otherwise behaving like Class 1 nouns with respect to concord. The next most robust semantic associations are those of the Class 9/10 pairing with animals (though not exclusively so) and Class 6a with liquids.⁴ The Class 5/6 pairing contains many body parts, as does the Class 15/6 pairing. While de Wolf (1971: 59) only gives four reconstructed nouns for unpaired Class 14 (with the meanings ‘fear’, ‘life’, ‘pain/ache’, and ‘witchcraft’), these can all be interpreted as referring to abstract entities.

The other classes and pairings do not show such straightforward semantic categorization, and, on the whole, it appears that the results of studies of the semantics of Bantu noun classes can also be applied to the East Benue-Congo languages, which have not seen as detailed investigation in this domain (see Maho (1999: 55–88) for the most recent detailed survey of work on the semantics of Bantu noun classes). Specifically, while it is not difficult to identify semantic tendencies in the distributions of nouns into various classes and class pairings, it has proven impossible to devise a set of semantic principles that fully cover these distributions, and a degree of lexical arbitrariness in assignment seems unavoidable.⁵ To the extent that domains of semantic regularity are interspersed with varying degrees of arbitrariness throughout East Benue-Congo, this seems to be the most reasonable way to reconstruct the system of the proto-language. If there ever was a time when the system was semantically regular, it would have presumably been at a more ancient time depth.

⁴The convention of referring to the unpaired class with a nasal consonant and associated with liquid substances as 6a is due to Welmers (1973: 163) and is connected to the fact that Classes 6 and 6a are homophonous in Bantu.

⁵Of course, we must also allow for the possibility that, in some cases, formal factors may have played a role in class assignment. This probably accounts, for instance, for the fact that loanwords from languages like English referring to non-humans can be placed in the Class 1/2 pairing in some East Benue-Congo languages (see, e.g., Lovegren (2013: 118–119) on Mungbam). Since English nouns will not begin with any sort of class prefix (unlike potential borrowings between other East Benue-Congo languages), they formally resemble Class 1a nouns, presumably accounting for such Class 1/2 assignments. Formal factors have also been implicated with respect to class assignment patterns in Bantu languages (see, e.g., Schadeberg (2009: 91)).

2 East Benue-Congo noun classes, with a focus on morphological behavior

The reconstructions seen in Table 1 were undertaken at a time when crucial data had begun to become available, but de Wolf (1971: 21) still felt the data he had access to was insufficient in various ways. By contrast, today, the problem would not seem to be a lack of data – quite a lot on the noun class systems of East Benue-Congo languages has been published in intervening decades (see, e.g., Hyman (1980a), Hyman & Voorhoeve (1980) for two collections of studies coming out in the decade following de Wolf (1971: 21), which represent merely the tip of the iceberg in this regard). Rather, the problem is that the data has, on the one hand, not been properly synthesized given the relatively low priority of comparative work in the field of linguistics in the last half century, and, on the other hand, simply fails to yield straightforward patterns. It does seem clear that progress could be quickly made within low-level subgroups if this was deemed a priority. The work of Connell (1987) on the reconstruction of the Lower Cross River noun class system is exemplary in this regard, though work of this type does not appear to be particularly common. At the same time, we must acknowledge that local patterns of language contact among multilingual populations should be expected to obscure genealogical signals in many cases throughout the East Benue-Congo area. This means that any procedure assuming a simple path for the reconstruction of Proto-Benue-Congo via a series of discrete intermediate subgrouping nodes is bound to run into difficulties (see, e.g., Di Carlo & Good (2014) for a relevant case study and contextualization). This is not to say that such work should not be undertaken. Rather, it is simply important to take into account the realities of language use and development in the East Benue-Congo area when engaging in efforts at reconstruction.

The most emblematic phenomenon seen in East Benue-Congo noun class data that has resisted straightforward analysis via subgrouping concerns the historical status of nasal consonants in some of the class markers associated with Classes 1, 3, 4, 6, 9, and 10. These classes show nasals in their nominal prefixes in Bantu languages, leading to their reconstruction with nasals for Proto-Bantu, but the distribution of these nasals in non-Bantu East Benue-Congo (and beyond) is much more complex, and there is, as yet, no consensus on their status in Proto-Benue-Congo (see Hyman (1980b) and Miede (1991) for discussion; see also Hyman, chapter 7, this volume, for a current evaluation of these nasal classes and their possible origins).

No attempt will be made here to revise the specific reconstructions of de Wolf (1971). This is partly because the time that would be required to do so would be prohibitive and properly reporting on any such efforts would almost certainly necessitate monograph-level discussion. However, there is also a more princi-

pled reason for this. Consistent with practices of the time, the scope of de Wolf's (1971) reconstructions is relatively limited: Specific forms and pairings are proposed, but it must be recognized that, in East Benue-Congo languages, these are merely elements of a larger noun class *system* (see Good (2012)), which is associated with a range of morphosyntactic properties. Moreover, while there has not been comprehensive work specifically reconstructing the broader morphosyntactic properties of the Proto-Benue-Congo noun class system, there has, in many cases, been enough work to allow for preliminary proposals to be made – or at least for promising possible alternatives to be outlined.

The rest of the discussion here, therefore, will look at various morphosyntactic features of East Benue-Congo noun class systems where available work makes it possible to seriously consider issues of reconstruction. Specifically, §2 considers the general direction of change assumed for East Benue-Congo noun class systems, §3 examines the significance of the presence of noun class suffixes (as opposed to prefixes) in the family, §4 discusses which morphosyntactic domains were most likely to be domains of concord, §5 raises issues with respect to the presence of different form classes for concordial elements, and §6 looks at cases where a noun class's identity may be difficult to uniquely reconstruct due to complex patterns of change. A brief synthesizing conclusion is offered in §7. These topics are not chosen because they exhaust all the points of potential interest with respect to East Benue-Congo noun classes. Rather, they represent features where significant work has already been done and which seem to be especially revealing with respect to coming to a better understanding of the system as a whole.⁶

2 “Drift” in Benue-Congo noun class systems

A remarkable fact about Benue-Congo noun class systems is that languages of the family range from having some of the most elaborated such systems in the world (as evidenced by many Bantu languages) to having, in effect, no synchronic noun classes (see Good (2012) for detailed discussion in a Niger-Congo context). Languages wholly lacking in noun classes are more strongly associated with West Benue-Congo (e.g., Yoruba, Igbo, or Edo), than East Benue-Congo.⁷ However,

⁶In choosing to focus on possibilities for system-level morphosyntactic reconstruction here, I do not mean to suggest that continued work on reconstructing the phonological shapes of specific class markers is not also an important endeavor within comparative Benue-Congo studies. I see these two lines of inquiry as complementary rather than being in opposition.

⁷Information on the (either remnant or lack of) noun classes in these West Benue-Congo languages can be found in Ogunbøwale (1970: 32–39) for Yoruba, Green & Igwe (1963: 13–20) for

2 East Benue-Congo noun classes, with a focus on morphological behavior

highly reduced systems in East Benue-Congo are present as well, as evidenced, for example, by the Bantu language Komo, which is reported to have no noun classes (Guthrie 1971: 42, Thomas 1992: 4), or the Bangangte variety of the Grassfields Bantu language Bamileke described by Voorhoeve (1968), which shows a highly reduced concord system with only five formally distinct classes that have become disconnected from the system of nominal singular/plural marking. Remarkable in this regard is the variation that one finds in closely related languages, like the small Ogoni group, where, for instance, one language of the group, Elemé, makes extensive use of class prefixes on nouns, two others, Ogoi and Khana, show traces of noun prefixes, and a final language, Gokana, shows no evidence of noun prefixes (Williamson 1985: 436–440)⁸

While the earliest work on Niger-Congo languages proposed that languages with minimal class systems represented an early “primitive” state of language development (see, e.g., Jungraithmayr (1990)), the present, quite stable, consensus treats relatively elaborated systems as closer to the historical situation. This is clearly seen in the reconstructions in Table 1. In this regard, the reconstructed Proto-Bantu noun class system can be considered relatively close to the Proto-Benue-Congo one from a broad typological perspective. However, it would be inappropriate to equate Proto-Bantu with Proto-Benue-Congo since the evidence from the group as a whole does not support Proto-Benue-Congo having as elaborated a system as Proto-Bantu. In fact, the latter group appears to have innovated a number of its noun classes, in particular with respect to less canonically nominal categories, such as those associated with locative meanings, i.e., Classes 16, 17, and 18 (see Williamson (1989: 37)).⁹ Thus, Proto-Bantu is generally treated as having around twenty noun classes (Maho 1999: 51), while de Wolf’s (1971) reconstruction of Proto-Benue-Congo has only fifteen.

There have been statements in the literature attributing the presence of reduced noun class systems in Niger-Congo in general, and Benue-Congo more specifically, to be the result of “drift...in the direction of the simplification of the

Igbo, and Dunn (1968: 207) for Edo.

⁸See Hyman et al. (1970); Faraclas (1986); Connell (1987); Gerhardt (1994) and Storch (1997) for further discussion on specific East Benue-Congo subgroups.

⁹However, one does find instances of apparently “extended” noun classes with locative meanings in East Benue-Congo outside of Bantu, such as in Mungbam (Lovegren 2013: 265) and Noni (Hyman 1981: 15–16), both non-Grassfields languages spoken at the northern edge of the Grassfields Bantu area. Watters (2003: 243–244) gives more detailed discussion on this point (see also Grégoire (1983)). This suggests that, if the development of such locative classes is treated as the result of a single innovation taking place after the breakup of Proto-Benue-Congo, this would have to be of an older time depth than Proto-Bantu (with the usual disclaimers regarding the possibility of areal diffusion applying).

nominal classification system” (Greenberg 1966: 9) (see also de Wolf (1971: 188) and Jungrathmayr (1969: 161–162)). This assessment is presumably connected to the fact that one sees reduced systems in the majority of Benue-Congo groups (to varying degrees), while it is much more difficult to find languages that evince the total number of reconstructed noun classes (see, e.g., de Wolf (1971: 188) on Benue-Congo and Maho (1999: 51) on Bantu).

However, there are reasons to doubt the validity of “drift” as an explanatory factor in the development of Benue-Congo noun class systems. First, there is no obvious general historical mechanism that can be associated with drift. So, its utility as a label for patterns of change is not clear. Second, as discussed in Good (2012: 322–324), there are a number of distinct mechanisms involved in the breakdown of noun classes that are not obviously interconnected, suggesting that their reduction is not due to some general pattern of “loss” but, rather, to independent changes which happen to co-occur in some Benue-Congo languages. Third, much of the apparent drift can be more concretely attributed to areal patterns affecting Niger-Congo languages in the Kwa-Benue-Congo sub-region of the so-called Macro-Sudan Belt (see Güldemann (2008b), as well as Clements & Rialland (2008: 37)).¹⁰ Niger-Congo languages in this region have been generally subject to processes of morphological reduction, in some cases clearly triggered by independent patterns of phonological reduction (see Hyman (2004) and Good (2012)), but these are probably relatively recent in nature when set against the broader genealogical diversification of Niger-Congo (see Hyman (2011)). This suggests that many of the observed reductions are not attributable to a gradual process of “drift” but, rather, more recent effects of contact. Finally, it is worth mentioning that one can only characterize Benue-Congo noun class systems as tending towards reduction if one ignores Bantu languages, where the pattern, if anything, goes in the opposite direction.

To these remarks, one might raise a possible methodological concern: Could it be the case that the application of the comparative method in the domain of noun class systems may accidentally tend towards the reconstruction of larger systems over smaller ones? Indeed, it is striking that both the Proto-Benue-Congo reconstructions and the Proto-Bantu ones give a relatively high number of noun classes when set against attested patterns in the daughter languages. One must wonder to what extent this reflects historical reality as opposed to being an epiphenomenon of a reconstruction methodology which might cause a proto-language to “accrete” features over the course of comparative analysis. This is not to say

¹⁰See Good (2017) for an overview of areal linguistic patterns in Niger-Congo.

that reduction of noun class systems within East Benue-Congo is not a historically real process, as evidenced by languages showing highly reduced systems or entirely lacking in functioning systems discussed above. Rather, it is to suggest that one must be cautious when assuming that a relatively robust attested noun class system is necessarily reduced because it may lack some distinctions reconstructed for some earlier historical stage.

In any event, given the extensive body of work in linguistics on language contact and linguistic areas since the time of de Wolf (1971), a fruitful direction for near-term studies of high-level patterns of change in Benue-Congo noun class systems would be to explore their development in terms of areal linguistic patterns in Africa, in particular looking for evidence of their differential development in distinctive cultural regions where Benue-Congo languages are found. Once the descriptive picture is better established in this regard, the stage would be set for an examination of genealogical patterns which takes areal insights appropriately into account.

3 Prefixal and suffixal morphology

A general puzzle for the reconstruction of noun class systems in Niger-Congo is the fact that languages of the family do not consistently show only noun class prefixes, but can also show noun class suffixes, or a complex mix of prefixes and suffixes (see, among others, Hoffmann (1967: 252–254), de Wolf (1971: 180–182), Welmers (1971: 15), Greenberg (1977; 1978), Childs (1983), Williamson (1989: 31–37), and Dimmendaal (2001: 378–381)). While this is an issue that is general to Niger-Congo rather than being specific to East Benue-Congo, East Benue-Congo is also implicated given that one finds both prefixing and suffixing patterns in the family. Prefixing patterns unquestionably dominate (even if we were to exclude the mostly exclusively prefixing systems of the Bantu languages), and this is presumably why Proto-Benue-Congo has been reconstructed as prefixing in its noun class system. However, this does not mean that the presence of suffixing patterns does not raise significant questions for the reconstruction of the properties of the noun class system on the whole nor that suffixing noun class marking, or even circumfixal class marking (as suggested by Welmers (1973: 205–210)) – whether throughout the system or only in part of it – should not be considered a possibility for Proto-Benue-Congo.¹¹

¹¹Resolving this issue would be more straightforward if East Benue-Congo subgrouping were more secure so that work could reference clear-cut instances of innovation rather than relying on a “majority-rules” approach for linguistic reconstruction.

Of particular interest are languages where the presence of nominal prefixes or suffixes is dependent on a noun's morphosyntactic context. For instance, in the Kainji language C'lela (Dakarkari), nouns in citation forms will show a prefix, as in *d-hyí* 'head', whereas this prefix is not present when the noun is followed by a concordial element, such as a demonstrative, as in *hyí dǎhnà* 'this head'. (For this noun, the relevant noun class is associated with a *d*, whether on the noun itself or the demonstrative (Hoffmann 1967: 247)). While the C'lela pattern is a minority one within East Benue-Congo, it is not unique. Similar patterns are seen, for instance, in the Grassfields Bantu language Aghem (Hyman 1979: 56–58).¹² In the Cross River language Efik one sees the “reverse” of this pattern, where a limited set of nouns, when modified by adjectives, appear with a prefix that is not found in isolating forms (Faraclas (1986: 45), citing Cook (1969: 179–181)).

As pointed out at least as early as Hoffmann (1967: 253) (see Dimmendaal (2001: 380) for a recent overview), the nature of Niger-Congo noun class systems, where concordial elements such as demonstratives can frequently be found adjacent to a noun, opens up possibilities for the reanalysis of the concordant segments as coding class on the noun itself. Thus, when one considers a phrase like the C'lela expression *hyí dǎhnà* 'this head', just cited above, a resegmentation of the phrase along the lines of *hyíd ǎhnà* could, in principle, result in a noun coded for its class suffixally. This sort of resegmentation would presumably be more likely in contexts where prefixes are not present on the noun since, otherwise, it would result in multiple exponence of class on nouns via a less typical circumfixal structure. Therefore, it would seem to make sense to see patterns of prefix absence and the presence class suffixes as potentially interrelated phenomena. At the same time, it must be admitted that there are cases where the distribution of prefixing and suffixing patterns does not point in any clear direction regarding their historical relationship. This is seen, for instance, in the Mambiloid language Vute, where nouns can appear with both prefixing and suffixing elements that are relatable to Proto-Benue-Congo noun class markers but which do not appear to interact with each other (Thwing 1987: 69–71) (see also Blench (1993: 111–112) for further discussion of suffixing class markers in Mambiloid).¹³

¹² Apparent dropping of prefixes along the lines of what is seen in languages such as C'lela and Aghem is, to the best of my knowledge, essentially unreported for Bantu languages with the exception of what is described for Sesotho in Demuth et al. (2009).

¹³ For instance, while some nouns are marked with prefixes, plurals are generally formed via suffixation, and it appears from Thwing's (1987) description that the addition of a suffix to a noun to code plurality is not associated with the loss of a prefix historically associated with singular coding.

2 East Benue-Congo noun classes, with a focus on morphological behavior

In this context, it is worth revisiting a tendency in the literature to view cases such as C'lela prefix absence as involving dropping of the prefix (see, e.g., Hoffmann (1967: 246) or Hyman (1979: 27)). This is presumably based on an intuition that the citation forms of nouns are in some sense more morphologically “basic” than modified forms. However, there is no logical reason why prefixed forms could not be considered to be augmented with a prefix treated as coding a category such as “lack of modification”. And, in fact, such an analysis becomes more plausible given the well-known presence of a formative commonly referred to as an *augment* (or *pre-prefix*) in many Bantu languages (see Katamba (2003: 107–108) for an overview discussion, de Blois (1970) for a detailed survey, and Williamson (1993) for consideration of the augment in the context of Benue-Congo reconstruction). This element immediately precedes the class prefix on nouns and often has a form that copies the prefix in whole or part. It is difficult to assign it a unique, general function. Its appearance can be determined by apparent referential factors (e.g., definiteness) but can also exhibit a degree of sensitivity to grammatical control (e.g., being sensitive to whether or not a verb is negated) (see, e.g., Hyman & Katamba (1993) for a detailed investigation of the functions of the augment in Ganda).¹⁴

The general prevalence of the marked nominative language type in Africa is also relevant here (see König 2006, 2008: 138–203). In effect, forms in languages of this type associated with more “nominative” domains (such as subjects) are morphologically more complex than forms used in more “accusative” domains, are found in a more functionally restricted range of environments, or show both classes of properties. This suggests, in general, that we should be wary of assuming that classificatory heuristics from European languages (such as “citation is the same as basic”) will naturally carry over into East Benue-Congo languages. Furthermore, as discussed in Creissels (2009), while it has not yet been widely explored, one seems to find relatively frequently in Africa cases of head-marking in noun phrases where what is coded is that the head is associated with some dependent in its phrase. This indicates that we may want to view cases of apparent prefix dropping in a language like C'lela not as one noun form being derived from another but, rather, as evincing a kind of inflectional nominal paradigm of some kind, where each form of the noun is actively coding a specific morphosyntactic category with respect to its relationship to a larger syntactic construction.

¹⁴Within the East Benue-Congo area, Boum (1980: 74–75) describes a similar pattern of double prefixation in two languages of the Menchum subgroup of Grassfields Bantu where nouns in certain classes show evidence of being coded with two prefixes in citation forms, with the initial one of these not appearing in locative and possessive contexts (see also Watters (2003: 241) and Hyman (2005)).

One factor that may have obscured this as a potential analysis is the fact that the functional range of such paradigmatic oppositions does not map neatly onto categories familiar from analyses of European languages, such as definiteness or case.¹⁵ Another reason that such an analysis has presumably not been actively proposed is that variable prefix presence has not been reported in most East Benue-Congo languages (especially if we include Narrow Bantu languages in this category), meaning that an abstract analysis of this kind would not be motivated by direct evidence in the majority of cases.¹⁶ While these remarks pertain more directly to synchronic analysis than historical concerns, a more accurate understanding of these synchronic systems can play an important role in reconstructing a Proto-Benue-Congo noun class system that is more reflective of the actual morphosyntax of the East Benue-Congo parent language.

When we come back to consideration of these patterns in the broader Benue-Congo picture, the question arises as to whether or not we should view the Proto-Benue-Congo system, as depicted in Table 1, as relatively well-behaved, adhering to a Bantu-like canon (even if there are fewer overall classes) where noun classes are almost exclusively coded with some prefix, excluding narrow and systematic exceptions of the sort associated, for instance, with Bantu Class 1a (see §1). Alternatively, we might want to consider what features of Proto-Benue-Congo could have resulted in relatively distant languages such as C'lela and Aghem (one spoken in northwest Nigeria and the other in northwest Cameroon) to have developed in similar directions with respect to alternations between prefixed and non-prefixed nouns. There has not been any general survey on patterns of prefix absence to the best of my knowledge, and, if anything, it is probably underreported since it is not a pattern necessarily easily detected in basic elicitation, such as when collecting wordlists. It is also important in this regard to consider the relatively well attested pattern where an East Benue-Congo language may be primarily prefixing but also show some suffixal or circumfixal noun class marking (whether appearing on nouns or as concords). Such patterns were recognized

¹⁵To pick one well-described example, Schadeberg's (1986) description of tonal cases in the Bantu language Umbundu includes the category of Common Case which covers such functions as subject, second complement of ditransitive verb, object of a negative verb, and object of a progressive verb, among others (Schadeberg 1986: 433–437).

¹⁶I am thankful to John Watters for the latter observation. Whether the analysis of prefixes as being part of some kind of inflectional nominal paradigm of the sort just suggested should be applied to all East Benue-Congo languages with productive noun classes or just that subset showing variable prefix presence is a question of synchronic analysis that lies outside the scope of the present chapter.

2 East Benue-Congo noun classes, with a focus on morphological behavior

by de Wolf (1971: 181), and new examples have since been attested, as seen in, for example, the overview of the noun class systems of Naki (Mekaf), Mungbam (Misong), and Noni (all non-Grassfields Bantu Bantoid languages spoken in the north of the Grassfields area) as presented in Hombert (1980: 87–88).

De Wolf (1971: 182) appears to view the issue of understanding the suffixing patterns through a dichotomous lens where Proto-Benue-Congo would be viewed as either prefixing *or* suffixing. Given such a choice, it seems likely that Proto-Benue-Congo was much closer to a prefixing prototype than a suffixing one. But, we might still consider whether Proto-Benue-Congo may have allowed for prefixes on nouns to be dropped in certain contexts, thereby creating favorable conditions for the rise of suffixing class patterns in some cases. In other words, as part of the reconstruction of the noun class *system* of Proto-Benue-Congo, we should bear in mind that its properties clearly resulted in the potential for its daughter languages to develop suffixal class-marking patterns and consider what sort of system would have been likely to have promoted such developments. This remains an important open area of research on comparative East Benue-Congo noun class systems.

A final point worth raising in this regard is the possibility for reconstructing word order within the noun phrase in Proto-Benue-Congo. I am not aware of this topic having received much attention, perhaps because of the relative homogeneity of East Benue-Congo languages in key domains, such as a strong tendency towards head-initial structures, resulting in patterns such as Noun-Demonstrative order being well-attested (see, e.g., Dryer (2013)). However, there are cases reported of alternative orders being possible in specific contexts (for instance to encode emphasis). In such cases, one may find Demonstrative-Noun ordering in languages where the reverse order generally predominates. For example, Van de Velde (2005) discusses this in some Bantu languages, and Watters (1981: 254–255) and Lovegren (2013: 182) give attestations of this in Bantoid languages (see also Watters 2003: 248). This seems likely to be a relatively common pattern, though I am not aware of any systematic study of it. To the extent that noun phrases in Proto-Benue-Congo probably tended to be head-initial, grammaticalization processes could be expected to more often create innovative suffixal class-marking patterns along the lines of what was outlined for C’lela above. However, less common word order patterns where a concordial element such as a demonstrative may have preceded the noun could allow for new prefixal class marking to develop, perhaps helping us understand the rise of, for instance, the pre-

prefixing augments found in Bantu languages, just discussed (see also Meeussen 1967: 99).¹⁷

4 Domains of concord

As discussed in §2, Bantu languages are generally taken to be conservative with respect to maintenance of the general structure of the Proto-Benue-Congo noun class system, though they may have innovated certain classes. A comparison between Bantu and the rest of East Benue-Congo is also relevant in this regard with respect to the domains where noun class concord is found. That there must have been some kind of agreement relation between head nouns and certain classes of associated elements is without question. However, what is not fully resolved is which grammatical classes those elements would have belonged to.

de Wolf (1971: 182–185) gives an overview of where concord was found in the languages he examined most carefully in his study, providing an exceptionally fine-grained list of environments where it was attested. Generalizing over his categories, throughout the family as a whole, the following domains are relevant: (i) nominal dependents, including demonstratives, adjectival elements (to the extent that they are present), numerals, possessive pronouns, and modifying interrogatives, (ii) verbs and verb-like elements (e.g., copulas), where subject concord is often found (to be discussed further below), (iii) pronouns of various kinds, and in particular anaphoric pronouns, where a prominent feature of many East Benue-Congo concord systems is a large class of third-person pronouns agreeing with the class of their referent, and (iv) associative markers and relativizers, which can agree with the noun preceding them.¹⁸ While not a do-

¹⁷This possibility raises broader questions about the role of augmentation in accounting for the shape of noun class prefixes in East Benue-Congo languages, whether in the form of the so-called augment, just discussed above, or some other kind of morpheme which would result in something comparable to the augment in terms of form, if not necessarily function (see, e.g., Hyman (2005: 337)). Dimmendaal (2001: 381–382) discusses evidence suggesting that the presence of the augment is quite old within Niger-Congo (see also Williamson (1993)). This would open up the possibility for it to have played a role in shaping noun class prefixes throughout East Benue-Congo via parallel developments in different branches. The details of such processes, at this stage, remain somewhat speculative.

¹⁸The associative marker and relativizer are possibly analyzable as nominal dependents, therefore belonging to class (i) above, though in their role as connective elements between syntactic constituents, their dependency relationships are not as obvious as for elements such as demonstratives and adjectives, which is why they are given their own category here.

2 East Benue-Congo noun classes, with a focus on morphological behavior

main of concord, *per se*, to this we might also add another domain of marking: (v) nouns themselves, specifically when they show overt marking of their class via some sort of affixal coding. The logic for adding this final class is that, from the perspective of a formal reconstruction of the properties of the Proto-Benue-Congo noun class system, the presence/absence of class marking on nouns can vary more or less along the same lines as its presence/absence in more properly syntactic domains in the daughter languages.

No more thorough follow-up study of the domains of concord at the level of East Benue-Congo appears to have been undertaken, and this would seem to be an area where a more detailed survey would lead to worthwhile results, perhaps leading to robust generalizations regarding where concord is more likely to be maintained or lost. Still, even a cursory examination of the results in de Wolf (1971: 184) shows that absolute patterns are unlikely to be uncovered, given that a wide range of logical possibilities for combinations of class coding across domains are attested. Of particular relevance for purposes of reconstruction is work such as that of Demuth et al. (1986: 467), who propose that class coding on concordial forms is more resistant to loss as a result of language change than nominal class coding. Dimmendaal (2001: 381) further puts forth the idea that, when coding on nouns survives where agreement is lost, this can be explained as the effect of contact. Good (2012) presents a more equivocal picture about the relative historical stability of these two types of noun class marking. However, if more systematic studies revealed the robustness of concord as a significant tendency, it would suggest that future work on reconstruction of the noun class system of Proto-Benue-Congo should privilege evidence from patterns of agreement over class marking on nouns as more likely to represent archaic features. A useful step forward for further examination of this issue would be to arrive at a more detailed understanding of areal patterns of nominal class coding and class concord, including consideration of languages where only remnant patterns are found in order to clarify if any apparent typological generalizations may be better understood as contact effects.

Even if we accept that noun classes are more robustly coded via patterns of agreement than via nominal prefixes, there is still the question of which precise domains would have shown agreement in Proto-Benue-Congo. In some cases, such as demonstratives, third-person pronouns (see Hyman, Chapter 6, this volume, on third-person pronouns in Grassfields), and possessive pronouns, concord is found in a sufficiently diverse range of the family's languages (see, e.g., de

Wolf (1971: 184)) that it seems necessary to reconstruct it for the proto-language given that concord has to be reconstructed somewhere in the system.¹⁹ Nominal prefixes are comparable in this regard, since the alternative would be to posit an improbably massive number of parallel processes of grammaticalization resulting in nominal prefixes in languages throughout the family.

At the same time, if we assume Proto-Benue-Congo had a fairly transparent noun class system in some domains of its grammar, it is also clear that processes of analogical extension and grammaticalization could have served to extend noun classes to domains where they might not have been found in the proto-language. Here, data from Bantu languages becomes useful simply by virtue of their degree of morphological elaboration and the fact that their comparative linguistics is relatively well understood. Güldemann (2008a: 386), for instance, gives a reconstruction of a grammaticalization pathway for a Proto-Bantu element **-ti*, associated with quotative marking (Guthrie 1970: 105), where it began as an uninflecting manner-marking element (perhaps comparable to English *like*) but later developed verbal properties. One of these properties is an ability to appear with subject concord marking, as generally found for Bantu verbs. Another such example involves a complementizer in the Bantu language Lwena, which shows suffixal concord with the subject of its matrix clause (see Güldemann (2008a: 453), drawing on the description of Horton (1949: 181–182)). (Idiatov (2010: 832–836) offers more general discussion of this kind of agreement.) It may be possible to reconstruct some degree of subject concord for **-ti* in Proto-Bantu. However, it is hard to consider the subject coding found in Lwena complementizers as representing anything other than an innovation in Bantu terms for this part of speech given its suffixing form. Thus, contrary to the implications of the drift metaphor (see §2), we must admit the possibility that Proto-Benue-Congo may have exhibited concord in more limited domains than what is found in the daughter languages, with its appearance in other domains due to later changes. That is, morphological coding of noun classes should not automatically be understood to represent the conservative situation. Working out the details, however, will have to await further, targeted study.

A comparatively controversial case of a concord domain in this regard involves subject coding on the verb by means of a prefix. Güldemann (2011: 123–129) (see

¹⁹See Kießling (2013) for discussion of attested numeral classifier systems in Niger-Congo languages, including many East Benue-Congo languages, which can potentially serve as models for the initial development of the Niger-Congo noun class system at some ancient stage of the language. By the time we can sensibly speak of Proto-Benue-Congo, however, it seems necessary to assume that a strongly grammaticalized noun class system was already present.

2 East Benue-Congo noun classes, with a focus on morphological behavior

also Güldemann (2003: 184–185)), for instance, argues that the pattern of subject concord (as well as object concord) on the verb seen in Bantu languages should be historically interpreted not as evidence for the historical presence of such an agreement pattern in a higher-level grouping such as East Benue-Congo but, rather, as the result of a comparatively recent process of grammaticalization. Specifically, an S-Aux-O-V syntagm provided the seeds for the development of a verbal structure which is prefixally inflected for subject concord and tense-mood-aspect marking, as well as object marking.²⁰ (See Güldemann (2007) for general discussion of such preverbal object structures in Benue-Congo.) Hyman (2011: 21–40), by contrast, provides evidence supporting a treatment of prefixal inflection on verbs in Niger-Congo (and, by extension, East Benue-Congo as having a comparatively old time depth. While he does not propose specific reconstructions regarding subject concords, there is a clear implication that he believes that the possibility that they were present at a genealogical level well above Narrow Bantu should be seriously considered.

While Güldemann (2011) is focused on Narrow Bantu, the core of his argument could apply just as well to East Benue-Congo languages showing phonologically fused instances of subject marking that strongly suggest a prefixal analysis is appropriate, such as the Cross River language Eleme (Bond 2010). This then raises the question: Given that grammaticalization scenarios could be developed where other domains of concord (such as demonstratives or third-person pronouns, just discussed) could be viewed as arising from more analytic structures, why treat subject concord differently? In this case, significant considerations would seem to be as follows: On the one hand, concord must be reconstructed in some domains unless we set aside the idea that it is one of the defining historical features of East Benue-Congo, and the pervasiveness of concord in domains such as demonstratives and third-person pronouns makes them strong candidates for having been concord domains in East Benue-Congo as mentioned above. On the other hand, there are clear constructional sources through which subject and object concord could have developed, and these are found even in contemporary languages lacking such concord. Potential sources of other kinds of concord elements are otherwise unclear (or, at least, require more speculation).

²⁰The coding of the class of object arguments on verbs in Bantu languages is often not clearly an example of concord since the appearance of the so-called object markers is not obligatory in all languages in cases where an overt object is present, suggesting that these markers behave more along the lines of pronominals. See Bearth (2003: 124). From a diachronic perspective, this suggests their appearance may result from a comparatively recent process of entrapment of object pronouns into a univerbating verbal complex, at least when set against subject coding on the verb, which is much more strongly associated with “true” grammatical agreement.

Nevertheless, as made clear by the discussion in Hyman (2011: 29–40), there are reasons to doubt any overly simplistic story for the presence/absence of concord in any particular domain in a group as old as East Benue-Congo, and the issue of whether or not subject concord was present must be considered unresolved, even if some plausible hypotheses can be put forward. We are, thus, left with an analytical problem: There is a reasonable diachronically shallow pathway that can be proposed for the development of subject concord in East Benue-Congo languages, but there are also patterns that suggest verbal prefixal morphology may be quite old. At this point, one can merely say that East Benue-Congo might have showed subject concord but that this is a less likely concord domain than that of, say, demonstratives or third-person pronouns.

5 Concord form classes

In addition to the issue of where concord was present in Proto-Benue-Congo, there is a further concern regarding how many different series of noun class markers there might have been. The most prominent classes where this question is relevant are almost certainly those associated with the Bantu nasal classes (see Section 1), where a nasal is found in the consonantal position of CV- nominal-marking class prefixes but not in other class-marking domains such as verbal person-coding prefixes (see, e.g. Meeussen (1967: 97–98)). In the East Benue-Congo case, the possibility of different series of class markers can be seen directly in de Wolf's (1971) reconstructions of a distinctive nominal prefix series and concordial series as presented in Table 1. It seems reasonable, therefore, to assume that there were at least two distinct series of noun class markers in Proto-Benue-Congo.²¹ In many cases, the markers for specific classes would be formally identical, creating alliterative patterns of concord.²² Nevertheless, in some classes there seems to have been partial formal divergence, with Classes 1, 3, and 6, and

²¹This is not to say that some variety preceding Proto-Benue-Congo necessarily had two distinct series since, at least for some cases, it would be straightforward to apply internal reconstruction to de Wolf's (1971) Proto-Benue-Congo system to propose an earlier stage with less variation. (This could, in particular, involve proposing that certain class prefixes on nouns, such as Class 6, were subject to initial consonant loss which did not affect consonants in all concordial forms.)

²²Patterns of alliterative concord are still found in noun class systems throughout East Benue-Congo, though reconstructed alliteration for any given noun class can often be lost due to historical processes such as sound change. New patterns of alliteration can also emerge in cases where new noun classes develop analogically on the basis of existing ones, as appears to be the case, for instance, for the Bantu locative classes discussed in §2.

2 East Benue-Congo noun classes, with a focus on morphological behavior

perhaps 9 and 10, being the most likely candidates for this, as indicated in Table 1. These are also classes associated with the historically problematic nasal classes in Bantu just discussed, and, presumably, this is not a coincidence.²³

The possibility that more than two series of concords may need to be reconstructed for Proto-Benue-Congo does not appear to have received detailed attention. It is unambiguously the case that the noun class systems of some languages of the family can only be described by implicitly assuming more than two series of concord marking insofar as there is a need to present separate concord sets for a number of word classes, e.g., demonstratives, numerals, and adjective-like elements. This is seen in the overview of the Noni noun class system given in Hyman (1981: 33). Eight series of noun class markers are given for this language representing the following domains: (i) nominal prefixes, (ii) person pronominal elements, (iii) possessive marking for nouns (involving, among other things, an associative marker), (iv) possessive pronouns, (v) determiners, (vi) quantifier-like elements, (vii) adjective-like elements, and (viii) numerals, and even this extensive list abstracts away from various complications for elements within these series.

Often, it is straightforward in such cases to view a wealth of concord series as the result of various processes of change (especially sound change) impacting different kinds of concord-stem combinations, creating a system where concord variants need to be explicitly listed synchronically but which can be easily seen as deriving from a simpler historical system. For instance, Noni Class 4 forms all contain a palatal consonantal element, but this is realized as a modification to a stem-initial consonant in some cases rather than as a true prefix. Thus, forms for the word ‘new’ in Noni are based on a stem *-fɛ* and can appear with an unambiguous prefix as in the Class 2 form *bɔfɛ* or with a modified consonant in the Class 4 form as *fiɛ* (Hyman 1981: 26). This Class 4 form can be set against the Class 4 word for ‘this’ *yin* (based on a stem with a shape of *-Vn*), where a full palatal consonant is found (Hyman 1981: 23). There is, however, no reason to view this as evidence for the reconstruction of a plain and mutating series of Class 4 concords in Proto-Benue-Congo given that the overall pattern is one where a full palatal consonant is found before agreeing stems beginning with a vowel and a consonant modified with palatalization is found for stems beginning with a consonant. This simply suggests a sound change where a former segmental

²³Class 4 is also such a class, not listed here, but this should be understood as an artifact of the presentation scheme where I associated Bantu class numbers with de Wolf’s (1971) reconstructions in a way that collapsed a possible Class 4/Class 10 distinction on formal grounds. See also §6.

prefix with a palatal quality (presumably along the lines of *i*) before consonantal stems metathesized and fused with the following consonant, while appearing as a palatal glide before a vowel. Indeed, this change seems to be an instance of a localized areal pattern found in the part of the Cameroonian Grassfields where Noni is spoken, as discussed in Kießling (2010).

Nevertheless, the fact that we can explain some of the attested complications in series of concords as the result of straightforward processes of sound change does not mean that we should not also consider the possibility that Proto-Benue-Congo had more than two series or that, in some cases, morphophonological processes had been applied to its concord system which would have created some forms that were partly unpredictable based purely on knowledge of the general form of a concord prefix and the stem it attached to. I am not aware of specific work having been done on this question, however, and it must remain an open issue for further research.

6 Noun class identity and class pairing consistency

Implicit in much of the discussion on noun classes in Proto-Benue-Congo is the idea that a noun class is a relatively stable entity, associated with a consistent form, even if subject to different patterns of change (e.g., sound change or analogical change). Moreover, it is easy to assume that the singular-plural pairings may be more stable than they are in reality. To be sure, there are pockets of stability. For instance, while I am not aware of a study systematically verifying this, the Class 1/2 pairing seems robust both in terms of the fact that each of its component classes is well attested and the fact that the pairing itself is well-attested for certain nouns referring to humans. This is presumably explainable by reference to the semantic cohesiveness of a subclass of Class 1/2 nouns, their likely frequency of use, and the general salience of the category *human*.

However, complications to this simplified picture are not hard to find. The clearest of these is a general lack of rigidity in singular-plural pairings. This can be seen in de Wolf's (1971) reconstructions, as schematized in Table 1, where, for instance, he was unable to propose a consistent singular for Class 13, indicating it as functioning as a plural for either Class 3 or Class 12. It is important to bear in mind in this context that patterns of singular-plural pairing are seen as (at least partly) diagnostic in some descriptions of the presence of a distinct class itself. This is found, for example, in the reconstruction of distinct Classes 4 and 5 for Western Grassfields Bantu in Hyman (1980b: 183), which are formally identical but differentiated by virtue of their status as coding singular versus plural

2 East Benue-Congo noun classes, with a focus on morphological behavior

and associated patterns of pairing. It is also seen in a divergence in the schematization of de Wolf's (1971) reconstructions given in Table 1 and the summary presented in Williamson (1989: 38–39), where she gives a distinct Class 4, which is not seen here, alongside a formally identical Class 10. de Wolf (1971: 52) does not appear to make a statement on the relationship of the relevant Proto-Bantu classes associated with these numbers to his class given with form **í*. These two classes are reconstructed as formally distinct in Proto-Bantu, and either could be historically connected to a class associated with **í* in Proto-Benue-Congo.

In fact, de Wolf (1971) proposes pairings consistent with the presence of something like the Class 3/4 pairing in Proto-Benue-Congo, as well as the Class 9/10 pairing given in Table 1. This leaves open the question as to whether we should view this as evidence for a distinct Class 4 in Proto-Benue-Congo or whether we should treat the plurals of the relevant words as involving something like a Class 3/10 pairing, under the assumption that there is just one plural class with a form associated with *í*. (Class 10 is picked over Class 4 in this case due to the fact that there is greater evidence for reconstructing a Class 9/10 pairing than a Class 3/4 one.) Obviously, the criteria one uses as diagnostic for a distinct noun class can have a significant outcome on the apparent consistency (or inconsistency) of singular/plural pairings, and the resolution of cases like these requires a less than canonical system either by proposing multiple homophonous classes with simpler pairings or less consistent patterns of pairing with fewer classes. The “ideal” analysis is probably more a matter for morphological theory than historical reconstruction. From the latter perspective, of greater interest here, the most important point to bear in mind is that the reconstructed noun class system for Proto-Benue-Congo almost certainly had non-canonical pairing structure for at least some of its classes.

It may also be the case that some of the apparent variability in class pairings could be due to the presence of “imperialistic” classes (see Gerhardt (1994: 167)) within East Benue-Congo languages, variants of which were perhaps even found in Proto-Benue-Congo itself.²⁴ These are classes which, for whatever reason, tend to historically “absorb” nouns from other classes. Based on de Wolf (1971), a possible candidate for such a noun class in Proto-Benue-Congo may be the **í* class (here labelled Class 10), due to its ability to serve as a plural for various sin-

²⁴In the formulation of Gerhardt (1994: 167), an imperialistic class would not only be a generally “open” class but would also be the typical class for the incorporation of loanwords and be morphophonologically “less marked”. While these patterns may be generally correlated for apparently imperialistic classes, Lovegren (2013: 137) notes the existence of a plural class which appears to draw in plural nouns from other classes despite being morphophonologically “marked” by virtue of employing circumfixal class encoding on the noun.

gular classes as indicated in Table 1. To come to a better understanding of these patterns, detailed studies of noun class distribution across dialects and low-level language clusters would be useful. These would give us some measure of the rate and degree to which noun class pairings can shift within languages of the family. Watters (1981: 306–308) provides a relevant example in his description of a clinal shift in the distribution of nouns within a Class 5/8 pairing versus a Class 5/6 pairing, where the former pairing loses ground to the latter as one moves west and south within the area associated with the Bantoid language Ejagham.

Other languages suggest additional complications that would be difficult to reliably reconstruct to Proto-Benue-Congo itself but whose presence within it cannot be ruled out and which certainly raise problems when using the comparative method to reconstruct the proto-language. These problems center around the fact that the formal structure of the East Benue-Congo noun class prefixes, consisting of just CV- or V- shapes and typically making use of only a limited range of a language's available vowel contrasts, makes them relatively prone to different types of sub-morphemic reanalysis and analogical contamination, where the form of one class is influenced by that of another.

Consider, for instance, patterns of prefix reduction found in the Abar variety of the Bantoid language Mungbam as seen in Table 2 (Lovegren 2013: 136). An optional process applies to noun class prefixes in this variety wherein they lose their initial consonant. In cases where the vowel of the CV form of the prefix is *a*, the reduced prefix shows the vowel *a*. From the standpoint of historical sound change, this pattern of consonant loss is not obviously remarkable, but, when looked at in light of the overall noun class system of the variety, it is striking that the reduced prefixes are formally identical to non-reduced prefixes associated with other classes. For instance, four non-reduced noun classes posited for this variety show a prefix with a segmental form of *i* (specifically, Classes 4, 5, and 10) and two show a prefix with a segmental form of *u* (specifically Classes 1 and 3), with additional tonal complications in some cases (Lovegren 2013: 111). As can be seen in Table 2, three of the reduced prefixes have a segmental shape of *i* as well and one shows an *u*, thus adding additional surface homophony to the system.

Patterns like those in Table 2 would clearly allow for a reanalysis of the structure of CV- prefixes as being morphologically complex, consisting of something along the lines of C-V-, and thus opening the door to various morphological developments and complications that would otherwise be unexpected. For instance, in the Munken variety of the same language, one can find apparent instances of “mixed” agreement, such as those presented in (1). The word for ‘day’, which most frequently is seen in the Class 14 form *būtù*, here, shows a form that would nor-

2 East Benue-Congo noun classes, with a focus on morphological behavior

Table 2: Prefix reduction in the Abar variety of Mungbam

CLASS	FULL FORM	REDUCED FORM	GLOSS
6	<i>má-ηkǎn</i>	<i>á-ηkǎn</i>	‘hand’
6a	<i>mā-mbǎlɔ</i>	<i>ā-mbǎlɔ</i>	‘oil’
13	<i>kí-lǎm</i>	<i>í-lǎm</i>	‘tongue’
8	<i>bí-ɲǔ</i>	<i>í-ɲǔ</i>	‘thing’
12	<i>kà-jì</i>	<i>à-jì</i>	‘god’
14	<i>bú-tsé</i>	<i>ú-tsé</i>	‘witchcraft’
19	<i>cí-bùs</i>	<i>í-bùs</i>	‘cat’

mally be associated with Class 3. Moreover, this apparent Class 3 marking of the form is found not only on the noun itself but also on the following demonstrative modifier *wán*. However, the following word *bū*, the object of a postposition, shows the expected Class 14 form, resulting in an inconsistent class coding pattern. The most straightforward interpretation of this pattern is to see it as resulting from a kind of “confusion” of classes triggered by their formal similarities and facilitated by processes of sound change, such as initial consonant loss, that would result in surface homophony of the sort just dicussed above for the Abar variety of this language.

- (1) *Á humiliation ūtù wán bū ηǎn.*
 DS humiliation 3.day 3.DEM 14.OBJ LOC
 “There is humility on this day.”

While this sort of class confusion and contamination was not likely to have been a feature of Proto-Benue-Congo itself, its noun class system clearly provided the seeds for it. This means, when attempting to reconstruct the system from attested data, one must consider the possibility that the daughter languages may have been impacted not only by comparatively regular processes, such as sound change or typical kinds of analogical extension, but also by more complex forms of analogical change, such as those triggered by sub-morphemic analysis.

7 Towards a reconstruction of the noun class *system*

An important theme of this chapter has been that we should consider the problem of reconstruction of the Proto-Benue-Congo noun classes not simply as an exercise in arriving at a set of forms which can be associated with various class markers but, rather, in terms of the reconstruction of an entire noun class system, paying attention, in particular, to the morphosyntactic properties of the system, such as whether class marking on nouns may have ever been optional in Proto-Benue-Congo (see Section 3) or how many distinct series of concords may have been present (see Section 5), among other questions. The reason for doing this is, on the one hand, the fact that even in the absence of a resolution on the shapes of specific forms, progress might still be made with respect to the reconstruction of these more abstract properties of the proto-system. On the other hand, a better understanding of these properties is ultimately likely to yield significant insight into why attested East Benue-Congo noun class systems are the way they are, even at the formal level.

Moreover, if there is a general consideration that emerges from this overview, it is that we should probably not assume the Proto-Benue-Congo noun class behaved as regularly as tabular presentations such as the one in Table 1 might be taken to imply. We can expect there to have been opacity in the principles of class assignment, variability in singular/plural pairings, differences in concord realization across various morphosyntactic constructions, and so on. Whether some of these "irregularities" should be modeled as variability in the usage of particular speakers or representative of dialect diversity among whatever community we can identify with Proto-Benue-Congo may not prove completely reconstructible, though reconstructing significant dialect diversity would be completely reasonable given that, within the East Benue-Congo area, salient dialect diversity within speaker communities seems to be the norm. Furthermore, while de Wolf (1971) does not appear to make an explicit statement about this, it is worth bearing in mind that an examination of the specific historical scenarios relating his Proto-Benue-Congo reconstructions to the noun class systems of his sample languages shows that they are not reducible to simple statements of sound change or clear-cut analogical changes. Rather, one has the impression of systems often being generally maintained while combinations of regular, semi-regular, and apparently irregular changes impact them.

I would like to close by briefly considering how we might move forward in our efforts to understand the nature of the Proto-Benue-Congo noun class system. As mentioned in §1, if the goal is to improve on the efforts begun by de

Wolf (1971), then the most natural step would involve reconstructing the noun class systems of low-level subgroups and working upwards in systematic fashion.²⁵ Our dataset has improved to a point where quick progress could be made for many such groups, even if reconstructing higher-level positions in the tree might still be somewhat elusive. If the goal is more generally historical in nature, namely using language as a means to understand Niger-Congo prehistory, then this approach is probably too limited, and increased knowledge of the structural and typological characteristics of the system is likely to be more worthwhile, especially since these are likely better windows into patterns of language contact and areal influence than purely formal reconstructions. This survey has emphasized the latter approach over the former. On the one hand, this should be viewed as reflecting changing priorities in the field since de Wolf (1971), especially given the explosion of work on language contact phenomena since the publication of Thomason & Kaufman (1988). On the other hand, it also follows a general expository goal here of laying out a “bigger picture” view of possible directions for future work on East Benue-Congo noun class systems, rather than presupposing that one way forward is to be inherently preferred over another.

Acknowledgements

I would like to thank Larry Hyman, John Watters, and an anonymous reviewer for feedback on a draft of this paper. Portions of the research underlying this proposal were supported by U.S. National Science Foundation award number BCS-1360763.

References

- Bearth, Thomas. 2003. Syntax. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 121–142. London: Routledge.
- Blench, Roger M. 1993. An outline classification of the Mambiloid languages. *Journal of West African Languages* 23. 105–118.
- Bond, Oliver. 2010. Intra-paradigmatic variation in Eleme verbal agreement. *Studies in Language* 34. 1–35.

²⁵Bruce Connell (personal communication) suggests that the available data on Upper Cross, for example, should now make it quite feasible to reconstruct its noun class system. (See Dimmen-daal (1978: 190–195) for initial work in this direction.)

- Boum, Marie Anne. 1980. Le groupe menchum: Morphologie nominale. In Larry M. Hyman (ed.), *Noun classes in the Grassfields Bantu borderland* (Southern California Occasional Papers in Linguistics 8), 73–82. Los Angeles: Department of Linguistics, University of Southern California. http://gsil.sc-ling.org/pubs/SCOPILS_6_7_8_9/Noun_classes_in_the_grassfields_bantu_borderland.pdf.
- Childs, G. Tucker. 1983. Noun class affix renewal in Southern West Atlantic. In Jonathan D. Kaye, Hilda J. Koopman, Dominique Sportiche & André Dugas (eds.), *Current approaches to African linguistics*, vol. 2, 17–29. Dordrecht: Foris.
- Clements, George N. & Annie Riailand. 2008. Africa as a phonological area. In Bernd Heine & Derek Nurse (eds.), *A linguistic geography of Africa*, 36–85. Cambridge: CUP.
- Connell, Bruce. 1987. Noun classification in Lower Cross. *Journal of West African Languages* 17. 110–125.
- Cook, Thomas L. 1969. *The pronunciation of Efik for speakers of English*. Bloomington, IN: African Studies Program & Intensive Language Training Center, Indiana University.
- Creissels, Denis. 2009. The construct form of nouns in African languages. In Peter K. Austin, Oliver Bond, Monik Charette, David Nathan & Peter Sells (eds.), *Proceedings of Conference on Language Documentation and Linguistic Theory 2*, 73–82. London: SOAS.
- de Blois, Kees F. 1970. The augment in the Bantu languages. *Africana Linguistica* 4. 85–165.
- de Wolf, Paul P. 1971. *The noun class system of Proto-Benue-Congo*. The Hague: Mouton.
- Demuth, Katherine, Nicholas G. Faraclas & Lynell Marchese. 1986. Niger-Congo noun class and agreement systems in language acquisition and historical change. In Colette G. Craig (ed.), *Noun classes and categorization*, 453–471. Amsterdam: Benjamins.
- Demuth, Katherine, 'Malillo Machobane & Francina Moloji. 2009. Learning how to license null noun-class prefixes in Sesotho. *Language* 85. 865–883.
- Di Carlo, Pierpaolo & Jeff Good. 2014. What are we trying to preserve? Diversity, change, and ideology at the edge of the Cameroonian Grassfields. In Peter K. Austin & Julia Sallabank (eds.), *Endangered languages: Beliefs and ideologies in language documentation and revitalization*, 229–262. Oxford: OUP.
- Dimmendaal, Gerrit J. 1978. *The consonants of Proto-Upper Cross and their implications for the classification of Upper Cross languages*. Leiden: Leiden University Doctoral dissertation.

2 East Benue-Congo noun classes, with a focus on morphological behavior

- Dimmendaal, Gerrit J. 2001. Areal diffusion versus genetic inheritance: An African perspective. In Alexandra Y. Aikhenvald & R. M. W. Dixon (eds.), *Areal diffusion and genetic inheritance: Problems in comparative linguistics*, 359–392. Oxford: OUP.
- Dryer, Matthew S. 2013. Order of demonstrative and noun. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. <http://wals.info/chapter/88>.
- Dunn, Ernest F. 1968. *An introduction to Bini*. East Lansing, MI: African Studies Center, Michigan State University.
- Faraclas, Nicholas G. 1986. Cross River as a model for the evolution of Benue-Congo nominal class/concord systems. *Studies in African Linguistics* 17. 39–54.
- Gerhardt, Ludwig. 1994. Western Plateau as a model for the development of Benue-Congo noun-class system. *Afrika und Übersee* 77. 161–176.
- Good, Jeff. 2012. How to become a “Kwa” noun. *Morphology* 22. 294–335.
- Good, Jeff. 2017. Niger-Congo languages. In Raymond Hickey (ed.), *The Cambridge handbook of areal linguistics*, 471–499. Cambridge: CUP.
- Green, M. M. & Rev. G. E. Igwe. 1963. *A descriptive grammar of Igbo*. Berlin: Akademie-Verlag.
- Greenberg, Joseph H. 1966. *The languages of Africa*. The Hague: Mouton (also *International Journal of American Linguistics* 29(1) part 2).
- Greenberg, Joseph H. 1977. Niger-Congo noun class markers: Prefixes, suffixes, both or neither. *Studies in African Linguistics* Supplement 7. 97–106.
- Greenberg, Joseph H. 1978. How does a language acquire gender markers? In Joseph H. Greenberg (ed.), *Universals of human language*, vol. 3: Word structure, 47–82. Stanford: Stanford University Press.
- Grégoire, Claire. 1983. Quelques hypothèses comparatives sur les locatifs dans les langues bantoues du Cameroun. *Journal of West African Languages* 13. 139–164.
- Güldemann, Tom. 2003. Grammaticalization. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 182–194. London: Routledge.
- Güldemann, Tom. 2007. Preverbal objects and information structure in Benue-Congo. In Enoch O. Aboh, Katharina Harmann & Malte Zimmermann (eds.), *Focus strategies in African languages: The interaction of focus and grammar in Niger-Congo and Afro-Asiatic*, 83–112. Berlin: Mouton de Gruyter.
- Güldemann, Tom. 2008a. *Quotative indices in African languages: A synchronic and diachronic survey*. Berlin: Mouton de Gruyter.

- Güldemann, Tom. 2008b. The Macro-Sudan belt: Towards identifying a linguistic area in northern Sub-Saharan Africa. In Bernd Heine & Derek Nurse (eds.), *A linguistic geography of Africa*, 151–185. Cambridge: CUP.
- Güldemann, Tom. 2011. Proto-Bantu and Proto-Niger-Congo: Macro-areal typology and linguistic reconstruction. In Osamu Hieda, Christa König & Hiroshi Nakagawa (eds.), *Geographical typology and linguistic areas: With special reference to Africa*, 109–141. Amsterdam: Benjamins.
- Guthrie, Malcolm. 1970. *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages*. Vol. 3. Farnborough: Gregg.
- Guthrie, Malcolm. 1971. *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages*. Vol. 2. Farnborough: Gregg.
- Hoffmann, Carl. 1967. An outline of the Dakarkari noun class system and the relation between prefix and suffix noun class systems. In M. Gabriel Manessy (ed.), *La classification nominale dans les langues négro-africaines, Aix-en-Provence, 3–7 juillet 1967*, 237–254. Paris: CNRS.
- Hombert, Jean-Marie. 1980. Noun classes of the Beoid languages. In Larry M. Hyman (ed.), *Noun classes in the Grassfields Bantu borderland* (Southern California Occasional Papers in Linguistics 8), 83–98. Los Angeles: Department of Linguistics, University of Southern California. http://gsil.sc-ling.org/pubs/SCOPILS_6_7_8_9/Noun_classes_in_the_grassfields_bantu_borderland.pdf.
- Horton, A. E. 1949. *A grammar of Luvale* (Bantu grammatical archives). Johannesburg: Witwatersand Press.
- Hyman, Larry M. 1979. Phonology and noun structure. In Larry M. Hyman (ed.), *Aghem grammatical structure: With special reference to noun classes, tense-aspect and focus marking* (Southern California Occasional Papers in Linguistics 7), 1–72. Los Angeles: University of Southern California Department of Linguistics. http://gsil.sc-ling.org/pubs/SCOPILS_6_7_8_9/Aghem_grammatical_structure.pdf.
- Hyman, Larry M. (ed.). 1980a. *Noun classes in the Grassfields Bantu borderland* (Southern California Occasional Papers in Linguistics 8). Los Angeles: Department of Linguistics, University of Southern California. http://gsil.sc-ling.org/pubs/SCOPILS_6_7_8_9/Noun_classes_in_the_grassfields_bantu_borderland.pdf.
- Hyman, Larry M. 1980b. Reflections on the nasal classes in Bantu. In Larry M. Hyman (ed.), *Noun classes in the Grassfields Bantu borderland* (Southern California Occasional Papers in Linguistics 8), 179–210. Los Angeles: Department of Linguistics, University of Southern California. http://gsil.sc-ling.org/pubs/SCOPILS_6_7_8_9/Noun_classes_in_the_grassfields_bantu_borderland.pdf.

2 East Benue-Congo noun classes, with a focus on morphological behavior

- Hyman, Larry M. 1981. *Noni grammatical structure: With special reference to verb morphology* (Southern California Occasional Papers in Linguistics 9). Los Angeles: University of Southern California Department of Linguistics. http://gsil.sc-ling.org/pubs/SCOPILS_6_7_8_9/Noni_grammatical_structure.pdf.
- Hyman, Larry M. 2004. How to become a “Kwa” verb. *Journal of West African Languages* 30. 69–88.
- Hyman, Larry M. 2005. Initial vowel and prefix tone in Kom: Related to the Bantu augment? In Koen Bostoen & Jacky Maniacky (eds.), *Studies in African comparative linguistics with special focus on Bantu and Mande: Essays in honour of Y. Bastin and C. Grégoire*, 313–341. Köln: Rüdiger Köppe Verlag.
- Hyman, Larry M. 2011. The Macro-Sudan belt and Niger-Congo reconstruction. *Language Dynamics and Change* 1. 3–49.
- Hyman, Larry M. & Francis X. Katamba. 1993. The augment in Luganda: Syntax or pragmatics? In Sam A. Mchombo (ed.), *Theoretical aspects of Bantu grammar*, 209–256. Stanford: CSLI.
- Hyman, Larry M., Erhard F. K. Voeltz & Georges Tchokokam. 1970. Noun class levelling in Bamileke. *Studies in African Linguistics* 1. 185–209.
- Hyman, Larry M. & Jan Voorhoeve (eds.). 1980. *L’expansion bantoue: Actes du colloque international du CNRS, Viviers (France) 4–16 avril 1977. Volume I: Les classes nominales dans le bantou des Grassfields*. Paris: SELAF.
- Idiatov, Dmitry. 2010. Person–number agreement on clause linking markers in Mande. *Studies in Language* 34. 832–868.
- Jungraithmayr, Herrmann. 1969. Class languages of the Tangale-Waja District (Bauchi Province, northern Nigeria). *Afrika und Übersee* 52. 161–206.
- Jungraithmayr, Herrmann. 1990. Evolution or reduction? On the history of research into the development of African languages. *Aiōn: Annali del Seminario di studi del mondo classico, Sezione linguistica* 12. 19–33.
- Katamba, Francis X. 2003. Bantu nominal morphology. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 103–120. London: Routledge.
- Kießling, Roland. 2010. Infix genesis and incipient initial consonant mutations in some lesser known Benue-Congo languages. In Armin R. Bachmann, Christliebe El Mogharbel & Katja Himstedt (eds.), *Form und Struktur in der Sprache: Festschrift für Elmar Ternes*, 188–220. Tübingen: Narr.
- Kießling, Roland. 2013. On the origin of Niger-Congo nominal classification. In Ritsuko Kikusawa & Lawrence A. Reid (eds.), *Historical Linguistics 2011: Selected papers from the twentieth International Conference on Historical Linguistics, Osaka, 25–30 July 2011*, 43–65. Amsterdam: John Benjamins.

- König, Christa. 2006. Marked nominative in Africa. *Studies in Language* 30. 655–732.
- König, Christa. 2008. *Case in Africa*. Oxford: OUP.
- Lovegren, Jesse. 2013. *Mungbam grammar*. Buffalo, NY: University at Buffalo dissertation.
- Maho, Jouni Filip. 1999. *A comparative study of Bantu noun classes*. Gothenburg: Acta Universitatis Gothoburgensis.
- Meeussen, A. E. 1967. Bantu grammatical reconstructions. *Africana Linguistica* 3. 79–121.
- Miehe, Gudrun. 1991. *Die Präfixnasale im Benue-Congo und im Kwa: Versuch einer Widerlegung der Hypothese von der Nasalinnovation des Bantu*. Berlin: Reimer.
- Ogunbòwale, P. O. 1970. *The essentials of the Yoruba language*. London: University of London Press.
- Schadeberg, Thilo C. 1986. Tone cases in Umbundu. *Africana Linguistica* 10. 423–447.
- Schadeberg, Thilo C. 2009. Loanwords in Swahili. In Martin Haspelmath & Uri Tadmor (eds.), *Loanwords in the world's languages: A comparative handbook*, 76–102. Berlin: De Gruyter Mouton.
- Storch, Anne. 1997. Where have all the noun classes gone? A case study of Jukun. *Journal of African Languages and Linguistics* 18. 157–170.
- Thomas, John Paul. 1992. *A morphophonology of Komo: Non-tonal phenomena*. Grand Forks: University of North Dakota MA thesis.
- Thomason, Sarah G. & Terrence Kaufman. 1988. *Language contact, creolization, and genetic linguistics*. Berkeley: UC Press.
- Thwing, Rhonda Ann. 1987. *The Vute noun phrase and the relationship between Vute and Bantu*. Arlington, TX: University of Texas at Arlington. (M.A. thesis).
- Van de Velde, Mark L. O. 2005. The order of noun and demonstrative in Bantu. In Koen Bostoen & Jacky Maniacky (eds.), *Studies in African comparative linguistics with special focus on Bantu and Mande*, 425–442. Tervuren: Royal Museum for Central Africa.
- Van de Velde, Mark L. O. 2006. Multifunctional agreement patterns in Bantu and the possibility of genderless nouns. *Linguistic Typology* 10. 183–221.
- Voorhoeve, Jan. 1968. Noun classes in Bamileke. *Lingua* 21. 584–593.
- Watters, John R. 1981. *A phonology and morphology of Ejagham – with notes on dialect variation*. Los Angeles: University of California at Los Angeles Doctoral dissertation.
- Watters, John R. 2003. Grassfields Bantu. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 225–256. London: Routledge.

2 *East Benue-Congo noun classes, with a focus on morphological behavior*

- Welmers, William E. 1971. The typology of the Proto-Niger-Kordofanian noun class system. In Chin-Wu Kim & Herbert Stahlke (eds.), *Papers in African linguistics*, 1–16. Carbondale, IL & Edmonton, AB: Linguistic Research Inc.
- Welmers, William E. 1973. *African language structures*. Berkeley: University of California Press.
- Williamson, Kay. 1985. How to become a Kwa language. In Adam Makkai & Alan K. Melby (eds.), *Linguistics and philosophy: Essays in honor of Rulon S. Wells*, 427–443. Amsterdam: Benjamins.
- Williamson, Kay. 1989. Niger-Congo overview. In John Bendor-Samuel (ed.), *The Niger-Congo languages*, 3–45. Lanham, MD: University Press of America.
- Williamson, Kay. 1993. The noun prefixes of Benue-Congo. *Journal of African Languages & Linguistics* 14. 29–45.
- Williamson, Kay & Roger M. Blench. 2000. Niger-Congo. In Bernd Heine & Derek Nurse (eds.), *African languages: An introduction*, 11–42. Cambridge: CUP.

