Historical morphosyntax and syntactic change

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1 Morphological and syntactic change in Bantu

Reconstruction of the morphosyntactic features of Proto-Bantu has been ongoing for more than 150 years (Maho 1999: 28–40). In this chapter, an overview of work on historical morphosyntax and syntactic change will be presented across the domains of noun class systems and agreement (section 2), verbal morphology (section 3), and, more briefly, syntactic constructions (section 4). The discussion will attempt to provide a sense of significant patterns of change that have resulted in well-known features of Bantu languages, place these within the broader Niger-Congo context, and highlight areas where the historical analysis of Bantu languages has benefited from consideration of more general issues in language change, in particular the study of grammaticalization.

2 Noun class systems and agreement

2.1 Key historical questions

Rugemalira (this volume) and Katamba (2003) provide overviews of Bantu noun class systems, and Maho (1999) represents the most thorough available study, expanding on the earlier work of Kadima (1969). Here the discussion will consider their historical origins (section 2.2), directions of change in these systems (section 2.3), and patterns agreement (section 2.4).

2.2 The origins of Bantu noun classes

Noun class systems with a specific set of typological properties and showing recurring formal patterns have long been considered to be the strongest evidence for the existence of the Niger-Congo language family (see Dimmendaal & Storch (2016)). Kießling (2013: 44) contains a concise summary of key properties of the Niger-Congo noun class system type, which also largely hold for Bantu languages (see also Toporova (1997)).

Given the comparative Niger-Congo facts, the presence of noun class systems in Bantu languages must be viewed as the result of inheritance from the parent language. Therefore, any examination of the origins of Bantu noun classes must consider the origins of Niger-Congo noun classes more broadly. Kießling (2013) looks at this question by examining etymologically transparent devices for noun classification attested in Niger-Congo languages that could serve as the source for full-scale noun class systems, on the assumption that grammaticalization processes can be cyclical within a language family (see also section 3.2). An example of a possible historical source construction for noun class markers is provided in (1) (Kießling 2013: 50). The example is drawn from Denya, a Southern Bantoid language, placing it among Bantu's closest relatives within Niger-Congo.

(1) *à-mɛ́*   *ǹjègésè*   *á-pɛ́á*
     2-CLF:EYE 10.groundnut 2-two
     "two groundnuts"

In (1), the Denya word for 'eye' is found in a numeral classifier construction for small round objects. This kind of construction could serve as a possible source for prefixal noun class marking, with other processes required for its extension into environments that would result in patterns of agreement (Kießling 2013: 59).

A similar process is attested within Bantu with respect to the development of elements creating diminutive nouns from reduced forms of the word for 'child', as discussed by Maho (1999: 90–91, 219). Examples from Kiyombe are presented in (2).

(2) a. *fi-mbēle* / *bāna* *bi*   *mbele*
      19-9.knife   2.child 8.ASS 9.knife
      "small knife"/"small knives"

    b. *muāna mbēle*
      1.child 9.knife
      "small knife"

    c. *mua-mbele*
      1.child-9.knife
      "small knife" (de Clerq 1907a: 456)

Following the description of de Clerq (1907a), one strategy for forming Kiyombe diminutives makes us of the Class 19 prefix *fi-*, as in (2a). Another strategy places the word 'child'

before the diminutivized noun, either in its full form, as in (2b), or a reduced form which superficially resembles a prefix in (2c). In the plural, this construction is the standard means of forming diminutive nouns. While the reduced form suggests a pathway to the development of a new diminutive nominal prefix, this has not resulted in the creation of a new noun class since nouns coded this way appear to show Class 19 agreement patterns, at least on verbs (de Clerq 1907b: 783). Interestingly, however, the Class 19 diminutive seen in (2a), reconstructed as *$pì$-, has been suggested as originating from a word meaning 'child' or 'small' at a higher level of Niger-Congo (Kähler-Meyer (1971: 347–348), Heine (1982: 214)). If this etymology is correct, this would mean that a freestanding word has developed into a true noun class marker.

Constructions like the ones seen in (2b) and (2c) are just one example of a general pattern where nouns have taken on a quasi-derivational functions in Bantu languages in ways that are formally reminiscent of noun class markers and possibly revealing of how noun classes originated in Niger-Congo. Discussion of further examples of such markers can be found in Maho (1999: 74–75) and Güldemann (1999b: 51–58), with the latter considering suffixing elements, in particular.

2.3 Change in noun class systems

Noun class systems can both expand and reduce, in terms of the number of distinct classes that they show, and patterns of noun class agreement on elements other than nouns can also change. All of these processes are found within Bantu.

One case of noun class system expansion that is likely to have taken place in the development of Bantu from Benue-Congo is the emergence of the locative Classes 16, 17, and 18, reconstructed as *$pà$-, *$kù$-, and *$mù$-, respectively (see Růžička (1959, 1960), Grégoire (1975, 1983), Maho (1999: 95–100), Creissels (this volume), Rugemalira (this volume), and Zeller (this volume)). Generally speaking, few nouns inherently belong to the locative classes, but the locative prefixes can often productively appear on nouns otherwise associated with other classes. Nouns coded for "secondary classification" (Maho 1999: 88) in this way can show agreement corresponding to their locative class, as seen in the Chichewa data in (3), drawn from (Bresnan & Mchombo 1995: 198).

(3) a. *pa-nyanjá p-ánga*   vs. *pa-nyanjá y-ánga*
    16-9.lake 16-1s.POSS   16-9.lake 9-1s.POSS

    "on my lake"

  b. *ku-nyanjá kw-ánga*   vs. *ku-nyanjá y-ánga*
    17-9.lake 17-1s.POSS   17-9.lake 9-1s.POSS

    "at my lake"

  c. *m-nyanjá mw-ánga*   vs. *m-nyanjá y-ánga*
    18-9.lake 18-1s.POSS   18-9.lake 9-1s.POSS

    "at my lake"

  d. *ti-mi-ndá t-ánga*   vs. **ti-mi-ndá y-ánga*
    13-4-field 13-1s.POSS   13-4-field 4-1s.POSS

    "my small fields"

The examples in (3a), (3b), and (3c) give the same noun coded with each of the three locative classes. The example in (3d) shows something similar, but, in this case, the noun is appearing with secondary classification coded with a Class 13 prefix associated with diminutive meaning. The locative nouns allow two different patterns of agreement, with either their primary or secondary class. The Class 13 noun, by contrast, does not permit this variation. This differential pattern of agreement possibilities appears to be typical across Bantu (Maho 1999: 98–99), and it seems like that it is at least partly due to the relatively recent emergence of the locative noun classes, either within Bantu itself, or a subgrouping intermediate to Bantu and Benue-Congo, since such classes have not been reconstructed for Benue-Congo (see De Wolf (1971: 50–59), Grégoire (1983: 351), Williamson (1989: 37), Watters (2003: 243–244), and Good (to appear)).

Assuming that, at some stage, these locative elements behaved more like canonical adpositions, their CV shape, shared by the majority of the inherited prefixes, seems likely to have facilitated their reanalysis as class markers and subsequent extension into the agreement system as controllers of an alliterative pattern of concord (see Harris & Campbell (1995: 50–51) on *reanalysis* and *extension* as understood here and Corbett (1991: 117–119) on alliterative agreement, as well as section 2.4). In fact, Guthrie (1971: 9) suggests that the alliterative nature of the locative class concords can be taken as evidence for their relatively late development within Proto-Bantu (see also Grégoire (1983: 358)).

GREGOIRE locatives book?

Add reference somehwere to Schladt 1999 on reciprocals (just writing this here to have it somewhere)

There appear to have been other cases of noun class system expansion in Bantu languages, but the historical details have yet to be seriously examined. Potential cases are proposed Proto-Bantu classes where the evidence for reconstructing them to the proto-language has been seen as insufficient, suggesting the development of new classes at some stage after the breakup of the family (see Guthrie (1967), Kadima (1969: 145–147), Maho (1999: 246–255)).

Reduction of noun classes in Bantu languages is quite well attested, whether through outright loss or merger (see Maho (1999: Chapter 4) for extensive exemplification). With few exceptions, reduction of noun classes is not known to result in complete loss of noun class systems, though Komo, at Bantu's north-central periphery is reported to have no noun classes (Guthrie 1971: 42, Thomas 1992:4) (see also Maho (1999: 53) and Good (2012: 305, 320–321)).

Another pattern of change that takes place within noun class systems is the realignment of singular–plural pairings and noun class assignment (Maho 1999:51–55, Katamba 2003:109–110). Hyman et al. (2017) contains a detailed discussion of the development of Teke noun classes from Proto-Bantu, that can serve to exemplify a number of possibilities. The noun class system of Teke is schematized in figure 1, using associative markers to indicate the forms associated with each class and lines between classes to indicate attested singular–plural class pairings. Parenthesized numbers are used to show which Proto-Bantu classes have merged with attested classes in Teke. In the case of Class 10, Class 9 has actually replaced it.
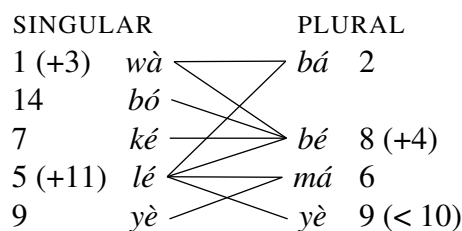

Figure 1: Teke noun class pairings

Hyman et al. (2017) provide various explanations for the shift in the Teke noun class system from that of Proto-Bantu. For example, the merger of Class 8, with reconstructed prefixed *bɩ̀-, and Class 4, reconstructed as *mì-, is likely to have been initiated by sound change, specif-

ically loss of the initial consonant of the nominal prefixes that formally distinguished these classes. With respect to the class assignment of specific nouns, they further show that semantic principles played a role in class assignment restructurings. For instance, animate nouns associated with Class 9/10 were shifted into Class 1/2, while inanimate nouns were shifted into other classes such as Class 9/6 or Class 5/6. (The role of animacy in noun class systems will be returned to in section 2.4.) While the reduced noun class system of Teke has resulted in relatively extensive restructuring, similar patterns can be found throughout Bantu, though they do not appear to have yet been the subject a large-scale comparative investigation.

2.4 Patterns of noun class encoding and agreement

The Benue-Congo reconstructions of De Wolf (1971: 182–185) suggest that agreement was found in a number of domains in proto–Benue-Congo, Bantu's parent subgroup within Niger-Congo. This includes on nominal dependents, such as demonstratives and possessive pronouns; anaphoric pronouns; and associative markers and relativizers. While not a domain of agreement, per se, it makes sense to consider nouns themselves in this context since they generally show overt prefixal marking of their class as well. Both subject and object agreement on the verb are, of course, typical of Bantu languages, as well (see Sikuku (this volume)), though whether or not they were present in Proto-Bantu is not as clear as agreement in other domains, as indicated by the debate between Güldemann (2011: 123–129) and Hyman (2011: 21–40). Because of the integration subject and object agreement morphology in the verbal complex of most Bantu languages, important aspects of the morphosyntax of these forms will be discussed in more detail in section 3.[1]

From a historical-comparative perspective, an interesting feature of the Bantu noun class agreement patterns is the presence of distinctive series of noun class markers. In table 1, an abbreviated and adapted version of the presentation of Meeussen (1967: 97) is provided. Reconstructed forms are given corresponding to the noun class prefix, a prefix for most kinds of agreeing nominal modifiers, the subject agreement prefix, and the object agreement prefix. In

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[1] I refer to the appearance of markers connected to the coding of subjects and objects as "agreement" here for purposes of presentation, though their precise morphosyntactic status has been debated, as discussed in Sikuku (this volume).

CLASS	NOUN	AGR	SUBJ	OBJ
1	*mù-	*jù-	*ú-, *á-	*mù-
2	*bà-	*bá-	*bá-	*bá-
3	*mù-	*gú-	*gú-	*gú-
4	*mì-	*gí-	*gí-	*gí-
5	*ì̧-	*í̧-	*í̧-	*í̧-
6	*mà-	*gá-	*gá-	*gá-
7	*kì-	*kí-	*kí-	*kí-
8	*bì̧-	*bí̧-	*bí̧-	*bí̧-
9	*ǹ-	*jì-	*jí-	*jí-
10	*ǹ-	*jí̧-	*jí̧-	*jí̧-
11	*dù-	*dú-	*dú-	*dú-
12	*kà-	*ká-	*ká-	*ká-
13	*tù-	*tú-	*tú-	*tú-
14	*bù-	*bú-	*bú-	*bú-
15	*kù-	*kú-	*kú-	*kú-
16	*pà-	*pá-	*pá-	*pá-
17	*kù-	*kú-	*kú-	*kú-
18	*mù-	*mú-	*mú-	*mú-
19	*pì̧-	*pí̧-	*pí̧-	*pí̧-

Table 1: Bantu noun class agreement series reconstructions following Meeussen (1967: 97)

Meeussen's (1967) reconstruction, all noun prefixes have a low tone. Most other prefixes have a high tone. Shading is used in the table to indicate cases where the form of a given prefix is predictable based on the one preceding it in its row.

Multiple series of agreement markers are not only a significant feature of Bantu noun class systems from a morphology-internal perspective. Differential patterns of alliteration within them are of potential interest from the perspective of the relationship between Bantu and Benue-Congo on the assumption that the regularity involved in the fully alliterative classes is evidence of their being more recent additions to the system (see section 2.3 for further discussion). From a Benue-Congo perspective, the so-called "nasal classes", comprising Classes 1, 3, 4, 6, 9, and 10 (but not the Bantu-specific Class 18) have been of considerable interest due to the question of the historical source of the nasal consonant in the noun prefixes in Bantu languages (Hyman 1980, Miehe 1991).

An additional feature of the class marking system is the so-called augment prefix (see Halpert (this volume)). This typically appears as a "pre-prefix" on nouns and often has formal overlap with the noun class prefix. The most detailed historically oriented study of the

augment is de Blois (1970) who reconstructs it as originally having the form of the "pronominal prefix" (i.e., agreeing prefix given in table 1) functioning along the lines of a determiner, with significant formal and functional change taking place throughout the family, including the complete loss in many languages.

In addition to the well-studied patterns of agreement associated with noun classes, Bantu languages have also innovated new patterns of agreement. A well-known case involves semantic agreement for animacy, as seen in the Swahili examples in (4). As in Bantu generally, Class 1/2 is associated with nouns referring to humans (see (4a)). Other nouns referring to animate entities also take Class 1/2 agreement, as in (4b), where the word *kiboko* 'hippopotamus' is coded with a Class 7 prefix but triggers the appearance of Class 1 agreement. The inanimate Class 7 word *kisu* 'knife', by contrast, appears with the expected Class 7 agreement in (4c).

(4) a. *Yu-le m-toto, ni-li-**mw**-on-a.*
　　　1-that 1-child, 1s-PST-1.OBJ-see-FV

　　　"That child, I saw him."　　　　　　　　　　　　　　　　(Wald 1975: 272)

　　b. *Yu-le ki-boko,　　　ni-li-**mw**-on-a.*
　　　1-that 7-hippopotamus, 1s-PST-1.OBJ-see-FV

　　　"That hippopotamus, I saw it."　　　　　　　　　　　　　(Wald 1975: 272)

　　c. *Ki-le ki-su,　　ni-li-**ki**-on-a.*
　　　7-that 7-knife, 1s-PST-7.OBJ-see-FV

　　　"That knife, I saw it."　　　　　　　　　　　　　　　　(Wald 1975: 270)

Animate concord does not appear to be particularly widespread in Bantu, though it may be underreported (Maho 1999: 123). It is found to varying degrees in the central East African coast (Ström 2012: 266). Something comparable is also reported in several languages around the border areas of Angola, Zambia, and the Democratic Republic of Congo (Kawasha 2007: 183), as well as in Bila, a language which otherwise has a highly reduced noun class system (Kutsch Lojenga 2003: 462).

A more striking innovation is the development of complementizers which agree with the subject of their matrix clause (see Idiatov (2010: 832–836) for general discussion). This does not appear to be especially common, though it is reported in more than one part of the Bantu-speaking area (Güldemann 2008: 369–370, 453). The examples in (5) are drawn from Lunda,

with the two agreeing complementizer forms being *níndi* for a Class 1 noun and *náwu* for a Class 2 noun.

(5) a. *Mu-kwénzi w-e-eluk-ili* **níndi** *mpáta* *y-a-telela*
1-youth 1-TNS-know-RPST COMP.1 8.country 8-TNS-ought-FV
ku-himp-ew-a.
15-change-PASS-FV

"The youth knew that the country ought to be changed." (Kawasha 2007: 182)

b. *A-kwénzi a-a-toñozhok-eli* **náwu** *Nswana Ø-ne-enzh-i*
2-youth 2-TNS-think-RPST COMP.2 Nswana 1-TMA-come-FV
na-ku-mw-ot-a.
TMA-15-1.OBJ-ask.for.marriage-FV

"The youth thought that Nswana had come to ask her for marriage."
(Kawasha 2007: 185)

As seen in (5), this kind of agreement has a suffixing component, going against the dominant prefixing pattern seen elsewhere in Bantu grammar. While Luvale is described as having a full class agreement paradigm for its agreeing complementizer (Horton 1949: 181–182), in other languages the complementizer agreement system is distinct from the class agreement system, such as in Lunda and Tiene, where it is oriented purely around person and number, or Akɔɔse, where it is organized around person in the singular with just a single invariant form for plural subjects (Kawasha 2006:19, Kawasha 2007:184, Ellington 1977:153, Hedinger 1984:90).

3 Verbal morphology

3.1 Origin of the canonical Bantu verbal structure

Bantu languages are typically presented as having complex agglutinative verbal structures which can show subject and object agreement and morphological encoding of categories such as tense, mood, and aspect. This picture masks considerable family-internal diversity, especially when Northwest Bantu languages are considered, which tend to show less complex verbal morphology (see Schadeberg (2003: 156), Creissels (this volume), and the examples in (8)). In figure 2, a schematic representation of the segmental structure of a canonical Bantu verb is presented based on the adaption that Güldemann (2003a: 184) gives of Meeussen (1967: 108–111). Nurse (2008: Chapter 6) provides the most thorough discussion of issues surrounding the reconstruc-

-4	-3	-2	-1	0	1	2	3
(PREINITIAL)	INITIAL	(POSTINITIAL)*	(PRERADICAL)*	RADICAL	(PREFINAL)*	FINAL	(POSTFINAL)
negation	subject	TMA	object	root	TMA	TMA	participant
TMA[†]		negation			valence		negation[†]
clause type[†]		clause type[†]					clause type[†]

*= zero or more elements   †= local innovation

Figure 2: The Bantu verb, following Meeussen (1967: 108–111) and Güldemann (2003a: 184)

tion of Bantu verbal structures (see also Nurse & Philippson (2006)). Numbers have been added to the positions for purposes of exposition

This representation does not include the fact that tonal patterns can also play a significant role in encoding morphological categories on the verb (see Kisseberth & Odden (2003: 61–62), Downing (2011), Marlo (2013), Odden & Bickmore (2014), Bickmore (this volume), Hyman (this volume), Marlo (this volume)). While reconstructions have been proposed for aspects of Bantu verbal tone (see, e.g., Meeussen (1967: 110)), work on this topic has been limited, and, in particular, there is no consensus on the status of so-called Melodic High tones on verbs in Proto-Bantu, which can play an important role in coding tense-mood-aspect distinctions (Nurse 2008:280, Odden & Bickmore 2014:4).

An elaborate verb form from Kinande (produced by Philip Mutaka), exemplifying the schema in figure 2 is provided in (6) (Nurse & Philippson 2003a: 9). This verb contains elements occupying seven of the eight positions, including multiple elements in the postinitial position (which cannot be given clear glosses) and in the prefinal position. These positions will be discussed further in section 3.2 and section 3.3.

(6)
-3	-2	-1	0	1	2	3
tu-	né-mu-ndi-syá-tá-sya-ya-	ba-	king	-ul-ir-an-is-i-	á	=ky-ô
1p-	TMA.COMPLEX-	2.OBJ-	close	-REV-APPL-REC-CAUS-TRANS-	FV	=7-PRO

"We will make it possible one more time for them to open it for each other."

The general historical source for the patterns seen in the Bantu verb complex appears to be largely historically retrievable by comparison with non-Bantu Benue-Congo languages, as discussed by Güldemann (2003a: 183–187), whose work is drawn on closely here. In particular, they seems to result from processes of morphologization of an S-Aux-OV-Other syntactic con-

struction. Relevant comparative examples from Tikar, a Bantoid language, and a close relative to Bantu, are given in (7).

(7) a. *à yɛn-nâ **mùn***
      1.SBJ see-PFV 1s
      "He saw me." (Stanley 1991: 247)

   b. *à tă **ǹshe** shɛ*
      1.SBJ IPFV luggage carry
      "He's carrying the baggage." (Stanley 1991: 103)

As can be seen in (7a), Tikar exhibits basic SVO word order. However, in certain auxiliary constructions, an object appears between an auxiliary and the main verb as in (7b). This is an instantiation of a broader pattern of S-Aux-OV-Other clausal syntax seen within Niger-Congo (Gensler 1994, 1997), with Benue-Congo cases, as documented by Güldemann (2007), being of particular interest from a Bantu perspective (see also Heine (1975: 35–36), Heine (1976: 41–42), Heine & Reh (1983: 30–31), Creissels (2006)). Patterns like these are even found in Bantu languages in the northwest, as seen in the examples from Ewondo in (8), where pronominal objects appear before the verb when an auxiliary is present.

(8) a. *Avɔ́ **mə** dzɔ.*
      1.give.PST 1s 9
      "He gave it to me." (Redden 1979: 55)

   b. *Akad **mə** soób bīyé.*
      1.HAB 1s wash 8.cloth
      "He washes clothes for me." (Redden 1979: 56)

   c. *Akad **mə** dzɔ vɔ́.*
      1.HAB 1s 9 give
      "He usually gives it to me." (Redden 1979: 167)

The historical interpretation of the fact that Ewondo's verbal structure is less agglutinative than what has generally been assumed for Proto-Bantu is not clear, for instance whether it involves morphological loss in Ewondo or full morphologization of the Bantu verbal complex after the breakup of the family. Nurse (2008: 69–72) summarizes the relevant issues (see also the discussion of object markers below). Nevertheless, on a broad level, these patterns suggest the development of the prefixal part of the Bantu verbal complex schematized in figure 3, where

General pattern I:	SUBJ		AUX	OBJ	VERB
Frequent pattern I:	PRON$_{\text{SUBJ}}$		AUX	PRON$_{\text{OBJ}}$	VERB
Resultant pattern I:	SM-TMA-OM-STEM				
General pattern II:	NP$_{\text{SUBJ}}$		AUX	VERB	NP$_{\text{OBJ}}$
Frequent pattern II:	PRON$_{\text{SUBJ}}$		AUX	VERB	NP$_{\text{OBJ}}$
Resultant pattern II:	SM-TMA-STEM				NP$_{\text{OBJ}}$

Figure 3: Schematic representation of the development of the Bantu verbal complex

a syntactic construction S-Aux-OV-Other pattern morphologized into a structure consisting of a subject agreement marker (SM), a tense-mood-aspect prefix (TMA), an object marker (OM), and a verb stem in cases where the subject and object were expressed pronominally. As indicated, this analysis assumes that subjects were frequently expressed as pronouns, which simply follows cross-linguistic tendencies, and that pronominal objects were more frequently preverbal than nominal objects. This latter assumption is connected to broader patterns of focus encoding in Bantu syntax, discussed in Morimoto (this volume), where topical elements tend to be preverbal.

The schematization in figure 3 can hardly be seen as a complete account. In particular, it oversimplifies the development of the encoding of tense, mood, and aspect (see section 3.2). It also does not capture important variation in the appearance of object agreement markers across Bantu languages (Polak 1986, Beaudoin-Lietz et al. 2004, Marten & Kula 2012, Marlo 2015). The example in (9) illustrates a significant dimension of variation. There are two object agreement markers in the verbal complex, one each in the preradical and postfinal position.

(9) *wu-n-tambik-il-i-yi*
    2s-1s.OBJ-call-APPL-SBJV-1.OBJ
    "Call him for me!" (Kawasha 2003: 153)

Other salient aspects of variation in the morphosyntax of object markers includes the number of object markers that can appear in the preradical position, with some languages allowing none and others showing no apparent morphological limit on the number allowed, with up to six attested (Marlo 2015: 4) and whether postverbal pronouns appear in special suffixing or enclitic forms (as in (9)) or as freestanding elements. Marlo (2015) contains the most recent survey of these issues.

Nurse (2008: 258) suggests that in Proto-Bantu at most two preradical object agreement markers were permitted, which implies that both languages lacking preradical markers and languages allowing for more than two are innovative. Under this scenario, the former group, all found in the northwest of the Bantu area, presumably would have lost their preradical object agreement markers as part of more general phonological processes reducing the size of verbs (see, e.g., Hyman (2004, 2007b)). The latter group, by contrast, would have undergone partial debonding (see Norde (2009: 186)) of the verbal prefix complex to allow more object markers to appear within a structure that had previously shown greater restrictions.

Finally, a simplified schema like the one presented in table 3 must be understood to stand in for a series of lower-level changes that would be associated with their own particularities and relative timing, and the precise relationship of these changes with respect to the development of Bantu from Benue-Congo is not clear (see also Nurse (2007a)). The development of subject agreement markers, for instance, may very well have preceded the morphologization of the entire verbal complex. This would be consistent with a broader pattern observed in African languages where subject pronouns fuse with auxiliary verbs to create elements simultaneously coding subject person and tense-mood-aspect (Creissels 2005:58, Anderson 2011:97–100, 2016).

3.2   Tense, mood, and aspect marking

The encoding of "standard" verbal categories such as tense, mood, aspect, and polarity, as well as less usual ones such as focus and relativization, have been found to form part of an "interlocking verbal system" (Nurse 2008: 12) (see Botne (this volume), Cheng (this volume), Devos (this volume), Morimoto (this volume), and van der Wal (this volume) as well as Nurse (2003)). Moreover, their expression may be dependent on the presence of multiple morphemes within the verb (as well as tone, see section 3.1) and on auxiliaries appearing before the main verb (see Gibson (this volume)). These possibilities can be seen in the forms given in table 2, drawn from Nurse & Muzale (1999: 541). They are based on the verb *-gur-* 'buy' and cover a distant past (P2), a hesternal past (P1), a hodiernal past (P0), a present (PRS), and a near future (F1), in both positive and negative forms and the perfective, progressive, and habitual aspects. The verbs are all coded with a first person plural subject.

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		PERFECTIVE	PROGRESSIVE	HABITUAL
P2	P	tú-ka-gur-a	tú-ka-bá ni-tu-Ø-gur-á	tú-ta-gur-a-gá
	N	ti-tú-á-guz-íre	tú-ka-bá tu-tá-rí-ku-gur-a	ti-tu-a-gur-a-ga
P1	P	tu-Ø-guz-iré	tu-Ø-bá-iré ni-tu-Ø-gur-a	—
	N	ti-tú-Ø-guz-iré	tu-Ø-bá-iré tu-tá-rí-ku-gur-a	—
P0	P	tu-áa-gur-a	tu-aa-bá ni-tu-Ø-gúr-a	—
	N	ti-tú-áa-gur-a	tu-áa-ba tu-tá-rí-ku-gur-á	—
PRS	P	tu-Ø-gur-á	ni-tu-Ø-gur-á	—
	N	ti-tú-gur-a	ti-tú-rí-ku-gur-a	—
F1	P	tu-raa-gur-á	tu-raa-bá ni-tu-Ø-gur-á	—
	N	ti-tuu-gur-é	tu-raa-bá tu-tá-rí-ku-gur-a	—

Table 2: Sample verb forms from Haya (Nurse & Muzale 1999: 541)

As can be seen, verb forms in a given category can be associated with a specific prefix in the postinitial position, such as the *-áa-* form in the hodiernal past. The final vowel can also play a role in tense-mood-aspect encoding, with *-a* serving as a kind of default, as can various other suffixal elements such as *-ile* and *-ga* and even morphophonological alternations, as seen in perfective forms where the root has shape *-guz-* . The primary exponent of negation is a *ti-* prefix, but it also can have secondary encodings such as a different postinitial than its corresponding affirmative form or a different element in the final position. Most forms in the progressive series are encoded using an auxiliary *bá* based on a 'be' verb.

The main historical issues that have been explored with respect to diverse verbs forms such as those seen in table 2 are (i) which morphological elements can be reconstructed for Proto-Bantu and (ii) what processes of grammaticalization have been found to have affected the development of the verbal system. Nurse (2008: Chapter 6) provides extensive discussion of the topic of Proto-Bantu reconstruction, and Nurse (2008: Chapter 7) considers processes of change. Anderson (2011: 125–134) also contains relevant discussion on the role of auxiliary structures in Bantu grammaticalization patterns.

With respect to what can be reconstructed for Proto-Bantu, a simplified and adapted version of the reconstruction proposed by Nurse (2008: 279) is presented in table 3. Like table 2, the example verb root used is 'buy' (with form *-gul-*), and the verbs are coded with a prefix associated with the first person plural. Empty cells indicate that it is unclear if a one-word verb

form should be reconstructed for the relevant category. Parentheses indicate some uncertainty in the formal details of the reconstruction. (See Nurse (2008: 278–283) for further discussion).

	PFV	IPFV	HAB/ITER	ANT
Past	*tu-a-gul-a* 'we bought'		*tu-a-gul-ag-a* 'we used to buy'	*tu-a-gul-i̧(le)* 'we had bought'
Present	*tu-Ø-gul-a* 'we buy'	*tu-Ø-ki-gul-a* 'we are/were buying'	*tu-Ø-gul-ag-a* 'we buy regularly'	*tu-Ø-gul-i̧(le)* 'we have bought'
Future	*tu-laa-gul-a* 'we will buy'		*tu-laa-gul-ag-a* 'we will buy regularly'	

Table 3: Tense and aspect in Proto-Bantu (or early Bantu) following Nurse (2008: 279)

As will be discussed below, the postinitial position has been one of the most active in terms of grammaticalization with Bantu. The end of the verbal complex, by comparison, is much more historically stable. The various morphemes appearing there are examined from a comparative perspective by Nurse (2008: 260–276). In addition to the *-a, *-ag-, *-i(le)* forms seen in table 3, there was also likely a final *-é* that could appear in complementary distribution with *-a*, marking something along the lines of subjunctive. There are different proposals for the development of *-i(le)*, and it may have an etymologically complex origin either as a grammaticalization of a verb meaning 'finish' or as an analogically extended long allomorph of a particular final vowel morpheme (see Voeltz (1977:78–82, 1980), Heine & Reh (1984: 25), Hyman (1993: 22) for more on the first proposal, Nurse (2008: 266–267) for discussion of both, and Bastin (1983) for detailed comparative study).

The fact that a tense distinctions are reconstructed in table 3 is noteworthy in a Niger-Congo context. Most Bantu languages, in fact, appear to show more developed tense systems than what is reconstructed in table 3, for instance having multiple degrees of remoteness in the past (Nurse 2008: 88–90). By contrast, the balance of evidence presently available suggests that Proto–Niger-Congo would not have had grammatical tense distinctions but, rather, only aspect distinctions, making tense marking a Bantu innovation (Nurse 2007b).

The encoding of tense, mood, and aspect in Bantu is especially prone to historical change, with "constant rebuilding of the inflectional system" (Schadeberg 2003: 151). The most innovative area within the verb is the postinitial zone of figure 2. The general historical account given for this is that auxiliary structures, of the sort seen for some of the forms in table 2, cre-

ate contexts that support the grammaticalization of new tense-mood-aspect prefixes (see Givón (1969: 193–198) for an early statement). Nurse (2003: 93), in fact, presents a historical account of the development of the negative present progressive form in Haya, *titúríkugura*, seen in table 2 along these lines, as presented in (10).

(10) a. STAGE 1
Ti-tú-ri   ku-gura
NEG-1p-be INF-buy

   b. STAGE 2
Ti-tú-ri-ku-gura
NEG-1p-PROG1-PROG2-buy

In the reconstructed stage of Haya given in (10a), the negative progressive is encoded via a combination of an auxiliary locative *be*-verb, along with an infinitival form of the main verb. This auxiliary–verb combination then became fused into a single complex verb with a new negative progressive marker *-ri-ku-*. Subsequent change has resulted in idiolectal and dialectal forms of the verb in (10b) such as *titwìíkugura*, *titúùkugura*, *titúúkugura*, and *titwííkugura* which are less etymologically transparent (Nurse 2003: 93).

Processes like this clearly recurred throughout the family in cyclical fashion. The overall verbal structure was maintained while the morphological material was renewed, and the changes involved both prefixal and suffixal elements of a range of grammatical categories (see Nurse (2008: 287–293)). To pick two case studies, Devos & van der Auwera (2013) present detailed discussion on cyclical change in the encoding of negation in Bantu, and Güldemann (2003b) investigates the link between focus encoding and progressive marking in Bantu languages, showing how the two can be historically connected. The Haya positive present progressive form in table 2, in fact, instantiates this connection since the *ni-* prefix derives from a focus marker (Hyman & Watters 1984:261, Güldemann 2003b:334–335).

Any full account of the development of verbs in Bantu languages needs to consider not only the "standard" categories of tense, mood, and aspect, but also the expression of negation and focus encoding. In this regard, it is noteworthy that, even in Proto-Bantu, the encoding of negation has been assigned to three different verbal slots, as seen in figure 2 (see Kamba Muzenga (1981), Güldemann (1996, 1999a) for relevant comparative discussion). Moreover, focus encoding in Bantu often reflects a special African pattern where focus distinctions are marked through ver-

bal inflection (see Creissels et al. (2008: 104–105), Kalinowski (2015: 80–87), van der Wal (this volume)).

3.3 Verbal extensions

In addition to certain aspectual markers (see section 3.2), the prefinal verb slot in figure 2 is where a set of suffixes often referred to as extensions are found. The most well studied of these from a synchronic perspective are those that change a verb stem's valency, such as the applicative *-id-* (Ngonyani this volume), causative *-ic-į-* (Simango this volume), passive *-ib-u-* (Marten this volume), and reciprocal *-an-*. As indicated, the causative and passive extensions show a degree morphological analyzability, at least in diachronic terms (see Bastin (1986: 130) and Good (2005: 14–15) for further discussion of the causative and Schadeberg (2003: 78–79) and Stappers (1967: 145) on the passive). A number of other extensions are also reconstructed, with varying degrees of productivity even apparently within Proto-Bantu (Meeussen 1967:92, Schadeberg 2003:72). Some of these, such as the neuter *-ik-* have syntactic and semantic functions that are hard to characterize succinctly, with this suffix indicating "that the subject is potentially or factually affected by the action expressed by the verb" (Schadeberg 2003: 75), for instance by creating a verb meaning 'be visible' from a root meaning 'see'. Others have a primarily semantic function such as *-ud-* which can add reversive or intensive senses to a verb (Schadeberg 2003: 77–78). The most extensive comparative study of Niger-Congo verb extensions, including those of Bantu, is found in Voeltz (1977), and Hyman (2007a) provides an up-to-date overview (see also Creissels (2014: 558–567)).

The fact that extensions may be an ancient feature of Niger-Congo means that any attempt to account for their ultimate origin is necessarily speculative. Givón (1971b: 153) proposes that their origin may be verbal in nature and that they developed during a time when auxiliary-like verbal elements followed the main verb rather than preceding it (see also Good (2005: 40)). Hyman (2007a: 155–156) suggests that some of the extensions may have prepositional origin, specifically citing the possibility of a connection between an instrumental suffix *-an-* and an instrumental preposition with form *na* found throughout Bantu (see also Heine (1980a: 103) and Schadeberg (2003: 73)). Such a scenario would imply the innovation of a new extension at

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some point. While extensions frequently undergo various sound changes and these can be accompanied by morphological reconfigurations (e.g., in the merger of two extensions (Meeussen 1954:86, Schadeberg 2003:79, Bostoen & Mundeke 2011)), genuine innovation of extensions appears to be relatively uncommon. Another possible case, which seems largely unrecognized in comparative Bantu studies involves the development of locative applicatives in postfinal position from encliticized locative class pronouns on the verb (see Peterson (2007: 12–14) and Kimenyi (1980: 89–96)).

Multiple extensions can appear a single verb root throughout Bantu. This is seen above in (6), where the verb appears with four extensions. Hyman (2003) discusses the restrictions that govern the ordering of some of the extensions, and Good (2005) reconstructs a fixed order for a subset of these. Schadeberg (2003: 73) points out that less productive suffixes tend to appear closer to the root than more productive ones, and it seems likely that such patterns would have held in Proto-Bantu. Good (2005: 42–46) also discusses cases where extensions that appear to have had a fixed order in Proto-Bantu have lost some of those restrictions in attested languages, suggesting the degrammaticalization process of debonding may have taken place (see also section 3.1).

The discussion of Schadeberg (2003: 72–79) makes clear that reconstructing the semantics of many of the extensions is not always straightforward. For example, the *-an- extension labeled reciprocal here is found with a range of meanings connected connected to collective action more generally (see Dammann (1954), Bostoen et al. (2015: 746–750)). Without clear-cut reconstructions, it can be difficult to determine whether some attested uses constitute semantic broadening, narrowing, or any kind of change at all. However, in some cases, patterns of distribution of certain uses of the extensions suggest that they represent innovations, as Bostoen et al. (2015: 766) argue for the development of antipassive uses of *-an-, for example. Cases where two extensions have fused together to encode a non-compositional meaning, as discussed in Bostoen & Nzang-Bie (2010), are also clearly indicative of semantic innovation. As discussed by Bostoen & Nzang-Bie (2010: 1289–1294), the *-an- extension appears to be especially prone to developing specialized meanings in combination with other suffixes.

4 Syntactic reconstruction and syntactic change

Most work on syntactic change in Bantu has focused on cases where morphology is implicated in some way, along the lines of what was discussed above in section 2 and section 3. In this section, the focus will be on cases where Bantu syntax itself is more in focus. Three topics will be considered: (i) the role of Bantu morphology in reconstructing Bantu syntax, (ii) the reconstruction of Bantu syntax itself, and (iii) work on comparative syntax with potential historical applications.

Givón (1971a) examines the possibility of using morphology to reconstruct older syntactic patterns, using Bantu data to exemplify his arguments. He suggests that the Bantu verb structure in figure 2 can be taken as evidence for, among other things, a pre-Bantu syntactic where objects were generally preverbal, with the object agreement markers having been morphologized into a preverbal position before a change to a postverbal object syntax took place (Givón 1971a: 394–395). This particular hypothesis does not seem tenable, as discussed by Heine (1980b: 100–103), and a more nuanced view of the sort presented in section 3.1 seems more likely. Nevertheless, this does not render invalid Givón's (1971a) basic insight that morphological patterns may be revealing of earlier syntactic ones. Maho (2007: 221), for instance, proposes that, in Bantu verb forms containing multiple tense-mood-aspect markers before the verb root, markers that have grammaticalized more recently appear to the right of older markers.

The reconstruction of non-morphological aspects of Bantu syntax has been relatively limited (Schadeberg 2003: 152–153). Meeussen (1967: 116–121) provides an overview of syntactic features that he considered reconstructible (see also Heine (1980b: 100–103)). These largely overlap with broad typological statements one could make, as found in in overview discussions such as Bearth (2003) or Creissels (this volume), for instance treating SVO basic word order as a Proto-Bantu feature or head-initial word order more generally. Nsuka Nkutsi (1982: 260) is notable, however, for proposing a reconstruction of both the morphology and syntax of Proto-Bantu relative clauses. More often, one finds comparative studies such as Van de Velde's (2005) examination of noun–demonstrative word order that discuss historical issues and have clear implications for reconstruction without focusing on the topic or work examining typologically noteworthy developments within specific Bantu languages that include consid-

eration of their historical development. This includes, for instance, the outline provided by Schadeberg (1986: 444–445) for the development of tonal case in Umbundu (see also Blanchon (1998) and König (2008: 205–222)) or Bostoen & Mundeke's (2012) description of a preverbal object focus construction in Mbuun, unusual for Bantu, which provides a historical analysis of an unusual agreement pattern associated with it.

While it is not specifically diachronically focused, work examining microvariation in Bantu (see Petzell & Ström (this volume)) provides possible directions for further reconstruction of Bantu syntax. Marten et al. (2007) provides an example of such an investigation, looking at fourteen fine-grained morphosyntactic parameters across ten Bantu languages and considering a historical interpretation of the data (see Marten & Kula (2012) for a follow-up study), and Marten's (2010) examination of the restructuring of the locative system in siSwati exemplifies how the results of this kind of approach can be usefully applied to problems of syntactic change in Bantu. Areas of Bantu grammar where a microcomparative approach would seem quite promising as a basis for more detailed reconstructions of Proto-Bantu syntax include the encoding of information structure relations (Morimoto this volume, van der Wal this volume), object asymmetries in double object constructions (Riedel this volume), and subject inversion constructions (Hamlaoui this volume, Marten & van der Wal 2014). The comparative data collected by studies of this kind could straightforwardly inform reconstruction of a state of Proto-Bantu that could produce the attested variation in the daughter languages.

5   Future directions in Bantu historical morphosyntax

For a family whose languages lack a long written tradition, work on Bantu historical morphosyntax is quite sophisticated, providing us with a detailed understanding of the morphology of the Proto-Bantu nominal and verbal system and clear links between Bantu and the rest of Niger-Congo. Two domains stand out as promising future directions for research in this area. The first, mentioned in section 4, is to apply the wealth of data on Bantu comparative syntax derived from recent typologically-oriented studies adopting the microcomparative approach to problems of reconstruction.

The second, not yet touched upon here, is to develop models of morphosyntactic change in Bantu which do not merely describe how one Bantu system develops into another but can additionally account for how specific sets of morphosyntactic features pattern genealogically and geographically within the family and its closest relatives. To this point, lexical and phonological data have not revealed clear-cut innovations defining Bantu within Niger-Congo or Bantu subgroups (see Nurse & Philippson 2003a:5–7, 2003b, Schadeberg 2003:154–160). While it seems unlike that morphosyntactic changes will pattern in a substantially different way, their examination in this regard would, nevertheless, provide us with a more comprehensive picture of the historical development of the full range of Bantu grammatical patterns.

Glossing abbreviations

1...19 (without s/p)	noun class
1, 2, 3 (with s/p)	singular/plural person
ANT	anterior
APPL	applicative
ASS	associative
CAUS	causative
CLF	classifier
FV	final vowel
IPFV	imperfective
ITER	iterative
HAB	habitual
OBJ	object pronominal
PASS	passive
PFV	perfective
POSS	possessive
PRO	pronoun
PST	past
REC	reciprocal
REV	reversive
RPST	remote past
SBJ	subject
TMA	tense-mood-aspect
TNS	tense
TRANS	transitive

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