Future and Distal *-ka-*'s:
Proto-Bantu or Nascent Form(s)?*

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1. Introduction

In Bantu verbal morphology, one of the most common morphological forms is *-ka-*. Although one finds numerous functions and meanings of this form across the Bantu domain, the focus of this paper will be on just two of these: its temporal use as a (post-hodiernal) future formative and its spatial use as a distal marker indicating location of an event/action away from the deictic center. The presentation and discussion of each type will comprise three parts: its geographical distribution, its grammatical distribution, and its potential sources of origin. The complexity of the issue of whether either or both of these morphemes can be reconstructed for Proto-Bantu or should

be considered nascent in Bantu precludes definitive answers here. Rather, the discussion is intended to provide a general overview of the body of data available and some of the issues involved.

The discussion is organized in the following manner. First, a brief overview of previous work in this area is presented (§2). Second, a synchronic map of the distribution and use of distal -KA- is laid out (§3). This is followed by a consideration of potential source(s) of -KA-, particularly as a locative clitic (§4). Next, the distribution of (post-hodiernal) future -KA- is outlined (§5) and subsequently compared with that of distal -KA- (§6). The concluding section (§7) presents a summary of the discussion and indications of future directions of research.

2. The working hypotheses of Meeussen and Guthrie

The historical status of the two -KA- forms in question has been the subject of tentative hypotheses at best. Meeussen (1967) rather tentatively lists -*ka*- as a future tense formative, but warns that the "list of tense formulae, ... [is] intended as illustrating guesses rather than as real reconstructions" (p. 116). He further tempers the listing of -KA- among tense formatives by suggesting that it is "probably rather a limitative" (p. 109), the term "limitative" referring to "[a] special position between formative and infix... attested in a limited number of languages; the result [being] that little can be said about proto-forms occurring in that position..." (p. 109). Meeussen also notes the relevance to this discussion of infinitival forms in *ka*-, noting that it suggests rather "a connection with the 'motional' limitative -*ka*- ['go to do'] than with cl. 12. The whole question is very involved." (p. 111).

Guthrie (1967-71), like Meeussen, proposes a tentative reconstruction of -KA- as a future marker, his comparative series C.S. 2248: "C.S. 2248 could well reflect some Proto-Bantu tense sign in view of its geographical distribution and the uniformity of tonal distinctiveness in the infix in all entries." (vol. 4: 242) Unlike Meeussen, he makes no mention of a motional -KA-. Meinhof (1910), however, reconstructs a verb root -*ka*- 'go' based on Ngonde and Herero motional -*ka*-'s and Swahili consecutive -*ka*-. Bourquin (1923) and Meeussen (1967) follow Meinhof in reconstructing a verb -*ka*- 'go'.

Given the very tentative and limited nature of this previous body of work, several questions need to be addressed concerning the historical status of -KA- forms. First, what is the geographical distribution in the Bantu domain of distal -KA-? How does its grammatical distribution in various languages relate to this geographical distribution? What was (or were) its source(s), if it is not reconstructable for Proto-Bantu? A locative affix? A verb of motion? Is there a connection with infinitival *ka*-? Second, what is the geographical distribution of future -KA-? Its grammatical distribution?

Map 1. Distribution of distal -KA- across Bantu[1]
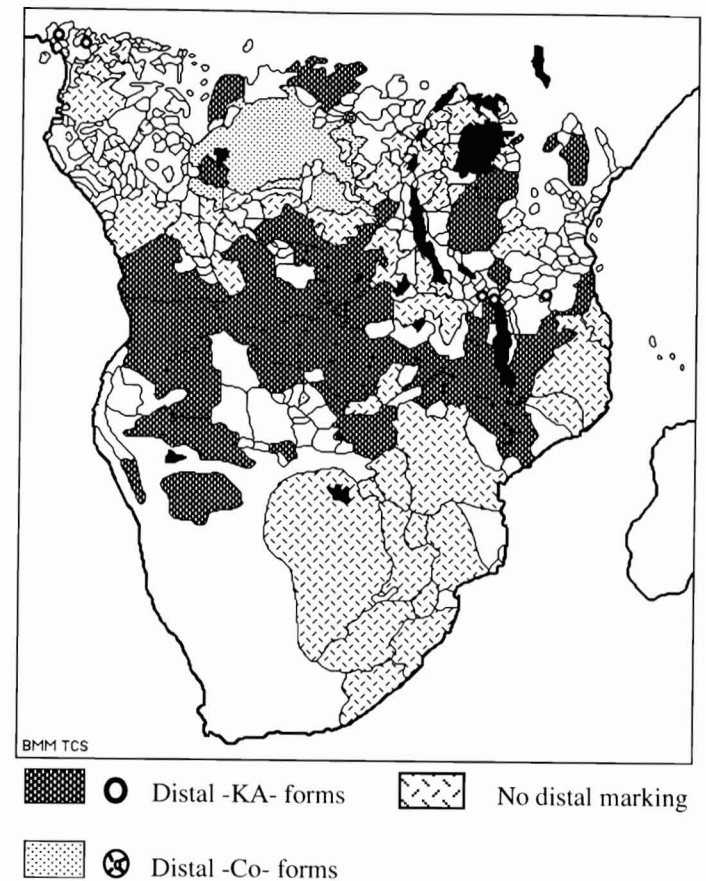
Map 1. Distribution of distal -KA- across Bantu[1]

How do these compare with distal -KA-? Can a historical connection be posited between future -KA- and distal -KA-? Although it is not possible, at this time, to provide conclusive answers to all of these questions, the data are, nevertheless, suggestive of potential paths of evolution.

3. Distal -*ka*-

Of approximately 150 languages spread across the Bantu domain that I have been able to consider, 51 employ distal -KA- in at least one construction. (See Appendix for list of languages.) However, -KA- is only one form of

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[1]Maps were produced using Bantu Mapmaker 3 (1996), created by Thilo Schadeberg and John B. Lowe, whom I thank for making it available.

distal marker found among Bantu languages. Several others are *-yo-*, *-to-*, and *-ko-*. Map 1 illustrates not only the distribution of -KA- languages, but also that of the -Co- languages. Languages that appear not to have any kind of distal marker are indicated by cross-hatching. One caveat, however: it is not possible to completely discount these languages at this time because authors have not always included data on distal use in their descriptions.

Two aspects of the distributional pattern immediately stand out. First, although distal -KA- occurs across a large part of the Bantu domain, it is most heavily concentrated in zones K, L, M, N, P, and R, i.e., across the south-central Bantu area. Second, distal markers of any type apparently do not occur at all in zones B, D, J, and S, and only in a few languages in zones A, C, E, F, G, and H. That is, areal pockets in the northwest, comprising zones A, B, and H; the northeast, comprising zones D, G, J; and the southeast, comprising much of zone P and zone S; generally lack distal marking.
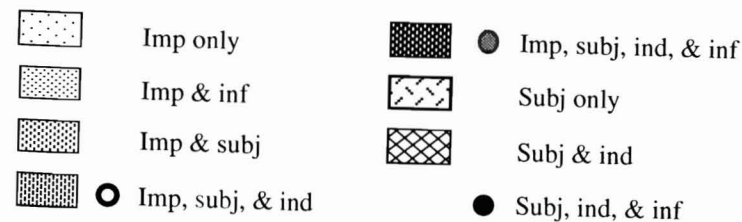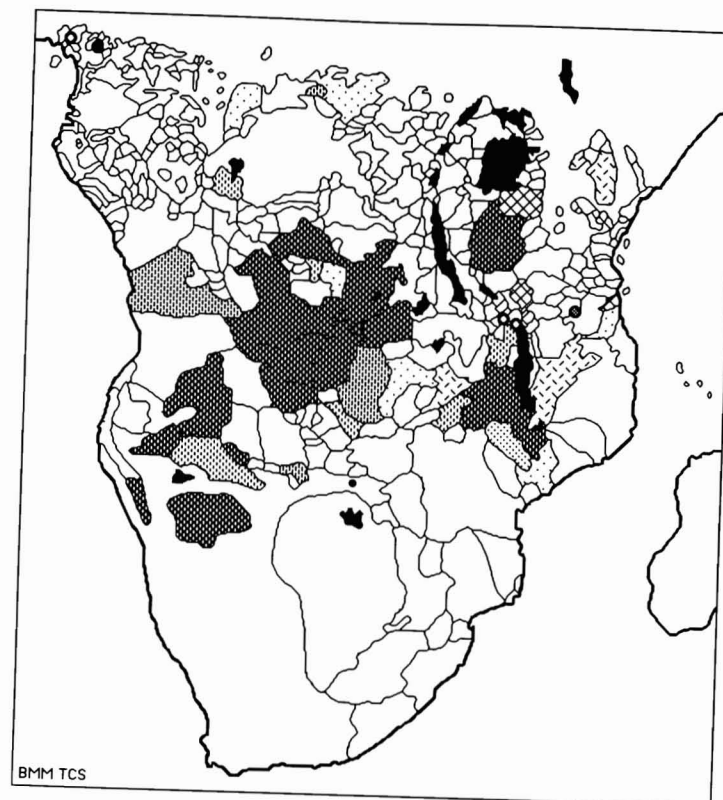
Although the data show distal -KA- to be widespread, the general lack of this formative in the northwest area—with the exception of Londo and Tunen—and the high frequency of occurrence in the south-central area require explanation. In particular, are these various -KA- forms cognate, or do they have different historical sources? In either case, do the data reflect a Proto-Bantu formative or a later development?

Before turning to these questions, it is appropriate to consider the grammatical distribution of distal -KA-. The focus here is the intensity of use in a language as gauged by its use in the imperative, subjunctive, indicative, and infinitive. Map 2 provides a general overview of such a distribution. However, note that authors do not always provide full descrip-tions of such phenomena; a language listed as only using -KA- in the imperative, for example, might also use it in the subjunctive, a fact which may not have been noted in the grammar(s) consulted. Of particular note in this distribution is that the use of -KA- is, to some extent, predictable.

The simplest use of -KA- is either in an imperative (1) or a subjunctive (2) construct.

(1) Use of distal -KA- in imperative only: "go and V" or "V elsewhere"

C.30	Mabembe	*ka*-ROOT-a	(Motingea 1991)
C.31	Ngiri	*ka*-ROOT-e	(Motingea 1996)
C.44	Ebango (Bua)	*ka*-ROOT-a	(Motingea 1995)
L.32	Kanyok	*ka*-ROOT	(Stappers 1986)
M.54	Lamba	*ka*-ROOT-e	(Doke 1938)
N.44	Sena	*ka*-ROOT-e	(Anderson 1897)
P.22	Mwera	*ka*-ROOT-e	(Harries 1950)

BMM TCS

▨ Imp only		▨ ● Imp, subj, ind, & inf	
▨ Imp & inf		▨ Subj only	
▨ Imp & subj		▨ Subj & ind	
▨ O Imp, subj, & ind		● Subj, ind, & inf	

Map 2. Map of the grammatical distribution of distal -KA-

(2) Use of distal -KA- in subjunctive only

E.51	Gikuyu	SP-*ka*-ROOT-e	(Fut)[2]	(Barlow 1960)
E.55	Kamba	SP-*ka*-ROOT-e	(Fut)	(Farnsworth 1957)
G.64	Pangwa	SP-*xa*-ROOT-e	(Fut)	(Stirnimann 1983)
M.52	Lala	ka-SP-*ka*-ROOT-e	(Hort)	(Madan 1908a)
P.21	Yao	SP-*ka*-ROOT-e	(Fut)	(Whiteley 1966)

Yao P.21 also has a future indicative construction incorporating distal -*ka*- which has the form ti-SP-ka-ROOT-e. However, this construction is clearly a grammaticalization of a one-time periphrastic form having auxiliary -*ti* 'say, do' followed by the subjunctive (Botne 1998).

If a language uses distal -KA- in two types of constructions, these are predominantly the imperative and subjunctive (3), with a few using it only in the subjunctive and indicative (4).

(3) Use of distal -KA- in imperative and subjunctive

A.11	Londo	ká-ROOT-e SP-kà-ROOT-e	(Kuperus 1985, 1982)
C.34	Sakata	ká(á)-ROOT SP-ká-ROOT-í	(de Witte 1955)
L.21	Kete	ka-ROOT(-a) SP(-a)-ka-ROOT(-a)	(Kamba Muzenga 1980)
L.62	Nkoya	ka-ROOT-e SP-ka-ROOT-e	(Yukawa 1987)

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[2]The following abbreviations are used:

Acc	Accompli	Imp	Imperative	PoHo	Post-hodiernal
Dir	Directional	ImF	Immediate Fut	Pr	Present
Dis	Distal	Ind	Indicative	Prf	Perfective
Dur	Durative	Indef	Indefinite	Prog	Progressive
F	Future	Inf	Infinitive	Pst	Past
FV	Final vowel	Loc	Locative	RmF	Remote fut
Foc	Focus	MedF	Medial Fut	S	Singular
Fut	Future	NrF	Near Fut	TomF	Tomorrow fut
HoF	Hodiernal Fut	P	Person	VRmF	Very remote fut
Hort	Hortative	Pl	Plural		

M.21	Ndali	kà-ROOT-e SP-ká-ROOT-e	(Field notes—RB)
N.21	Tumbuka	ka-ROOT-a-ni SP-ka-ROOT-e	(Diocese of Mzuzu 1970)
N.31	Ngonde	ka-ROOT-e SP-ka-ROOT-e	(Field notes—RB)
N.41	Nsenga	ka-ROOT-e SP-ka-ROOT-e	(Ranger 1928)
R.22	Ndonga	ka-ROOT-e sp-ka-root-e	(Viljoen and Amakali 1978)

(4) Use of distal -KA- in subjunctive and indicative only

F.21	Sukuma	SP-ká-ROOT-e SP-ko-ka-ROOT-a	(Fut)	(Batibo 1985)
G.61	Sango	SP-ká-ROOT-age		(Heese 1920)
		[Form not provided]		
P.13	Kimatuumbi	SP-ka-ROOT-é SP-ka-ROOT-a	(Fut)	(Odden 1996)

One language, Nyungwe N.43, differs from this pattern in that it uses distal -KA- in the imperative and the infinitive (5), but apparently not in the subjunctive.

(5) Use of distal -KA- in imperative and infinitive

N.43	Nyungwe	kʰa-ROOT-e ku-kÓa-ROOT-a	(Courtois 1888)

The next group of languages uses distal -KA- in three construction types: imperative, subjunctive, and indicative (6).

(6) Use of distal -KA- in imperative, subjunctive, and indicative

C.37	Ebuja	ka-ROOT-e sp-ka-root-e SP-ko-ka-ROOT-a	(Fut)	(Toulmond 1937)
H.21	Kimbundu	ka-ROOT-e sp-a-ka-root-e SP-a-ka-ROOT-a	(Fut)	(Chatelain 1888-89)
K.38	Mbukushu	ka-ROOT-e sp-ka-root-e		(Fisch 1977)

mbo-SP-na-ka-ROOT-a   (Pst)

L.41	Kaonde	ka-ROOT-i	(Broughall Woods
		SP-ka-ROOT-e	1924)
		SP-a-ka-ROOT-a (Pst)	
P.10	Ndendeule	ka-ROOT-a	(D. Ngonyani, p.c.)
		sp-ka-root-é	
		cha-SP-ka-ROOT-a (Fut)	

Tunen A.44 differs from these languages, using a directional *-ka* in subjunctive (hortative), indicative, and infinitive constructions (7), but apparently not in the imperative.

(7) Use of distal -KA- in subjunctive, indicative, and infinitive

A.44	Tunen	SP-T-ká̄ ROOT	(Dugast 1971)
		sp-ka-root	
		o-ka-ROOT (Hort)	

Finally, there is a large set of languages spread across the central portion of the Bantu area that use distal -KA- in all four types of constructions (8).

(8) Use of distal -KA- in imperative, subjunctive, indicative, and infinitive

F.22	Nyamwezi	ka-ROOT-é	(Maganga and
		SP-ka-ROOT-é ??	Schadeberg 1992)
		SP-laa-ka-ROOT-ée	
		ku-ka-ROOT-a (Fut)	
K.11	Chokwe	ka-ROOT-e	(Martins 1990;
		SP-ka-ROOT-e	White 1947)
		mu-SP-ka-ROOT-a	
		ku-ka-ROOT-a (MedF)	
K.13	Luchazi	ka-ROOT-e	(White 1947)
		SP-ka-ROOT-e	
		SP-ka-ROOT-a	
		ku-ka-ROOT-a (MedF)	
K.14	Lwena	ka-ROOT-e	(Horton 1949;
		SP-ka-ROOT-e	White 1947)
		na-SP-ka-ROOT-a	
		ku-ka-ROOT-a (MedF)	

K.19	Nganguela	ka-ROOT-e	(Lecomte 1938)
		SP-ka-ROOT-e	
		SP-ka-ROOT-a	
		ku-ka-ROOT-a (Fut)	
K.22	Lunda	ka-ROOT-e	(White 1947;
		SP-a-ka-ROOT-e	Fisher [1963])
		SP-a-ka-ROOT-a	
		ku-ka-ROOT-a (MedF)	
K.33	Kwangari	ka-ROOT-e	(Dammann 1957)
		SP-ka-ROOT-e	
		na-SP-ka-ROOT-a ??	
		ku-ka-ROOT-a (Fut)	
L.31a	Luba-Kasayi	ka-SP-ROOT-e	(Willems 1988)
		SP-ka-ROOT-e	
		SP-ká-ROOT-i	
		ka-ka-ROOT-a (Pst)	
L.33	Luba-Shaba	ka-SP-ROOT-e	(Munyarugero 1975;
		???	Gillis 1973)
		SP-a-ká-ROOT-íde	
		ku-ka-ROOT-a (Pst)	
L.35	Sanga	ka-ROOT-e	(Roland 1937)
		SP-ka-ROOT-e	
		SP-ka-ROOT-a	
		ku-ka-ROOT-a (ImF)	
N.31	Chewa	ka-ROOT-e	(Watkins 1937;
		SP-ka-ROOT-e	Hetherwick 1914)
		SP-ka-ROOT-a	
		ku-ka-ROOT-a (Fut)	
R.21	Kwanyama	ka-ROOT-e	(Turvey et al. 1977;
		SP-ka-ROOT-e	Brincker 1891)
		SP-ka-ROOT-a	
		ku-ka-ROOT-a (Fut)	
R.31	Herero	ka-ROOT-e	(Hendrikse 1981)
		SP-ka-ROOT-e	
		SP-ka-ROOT-a	
		ku-ka-ROOT-a (Fut)	

These data reflect an implicational relationship among the types of constructions in which distal -KA- can be found. Use in the infinitive always

implies use in the imperative and, with the sole exception of Nyungwe N.43, in the indicative, while use in the indicative always implies use in the subjunctive. Except for a few languages in the northern and central eastern areas (sole exception: Lala M.52, but this may be a lack of descriptive completeness in Madan 1908a) and for Tunen A.44 in the northwest, use in the subjunctive implies use in the imperative. Schematically, the implicational relationships can be displayed as follows:

Imperative ←   ←   ← Infinitive
        ⇑   ⇓
    Subjunctive ← Indicative
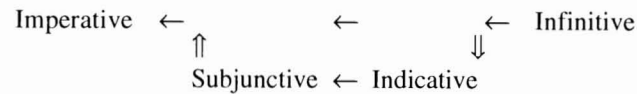
As important as the apparent implicational relationship is the fact that the overwhelming majority of the languages use distal -KA- in the imperative, suggesting that this may have been the primary point of origin of this marker for most languages. However, six of eight languages not permitting use of distal -KA- in the imperative occur in the east, indicating a different possible origin in the subjunctive.

4. Source(s) of distal -KA-

Distal -KA- constructions are often given a reading "go and V". Given this motional quality, a likely source would appear to be a verb of movement. Tunen A.44 provides an example of a language which appears to derive an "itive" (direction away)[3] -KA- from the verb "go". According to Dugast (1971), Tunen has two directional constructions, one indicating movement away (9a), the other movement towards (9b), the speaker.

(9) Tunen A.44 (Dugast 1971)

   a. SP T-*ka* (OBJ) ROOT   movement away   [< -ákan 'go']
   b. SP T-nda (OBJ) ROOT   movement towards

Dugast (1971:253) proposes that the -ka of (9a) "est sans doute une contraction du verbe 'aller', -ákan." This origin-in-a-verb-of-motion hypothesis finds support in two areas. First, directional marking through the use of "go" verbs can be found in other Southern Bantoid languages of northern Cameroon. For example, in Tikar (10), we can see the origins of a comparable construction in which the auxiliary verb still maintains the sense "leave". And Hyman (1981:69) indicates for Noni (11) that "ègēǹ '& went' is a directional verb which is required to indicate motion towards [a place]." A similar construction is found in Oku (12) and Ghomala?-Bamileke (13), both Grassfields Bantu languages.

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[3]The term "itive" (< Lat. *ire* 'go') was apparently coined and first used by Schadeberg (1990).

(10) Tikar (Stanley 1991)

   à   kèn-ø   kɔ'   nswi' pỳɪ   nywi
   il   partir-Prf   botte   paille tomber   corps

'Il est partie se jeter sur la botte de paille.'

(11) Noni [Beboid] (Hyman 1981)

   bɔ́ cí   nɔ́ɔ̀   lewtɛ̀ ɛ̀gēǹ   fɔ̀wǎy   [gɛn 'go']
   3P P2 FOC run   & went   market

'They ran to the market.'

(12) Oku [Grassfields, Ring] (B. Wamey, p.c.)

   ɣene   ɲínɘ́   ndúu   ɘʊwěy   [ndú 'go']
   3P   run.PROG   go.PROG   market

'They are running to the market.'

(13) Ghomala?-Bamileke [Grassfields, Mbam-Nkam] (Nissim et al. 1977)

   wáp dʌ   tá   ǎ   yɘ   gɥɔ́   gɔ́   m   lɔ́ktà
   ils   prendre-ACC   père   moi   celui   grand   aller   vers   hópital

'Ils ont emmené mon grand-père á l'hopital.'   [gɔ́ 'go']

Second, a variety of narrow Bantu languages lend further support to a possible verbal source for distal -KA-. The verb -*ké* 'go' is used in an itive role, similar to that noted in the southern Bantoid languages in a past indicative in Basaa A.43 (14), in the present and imperative in Ewondo A.72 (15), and in the imperative in Ngombe C.41 (16). Note in both Basaa and Ngombe the obligatory presence of a locative following the motion verb.

(14) Basaa A.43 (B. Mbom, p. c.)

   ŋ-kê + í + Verb Root   'went to V'

   PST-go   LOC

(15) Ewondo A.72 (Redden 1979)

   a. mɑ-kɘ tsá(b) ndzaag   'I'm going to gather firewood'
       1S-go   gather   firewood

   b. kɘ-lɘ̀ wa-wulu á   ndzɔ́ŋ   'I'm going to gather firewood'
       go-?   2S-walk   LOC road

(16) Ngombe C.41 (Motingea 1996)

ké á   loké   madíbá   'va puiser l'eau'   [-ké 'go']
go LOC puiser eau

Other "go" verbs also occur with itive uses. Mokpa D.10?? (17) uses the verb -*kóya* 'partir', Ntomba C.66 (18) the verb -*ta* 'aller, partir'; Lozi S.34 (19) the verb -*ya* 'go'.

(17) Mokpa D.10? (Motingea 1990)

a. ta   ntsɔkɔ mbéyá   'appelle ta mère'
appelle ta mère ?

b. kô-tá-é   ntsɔkɔ mbéyá   'va appeller ta mère'
va-appeller-FV ta mère ?   [< -kóya 'partir']

(18) Ntomba C.66 (Gilliard 1928)

a. to-kos-e   'va prendre'   [< -ta 'partir, aller']

b. yo-lamb-e biomba 'viens préparer la nourriture' [< -ya 'venir']

(19) Lozi S.34 (Gorman 1950)

a. mu-yo-bon-a   'go (Pl) and see'   [< -ya 'go' + ku-INF]

b. mu-to-ng-a   'come (Pl) and get (it)' [< -ta 'come' + ku-INF]

As apparent from the examples in (18b) and (19b), the verb 'come' may also be used with a directional "ventive" sense. A further example is found in Eleku C.36g (20), in which the source verb -*ya* 'venir' develops a directional use, either itive or ventive.

(20) Eleku C.36g (Hulstaert 1982)

yŏ-koá mai   'viens/va chercher l'eau'
[yá + ŏ + koa]
come-LOC of place-get

Finally, in Luguru G.35 (21), the verb -*ká* 'go' is used to form a periphrastic itive indicative, while in Sakata C.34 (22) it occurs in an itive imperative.

(21) Luguru G.35 (Scheerder—Tastevin 1950)

na ye k-o-ka   uku-gula   kwa waHindi
et lui 3S-PR-aller INF-acheter chez Hindous
'et lui, il va (le) vendre chez les Hindous'

(22) Sakata C.34 (de Witte 1955)

káá pə   'ga geef' ['go give']   [-ká 'go']

These data suggest that use of a verb of motion, such as 'go' or 'come', in a periphrastic construction in order to indicate direction is and was a productive process in Bantu not limited to a particular motional verb. The data also reveal that certain languages required a locative particle or clitic following a verb of motion. In Eleku (20), this clitic is /ŏ/, a locative of place; in Basaa (14) it is /í/. In Mabiha P.25 and Tumbuka N.21, locative clitics are also used following verbs of motion, as in (23) and (24), respectively.

(23) Mabiha P.25 (Harries 1940)

ŋ-gw-ena ku-ku-lihinga   'I am going to bathe.'   [<-hena 'go']
1S-PR-go LOC-INF-bathe

(24) Tumbuka N.21 (Diocese of Mzuzu n.d.)

a. n-iza   m(u)-ku-mu-phalira-ni 'I will come and tell you.'
1S-come   LOC-INF-2P-tell-2P

b. wa-k(a)-iza   ka-tola   vingoma 'S/he came to get maize.'
3S-PST-come   DIS-fetch maize

c. wa-ka-ya ka-tola vingoma   'S/he went to get maize.'

Notice in Tumbuka that verbs of motion may be followed either by the locativized infinitive with *mu-ku-* or by the distal infinitive in *ka-*. A similar case in Songye L.23 (25) is discussed by Stappers as follows: "Morfologisch is dit weer een T.4 van het werkwoord *kuya* (gaan) dat in de infinitief niet voorkomt. Gevolgd door een infinitief met °*ka-* als prefix in plaats van °*ku-* duidt het de beweging aan." (Stappers 1964: 179) ["Morphologically, this is again a T.4 of the verb *kuya* (to go) that does not occur in the infinitive. Followed by an infinitive with °*ka-* as prefix instead of °*ku-*, it indicates motion to." Translation—RB]

(25) Songye L.23 (Stappers 1964:179)

tufuníné tuyaa ka-kuná   'we gingen planten'
3P-be   3P-go KA-plant   ['we were going to plant']

Willems (1988: 109) makes the same point about Luba-Kasayi L.31: "...après les verbes *kuya* ['go'] and *kuenda* ['go'] le prefixe de l'infinitif [i.e., *ku*] est souvent remplacé par *ka*." The imperative form may also occur without the verb of motion, but in this case it requires a final -*e* rather than -*a*, as a comparison of (26a) and (27) shows.

(26) Luba-Kasayi L.31 (Willems 1988: 109)

a. yâ ka-kuata   nzò:lo   'va prendre une poule'
go LOC-catch   chicken

b. nda ka-mòna, tung'   'va voir, dis'

(27)   Luba-Kasayi L.31 (Willems 1988: 107)
    ka-kuàt-e   'va prendre'

Willems also points out that "...parfois on entend la particule *ka* avec le sens de venir," as illustrated in (28).

(28)   Luba-Kasayi L.31 (Willems 1988: 109)
    ku:àngatè   tshimuma etshi   'viens prendre ce fruit'
    [ka-u-angat-e]
    LOC-2S-take-FV   fruit   this

However, as the example in (28) clearly shows, this construction is not the same as that in (27), which has the sense of "go". The *ka-* in (28) appears in a construction which apparently cannot be preceded by a verb of motion and, more importantly, one which is followed by a subjunctive form in *-e*, a typical pattern in Bantu when verbs occur in sequence in the imperative. This indicates that the *ka-* of (28) had a verbal origin. Given the ventive use, the verb was most likely 'come'. The most probable form would have been *yaka* 'come (imp)', with eventual loss of the initial syllable. Compare, for example, Kela C.75 which, according to Forges (1977: 86), has *di-yà* 'to come' in normal use, but *-yaka* when used as an auxiliary. This latter is of particular relevance because it suggests that auxiliary constructions included a particle *ka* following the verb of motion 'come' and preceding the main verb root. Consequently, the evidence points towards not only a potential verbal origin for distal *-KA-*, but also a locative one in clitic *ka*.

Locative *ka-* in Bantu, unlike the common Bantu locative clitics PA, KU, and MU, is not widespread. Nevertheless, there are a small number of languages across the Bantu domain that have this clitic. Significant for the aims of this paper, this clitic appears as a directional locative—in some cases in opposition to locative *ku-* —and as an infinitive prefix. Gérard (1924:45), for example, describing Lebeo C.45, states that *ka* is a "préposition indiquant une relation de lieu" and is a "signe de l'infinitif" (29).

(29)   Lebeo C.45 (Gérard 1924)
    SP-ba   ka-ROOT-a   'aller V'
    want   INF-Stem

Similarly, Harries (1959: 189) indicates that in Nyali D.33 "[t]he [verb] stem may take prefix *ka-* or *i-* in... verbal constructions corresponding to the uses of the infinitive."

(30)   Nyali D.33 (Harries 1959)
    asá   ka-murá   'He has gone to the field.'
    3S-go LOC-field

In Bushong C.83, according to Vansina (1959: 37) "[l]e locatif est un préfixe *á-* ou *ká-*." It is also an infinitival prefix (31).

(31)   Bushong C.83 (Edmiston n.d.; Vansina 1959)
    ba-wela   ka-shahala mboka 'they are about to dig the road'
    3P-be about to INF-hoe   road

-KA- may also come to denote the purpose of the action, as in Sena N.44 (32).

(32)   Sena N.44 (Anderson 1897)
    w-a-enda ka-saka   nkuni   's/he has gone to get firewood'
    3S-PST-go LOC-look for firewood

Further evidence of locative *ka* in Bantu can be seen in Fang A.75 (33) and Lozi S.34 (34), Ombo C.69 (35), Gusii E.42 (36), and Luyana K.31 (37).

(33)   Fang A.75 (Galley 1964)
    ká   'á gauche; derriere'
    kô   'á droite; devant'

(34)   Lozi S.34 (Gorman 1950)
    ka   "used to express 'at, in, on' in phrases of time;
    ku   "used to express 'in the time of'"

(35)   Ombo C.69 (Meeussen 1952)
    a. bákindí kámį   [< ká-amį 'LOC-mon']
        'ils sont chez moi (ici)'

    b. bákindí kamį   [< ka-amį 'LOC-mon']
        'ils sont chez moi (au loin)'

(36)   Gusii E.42 (Whiteley 1960)
    ká-i 'where'   [< *-pí 'where']

(37)   Luyana K.31 (Givón 1970)
    a. i-ná-ká-kél-a   'I came, way over there.'
        1S-PST-DIS-come-FV

    b. i-ná-kú-kél-a   'I came, here.'

That an archaic locative *ka-* is found in Bantu should not be entirely unexpected. De Wolf (1971: 59) proposes reconstructing *ka locative-temporal for Proto-Benue-Congo, finding evidence of it in a variety of languages. Among Bantoid languages, one finds *ká/ka* indicating place or direction away/to in Mambila (Northern Bantoid; Meyer 1939-40), kə-r [kə́r]

'towards' in Tiv (Southern Bantoid; Abraham 1940), and káyə̀r 'into' in Jarawa (Southern Bantoid; Lukas and Willms 1961).

Another aspect of the use of *ka-*, illustrated in Mabembe C.30 (38), provides further support for a locative analysis. In (38a), we see that in the imperative the *ka-* form may be preceded by a verb 'go', here kɛndɛ́. In (38b), on the other hand, we find what Motingea calls an "infinitif sans marque". He indicates that there cannot be two consecutive *ka*'s, and opts to gloss the one present as 'va', speculating "qu'il s'agit du phénomène d'haplologie" (p. 31). However, in a list of common verbs, including that for 'go', he does not list or discuss a verb stem *-ka*. The lack of consecutive *ka-*'s can be explained if we assume that the source of *ka-* here is not a verb, but rather a locative clitic that appeared only following verbs of motion, which could be deleted, leaving the *ka-* as the surface source of the sense "go and".

(38)   Mabembe C.30 (Motingea 1991)

   a. kɛndɛ́ ká-tóká   mái ó dzidziba
      va   LOC-puiser eau á source
      'va puiser de l'eau á la source'

   b. ká kɔlɔ́ na bangó
      va dire á   eux
      'va leurs direm'

Other languages provide additional evidence of a verb of motion plus locative infinitive construction. Among them are Londo A.11 (39), Kimbundu H.21 (40), Sena N.44 (41), and Tumbuka N.21 (42).

With respect to the origins of distal -KA-, these data suggest that there were at least three different paths: 1) via a directional verb such as *-ka* or *-ta* 'go (away)' found in a periphrastic indicative construction, as, for example,

(39)   Londo A.11   (Kuperus 1985)   (Bruens 1948)

   a. ka-lang-e   'go read'   'read'

   b. nde ka-lang-e 'come on, read'   'go and read'

      [nde 'go (imp)']

(40)   Kimbundu H.21 (Chatelain [1888-89] [1964])
      ndé ka-sumb-e   'go and buy'   [compare with the verb *-ia* 'go']

(41)   Sena N. 44 (Anderson 1897)
      ndoko   ka-m-pang-e 'Go and tell him.'
      go (IMP) LOC-3S-tell-FV   [compare with the verb *-pita* 'go']

(42)   Tumbuka N.21 (Diocese of Mzuzu n.d.)
      luta-ni ku-ya ka-wona   'Go (pl.) and see.'
      go-PL   to-go LOC-see

in Tunen A.44; 2) via an imperative form of a verb 'go (away)' followed by a bare root in the subjunctive, as in Sakata C.34; or 3) via a locative clitic affixed to the main verb when preceded by a verb of motion, found in many languages. These possible paths are schematically represented in (43).

(43)   Possible paths of evolution of distal -KA-
   a.   SP + *ka* STEM   < Directional verb *-ka* 'go (away)'
   b.   *ka* ROOT-e   < Imperative 'go' followed by subjunctive
        IMP SUBJ
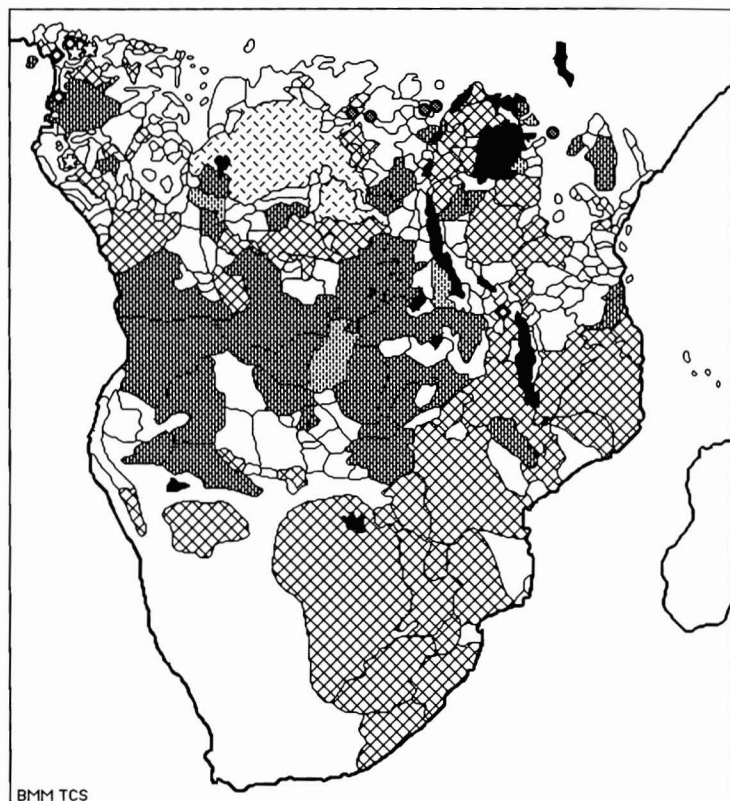   c.   Vb$_{dir}$ *ka*-ROOT-e   < Locative affix following directional verb

The data also appear to suggest that distal -KA- was not fully established as such in Proto-Bantu. Rather, there appears to have been a creative potential for motional constructions, as evidenced by the wide variety in forms of 'go' and 'come' motion verbs that have been employed for this purpose and by the erratic areal use of this pattern in the northwest Bantoid/Bantu area. But such constructions must have still been transparent, both in composition and meaning. That is, *-ka* must have been one of several viable motion verbs and *ka-* a quasi-viable locative clitic. Furthermore, of the two languages in the northwestern area that have distal -KA-constructions, Londo A.11 and Tunen A.44, it is clear that distal -KA- in Tunen has a verbal origin, as in (43a), Londo either the imperative/subjunctive (43b) or the locative one (43c), or both. Both of these cases can be accounted for as nascent forms in Proto-Bantu, culminating at a later time in relatively fixed forms.

Nevertheless, the issue of the origins of distal -KA- merits much additional investigation. Important evidence could be gleaned from a comparison of tonal behavior of -KA- forms, which has not been included here for two reasons. First, many data sources do not indicate tone. Second, there are often differences between surface tone and proposed underlying tone that is significant. Kuperus (1985), for example, suggests that Londo *ka-* has an underlying low tone, though it surfaces with a high tone. Which of these to use in a comparison is not readily apparent. Close comparison of -KA- usage in very similar areal groups should also lead to further insights.
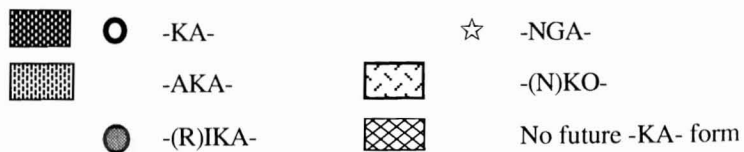
5. Future -KA-

Like distal -KA-, the distribution of the future formative -KA- is widespread over the Bantu domain, as indicated by the mapping of its distribution in Map 3. In addition to future markers having the simple form *-ka-*, two other formatives, both having the general form *-Vka-*, are indicated on the map. In

the central northern area of the Bantu domain, several languages occur with a future form -EKA-, as illustrated by the examples in (44).

Map 3. *Geographical distribution of future -KA-*

Legend:
- ■ (dark) / O -KA-
- ▒ (gray) -AKA-
- ● -(R)IKA-
- ☆ -NGA-
- ▨ -(N)KO-
- ▩ No future -KA- form

(44) Future formatives in -EKA-

a.	C.50 Likile	SP- *éká-* ROOT- a	Fut		(Carrington 1977)
b.	D.14 Enya	SP- *eka-* ROOT- ea	Fut		(Spa 1973)
c.	D.33 Nyali	SP- *ɪká-* ROOT- a	Fut (Nr)		(Tucker and Bryan 1957)

That these -*Vka*- forms are not simple morphological units, at least historically, is suggested by the fact that other languages in the area have *e*-as the future formative (45) and by the fact that Likile, for example, constructs the negative future with -*ka*- and not -*eka*- (46).

(45) Future formatives in -E-

a.	C.53 Gesogo	SP- *e-* ROOT- a	Fut	(Harries 1955)
b.	J.51 Hunde	SP- *e-* ROOT- a	Fut (Hod)	(Mateene 1992)

(46) Likile C.50 future negative (Carrington 1977)

SP-*tí-ká*-ROOT -a

The remote future formative -*rika*- in Llogoori E.41 (47) is similar to the future formatives listed in (44) above. However, the difference in the vowel quality of the formative (1st degree of aperture vs. 2nd degree) and in the suffixal vowel— -*e* rather than -*a* —suggests a different origin. Since the the near future formative is -*ri*-, one can reasonably analyze -*rika*- as -*ri+ka*- (cf. Mould 1981 for a different analysis), which quite possibly could have been suppletive "be" plus a locative *ka*- complement. Compare this, for example, with Luchazi K.13 which has a remote future derived from suppletive "be" plus a *ka*-infinitive, SP-li ka-ROOT-a.

(47) Llogoori E.41 (Leung 1991)

SP-*rika*-ROOT -e Fut (Rm)

A second subset of -*Vka*- formatives is comprised of those languages having a future formative -AKA-, as listed in (48).

(48) Future formatives in -AKA-

a.	D.28 Holoholo	SP- *àkà-* ROOT- a	Fut	(Coupez 1955)
	K.22 Lunda	SP- *aka-* ROOT- a	Fut (Rm/Dis)	(White 1947)
	M.41 Taabwa	SP- *aka-* ROOT- a	Fut	(De Beerst 1898)
b.	D.33 Nyali	SP- *aká-* ROOT- ɪ	Fut (Rm)	(Tucker and Bryan 1957)

c. E.41 Llogoori   SP- *raka*-ROOT- e   Fut (Rm)   (Leung 1991)

J.25 Kwaya   SP- *aka*-ROOT- e   Fut (Rm)   (Sillery 1920)

J.32 Luhya   SP- *axá*-ROOT- e   Fut (Rm)   (Mould 1981)

J.34 Saamia   SP- *axá*-ROOT- e   Fut (Rm)   (Mould 1981)

As with the -EKA- forms, the -AKA- forms appear to be analyzable into two parts. In Holoholo (48a), for example, the future negative occurs without the *-a-* (49a), while in Taabwa (49b) it is optional. Moreover, in Taabwa the present/near future is formed with the morpheme *-a-* alone (50a), while the future subjunctive has only *-ka-* (50b).

(49)   Future negatives

a.   *a*-SP-*kà*-ROOT-*í*   Holoholo D.28   (Coupez 1955)

b.   *ta*-SP-(*a*)*ka*-ROOT-*a*   Taabwa M.41   (De Beerst 1898/1902)

(50)   Taabwa M.41 (De Beerst 1898/1902)

a.   SP-*a*-ROOT-*a*   Pr/nr fut

b.   SP-*ka*-ROOT-*e*   Fut subj

The cluster of northeastern languages (48c) appear to have derived from the same original construction. Although Mould (1981) analyzes *-raka-* as a single formative, other evidence suggests separable parts. Llogoori, itself, has an indefinite future formative *-ra-*, which suggests that *-ka-* was a separate element combined with it to create a new tense formative. Second, Sumbwa F.23 has a pair of futures which make the same distinction (51).

(51)   Sumbwa F.23   (Capus 1900)

a.   SP-*la-ka*-ROOT-*a*   Rm Fut

b.   SP-*la*-   -ROOT-*e*   Mid Fut

Although there is no evidence in Lunda or Nyali, I suggest that they are also cases of two morphemes combining to form one formative. Hence, the *-Vka-* cases can be considered in conjunction with simple -KA- future forms.

The mapping of the areal distribution of future -KA- provides an important perspective on its wide range of occurrence in Bantu. However, equally as important for understanding its history and development is its distribution and use in the grammars of particular languages, as was the case with distal -KA-.

Close observation of the occurrence of future -KA-'s shows that -KA- occurs in four kinds of constructions with a future reading, usually some

kind of post-hodiernal future; these include the indicative, subjunctive, infinitive, and imperative. The most pervasive use of this future -KA- is found in the indicative. In 30 of the 55 languages having a future -KA-, the -KA- is found only in the indicative (52). (For languages marked with an asterisk, the sources do not discuss other areas of the grammar. Hence, they may use *-ka-* elsewhere as well.)

(52)   Languages having only indicative future -KA-

A.31	Bube	SP-(k)a-ROOT-a	RmF	(Justo 1991; Juanola 1890)
A.42	Bankon	SP-γá-ROOT-a	F	(Spellenberg 1922)
A.46	Nomaande*	SP-ká-SP ROOT SP-kà-SP ROOT	PoHoF IndefF	(Wilkendorf 1991)
A.62a	Nugunu*	SP-gaá-ROOT	HoF	(Gerhardt 1989)
B.52	Nzebi	SP-ká-ROOT	RmF	(Marchal-Nasse 1989)
B.85	Yansi	SP-N°-ka-ROOT	MedF	(Mayanga 1985)
C.31b	Libinza	SP-kV-ROOT-ì SP-kV-ROOT-á	MedF RmF	(van Leynseele 1976/77)
C.34	Sakata	SP-kó-ROOT-a	RmF	(Ikamba 1987)
D.25	Lega	SP-ka-ROOT-a	RmF	(Waseka 1988)
D.26	Binja-Sud	SP-ká-ROOT-a	IndefF	(Hennin n.d.)
E.41	Llogoori*	SP-ra-ka-ROOT-e	RmF	(Leung 1991)
F.23 J.25	Sumbwa Kwaya	SP-la-ka-ROOT-a SP-a-ka-ROOT-e	RmF MedF	(Capus 1900) (Sillery 1920)
J.31	Masaba	SP-ka-ROOT-e	TomF	(Purvis 1907)
J.32	Luhya*	SP-a-xá-ROOT-e	RmF	(Mould 1981)
J.34	Saamia*	SP-a-xá-ROOT-e	RmF	(Mould 1981)
J.51	Hunde*	SP-ka-ROOT-a	HoF	(Mateene 1992)
J.61	Ha	SP-ro-ka-ROOT-a	VRmF	(van Sambeek n.d.)
K.19	Nganguela	SP-ka-ROOT-a	F	(Lecomte 1938)
K.31	Luyana	SP-ká-ROOT-a	NrF	(Givón 1970)
K.51	Mbala	SP-ga-ROOT-a	PoHoF	(Ndolo 1972)

L.41	Kaonde	SP-ká-ROOT-a	PoHoF	(Wright 1977)
L.62	Nkoya	SP-kà-ROOT-a	PoHoF	(Yukawa 1987)
M.42	Bemba	SP-kà-ROOT-a SP-ká-ROOT-a	TomF RmF	(Givón 1969)
M.52	Lala	SP-ka-ROOT-a	RmF	(Madan 1908a)
N.43	Nyungwe	SP-kʰa-ROOT-a	NrF	(Courtois 1888)
P.22	Mwera	ci-ka-SP-ROOT-e	MedF	(Harries 1950)
R.11	Umbundu	SP-ka-ROOT-a	F	(Schadeberg 1990; Valente 1964)
R.22	Ndonga	ota-SP-ka-ROOT-a	F	(Viljoen and Amakali 1978)
S.34	Lozi	SP-ka-ROOT-a	F	(Gorman 1950)

Several languages in the northwest have futures marked by -NGA- forms (53). In Ewondo A.72, however, there is also a future of the form SP-n-ROOT, suggesting that -NGA- forms may have been historically, at least, complex forms comprised of *-n-* and *-ka-*.

(53)   Languages having indicative future -NGA-

A.62a	Nugunu	SP-ngà-ROOT	RmF	(Gerhardt 1989)
A.72	Ewondo	SP-ŋ-gâ-ROOT	RmF	(Redden 1979; Abega 1976)
B.31	Tsogho	SP-nga-ROOT	F	(Walker n.d.)

Several languages use future -KA- in two areas of the grammar. Benga A.34 and Kwanyama R.21 use it in both the indicative and infinitive (54), while six other languages use it in the indicative and the subjunctive (55).

(54)   Languages having indicative and infinitve futures with -KA-

A.34	Benga	SP-ka-ROOT-a-ndi ka-ROOT-a	F–Ind F–Inf	(Pérez e Sorinas 1928)
R.21	Kwanyama	oha-SP-ka-ROOT-a oku-ka-ROOT-a	F–Ind F–Inf	(Turvey et al. 1977; Brincker 1891)

(55) Languages having future indicative and subjunctive with -KA-

E.55	Kamba	SP-ka-ROOT-a ñĭ-SP-ka-ROOT-a SP-ka-ROOT-e	NrF–Ind RmF–Ind F–Subj	(Farnsworth 1957)
L.33	Luba-Shaba	SP-a-ka-ROOT-a SP-ka-ROOT-e	RmF–Ind F–Subj	(Munyarugero 1975; Gillis 1973)
M.41	Taabwa	SP-a-ka-ROOT-a SP-ka-ROOT-e	F–Ind F–Subj	(De Beerst 1898)
M.54	Lamba	SP-a-ka-ROOT-a SP-ka-ROOT-e	F–Ind F–Subj	(Doke 1938)
M.61	Lenje	SP-ka-no-ROOT-a SP-ka-ROOT-e	RmF–Ind F–Subj	(Madan 1908b)
M.63	Ila	SP-ka-ROOT-a SP-ka-ROOT-e	RmF–Ind F–Subj	(Smith [1964])

Seven languages extend use of the future formative -KA- to the infinitive (56) or to the imperative (57).

(56) Languages having future indicative, subjunctive, and infinitive

E.51	Gikuyu	SP-kā-ROOT-a SP-ka-ROOT-e gũ-ka-ROOT-a	RmF–Ind F–Subj F–Inf	(Barlow 1960; Gecaga 1960)
K.11	Chokwe	mu-SP-ka-ROOT-a SP-ka-ROOT-e ku-ka-ROOT-a	RmF–Ind F–Subj F–Inf	(Martins 1990; White 1947)
K.13	Luchazi	SP-ka-ROOT-a SP-ka-ROOT-e ku-ka-ROOT-a	RmF–Ind F–Subj F–Inf	(White 1947)
K.22	Lunda	SP-a-ka-ROOT-a SP-ka-ROOT-i ku-ka-ROOT-a	RmF–Ind F–Subj F–Inf	(Fisher 1963; White 1947)
L.34	Hemba	SP-ka-ROOT-a SP-ka-ROOT-anga SP-ka-ROOT-e ku-ka-ROOT-a	NrF–Ind RmF–Ind F–Subj F–Inf	(van der Meiren 1912)

L.35   Sanga   SP-ka-ROOT-a   F–Ind   Roland 1937)
                  SP-ka-ROOT-e   F–Subj
                  ku-ka-ROOT-a   F–Inf

(57) Languages having future indicative, subjunctive, and imperative

D.28   Holoholo   SP-a-ka-ROOT-a   F–Ind   (Coupez 1955)
                  SP-ka-ROOT-e   F–Subj
   ka-ROOT-é   F–Imp

One language, Lwena K.14, exhibits use of future -KA- in all of the constructions (58).

(58) Languages having future indicative, subjunctive, imperative, and
     infinitive

K.14   Lwena   na-SP-ka-ROOT-a   RmF–Ind   (Horton 1949;
                  SP-ka-ROOT-e   F–Subj   White 1947)
                  ka-ROOT-e   F–Imp
                  ku-ka-ROOT-a   F–Inf

This distribution of future -KA- across grammatical constructions, when plotted on a map (Map 4), shows the densest use to come in the south-central area of the Bantu domain.

These data, like those in the case of distal -KA- noted previously, again suggest an implicational relationship among future -KA- constructions across languages. In particular, the data indicate that use of -KA- in the infinitive or subjunctive always implies use in the indicative. Use of -KA- in the imperative implies use in the subjunctive. The drawing below summarizes these relationships schematically:

Indicative ← Subjunctive ← Imperative
        ↑
    Infinitive
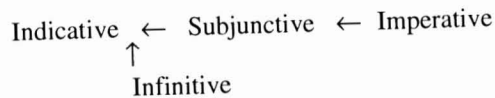
If correct, such an implicational relationship provides strong evidence that future -KA- originated in indicative constructions and only later spread to other constructions.
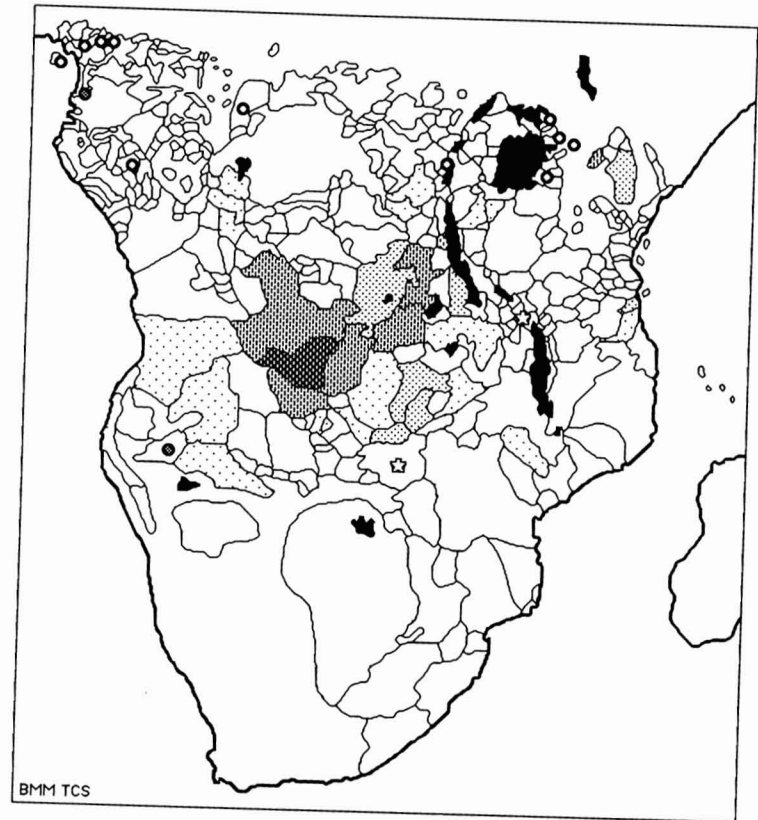
There are apparent exceptions to this claim. For example, in Tonga M.64, we find use of future -KA- only in the subjunctive (59).

(59) Tonga M.64 (Collins 1962)

   watwaambila kuti tu-ka-bool-e

   's/he told us that we come the day after tomorrow'

However, if we look at formation of simple indicative futures, we find that both are relatively recent periphrastic constructions based on auxiliary *-ya* 'go' (near future) or *-zi* stem of 'come' [<-*zya*] (remote future) plus the infinitive. Quite likely, a simple indicative construction with formative -KA- was replaced by these periphrastic innovations.

▱ ⬤ Ind only		▨ Ind, subj, imp, & inf	
▨ Ind & subj		O Ind & inf	
▨ Ind, subj, & imp		☆ Subj only	
▨ Ind, subj, & inf			

Map 4.   *Grammatical distribution of future -KA-*

Determining the origins of future -KA-'s is even less certain than it was for distal -KA-. Nevertheless, there are several observations which may help in guiding us towards a solution. First, it can be seen from the examples in (60) to (62) that grammaticalized "go + V" constructions in Bantu tend to become imminent or near futures, though occasionally there are exceptions, as in Hunde J.51 (67).

(60)   Duala A.24 (Ittmann 1939)

SP-m-ɛndé INF   Fut   [< -ɛndɛ 'gehen']

(61)   Myene B.11 (Teisseres 1957)

SP-kɛ-ROOT-a   Im Fut   [< -kɛnd- 'aller, partir']

SP-be-ROOT-a   Fut

(62)   Mbala K.51 (Ndolo 1972)

SP-anga ROOT-a   Im Fut—'be going to V'   [< -ang- 'aller']

However, as noted previously, -KA- futures are overwhelmingly post-hodiernal "remote" futures. A few, however, like Nugunu A.62a, Kwanyama R.21, and Herero R.22 (63-65), are not. Rather, they are imminent or hodiernal futures, suggesting, perhaps, a verbal 'go' origin.

(63)   Nugunu A.62a (Gerhardt 1989)

SP-gaá-ROOT   Hod Fut

(64)   Kwanyama R.21 (Turvey et al. 1977)

SP-ka-ROOT-a   Im Fut—'be going to V'

(65)   Herero R.31 (Hendrikse 1981)

SP-ka-ROOT-a   Im Fut—'going to V'

Other languages in which -KA- is not a remote future often have grammaticalized a new periphrastic construction—usually "come + V"—as a remote future, producing a shift in the temporal sense of the -KA- formative to a hodiernal or more immediate future, as illustrated by the languages in (66) to (69).

(66)   Yansi B.85 (Mayanga 1985)

a.   SP-N°-ya-ROOT   Rm Fut   [< -ya 'venir']

b.   SP-N°-ka-ROOT   Im Fut

(67)   Hunde J.51 (Mateene 1992)

a.   SP-génde-ROOT-a   Post-Hod Fut   [< -gɛnd- 'aller']

b.   SP-ka-ROOT-a   Hod Fut

(68)   Nyungwe N.43 (Courtois 1888)

a.   SP-dza-ROOT-a   Rm Fut   [< -dza 'vir']

b.   SP-kʰa-ROOT-a   Nr Fut

(69)   Mwera P.22 (Harries 1950)

a.   ci-SP-jie-ROOT-a   Rm Fut   [< -ji- 'come']

b.   ci-ka-SP-ROOT-e   Med Fut

Other evidence indicates that some future -KA-'s derived from ka- infinitive prefixes. In Bushong, for example, futures are constructed from the a ka- infinitive (70). In the remote future, the verb itself is repeated in its infinitival form. Subsequent loss of the first root would produce the kind of future construction evident elsewhere.

(70)   Bushong C.83 (Edmiston n.d.; Vansina 1959)

a.   SP-ROOT-ká-ROOT   Rm Fut

b.   SP-wela ká-ROOT   Im Fut   [< -wela 'want']

And in Tumbuka N.21 a ventive future is formed from auxiliary 'come' plus a ka- infinitive (71). The potential loss of -iza- in further grammaticalization would again lead to the common -KA- future form found elsewhere.

(71)   Tumbuka N.21 (Diocese of Mzuzu 1970)

SP-iza-ka-ROOT-a   Ventive Fut [< -iza 'come' + ka- infinitive]

The discussion so far has pointed to possible origins of -KA- futures in auxiliary verbs or ka- infinitives, scenarios similar to those discussed for distal -KA-. However, other observations suggest that a future -KA- is, unlike distal -KA-, reconstructable for Proto-Bantu. First, whereas distal -KA- is almost entirely absent from the northwest Bantu area, future -KA- is found in a number of languages in this area: Bubi A.31, Benga A.34, Bankon A.42, Ewondo A.72, Fang A.75; Nzebi B.52, Yansi B.85; Libinza C.31b, Sakata C.34. Second, unlike the case with distal -KA-, some non-Bantu Southern Bantoid languages also posess a -KA- future. Tikar (72) is one such case. Nomaande and Nugunu (Yambasa), (73) and (74), respectively, are two others. They are of potential interest because of their location and classification. Although classified as Bantu A.46 and A.62,

respectively, by Guthrie, they have been reclassified as part of the Mbam group (Southern Bantoid) in Watters and Leroy (1989).

(72) Tikar (Stanley 1991)

à kà   yɛn-kà   ɓyin   'Il vous aura vu.'

il FUT voir-PRF F vous

(73) Nomaande A.46 or Mbam (Wilkendorf 1991)

u-ká-a   námb-áka   'Elle (le) préparera (demain).'

3S-RmF-3S   préparer-DUR

(74) Nugunu A.62a or Mbam (Gerhardt 1989)

SP gaá Root   Fut (Tod or Tom)

SP nga Root   Fut (remote)

The fact that two of the languages in this classificatory border area have -KA- futures adds further support to the hypothesis that the form can be reconstructed for Proto-Bantu. However, this does not imply that all languages currently possessing a future -KA- inherited it from Proto-Bantu.

6. Distal vs future -KA-

In separating distal from future uses of -KA-, it seems highly likely that distal -KA- originated in imperative constructions, post-hodiernal future -KA- in simple indicative constructions. This hypothesis finds support not only in the survey and discussion developed previously, but also in the facts associated with individual languages. In a number of languages that have both distal and future -KA-'s, there is a clearcut distinction between them. In Nyungwe N.43 (75), for example, distal -KA- occurs only in the imperative, future -KA- only in the indicative. Neither occurs in the subjunctive.

Sanga L.35 and Nkoya L.62, (76) and (77), respectively, permit distal -KA- in both the imperative and the subjunctive, but only future -KA- in the simple indicative.

(75) Nyungwe N.43 (Courtois 1888)

a. kʰa-gon-e   'vá dormir' ['go sleep']

b. *a-ka-Root-e

c. a-kʰa-sung-a   'guardarei' ['he will stand guard']

(76) Sanga L.35 (Roland 1937)

a. ka-dy-e   'va manger (ailleurs)'

b. a-ka-dy-e   'qu'il aille manger (ailleurs)'

c. u-ka-pot-a   'il achètera'

(77) Nkoya L.62 (Yukawa 1987)

a. ka-mu-mónesh-é   'Show him' (somewhere else)

b. u-ka-mu-mônesh-e 'That you show him' (somewhere else)

c. ba-ka-môn-a   'They will see' (post-hodiernal future)

Lala M.52, which apparently does not allow distal -KA- in the imperative, does use it in the subjunctive, but only future -KA- in the indicative (78).

(78) Lala M.52 (Madan 1908a)

a. ??ka-Root-e

b. n-ka-tem-e   'I should go and cut'

c. tu-ka-tem-a   'We will cut (some time)'

(79) Nganguela (Lecomte 1938)

Distal -KA-	*Future -KA-*	
a. ka-lek-e 'vai dizer'		Imperative
b. tu-ka-nw-e 'vamos beber cerveja'		Subjunctive
c. a-ka-handek-a 'êle irá falar'	va-ka-ts-a 'hão-de morrer'	Indicative
d. ku-ka-land-a 'ir comprar'		Infinitive

Overlap of the two uses in particular languages also supports different points of origin. In Nganguela K.19 (79 above), the use of distal -KA- has spread through the grammar, so that it occurs in the imperative, subjunctive, indicative, and infinitive, whereas future -KA- (79c) is restricted to the indicative.

In Gikuyu E.51 and Kamba E.55, on the other hand, the reverse has occurred. Future -KA- has spread to the subjunctive and infinitive, while distal -KA- has been retained only in the subjunctive (80).

(80) Gikuyu E.51 (Barlow 1960)

	Distal -KA-	*Future -KA-*	
a.		gũ-ka-negeni-a 'to upbraid (at a later time)'	Infinitive
b.	ũ-ga-tem-e '(that) you cut the tree (dist)'	ũ-ga-tem-e '(that) you cut the tree (later)'	Subjunctive
c.		nĩ-n-ga-gwat-a 'I will take hold (post-hoF)'	Indicative

In Ndonga R.22, the two uses overlap in the subjunctive, but are distinct in the imperative and indicative (81).

(81) Ndonga (Viljoen and Amakali 1978)

	Distal -KA-	*Future -KA-*	
a.	ka-long-e 'go work'		Imperative
b.	u-ka-land-e '(that) you should go and buy'	a-ka-dhim-e '(that) he extinguish the fire'	Subjunctive
c.		ota-ndi-ka-dhan-a 'I will play'	Indicative

Extensive spread of the use of both distal and future -KA-'s through the grammar is found in the southwest area of Bantu. In Luba-Shaba L.33, Sanga L.35, Chokwe K.11, Luchazi K.13, and Lunda K.22, the overlap is complete except for the imperative, where no future use is found. Examples from Sanga (82) illustrate this discrete (i.e., non-overlapping) use of the two.

(82) Sanga (Roland 1937)

	Distal -KA-	*Future -KA-*	
a.	ka-dy-e 'va manger (ailleurs)'		Imperative
b.	a-ka-dy-e 'qu'il aille manger'	a-ka-pot-e 'qu'il achète [plus tard]'	Subjunctive

c.	n-ka-dy-a 'je vais manger (ailleurs)'	u-ka-pot-a 'il achètera'	Indicative
d.	ku-ka-dy-a 'aller manger (ailleurs)'	ku-ka-sak-a 'vouloir [futur]'	Infinitive

In Lwena K.14 (83), the overlap of distal and future is complete.

(83) Lwena K.14   (Horton 1949; White 1947)

	Distal -KA-	*Future -KA-*	
a.	ka-mu-lwez-e 'show him (elsewhere)'	ka-mu-lwez-e 'show him (later)'	Imperative
b.	ngu-ka-ci-ling-e 'that I do it (elsewhere)'	ngu-ka-ci-ling-e 'that I do it (later)'	Subjunctive
c.	na-va-ka-lim-a 'they will hoe (later at some other place)'	na-va-ka-ci-ling-a 'they will do it (post-hoF)'	Indicative
d.	ku-ka-has-a 'to be able (elsewhere)'	ku-ka-has-a 'to be able (later)'	Infinitive

Significantly, use of the two -KA-'s appears to be, in all of the languages mentioned, mutually exclusive; they cannot be used together in the same expression, nor have the two meanings merged into one morpheme expressing, simultaneously, both meanings. However, there are two languages—Kimbundu H.21 and Kimatuumbi P.13—in which the two senses are combined in just one -*ka*- morpheme. Chatelain ([1964]: 47), for example, states that the indicative future with -*ka*- "indica um tempo futuro com mudança de logar mais distante que o futuro II" (84). A similar statement could be made for Kimatuumbi (85).

(84) Kimbundu H.21 (Chatelain [1964])

	Distal and future -KA-	
a.	tu-a-ka-bang-e 'that we will [go] make'	Subjunctive
b.	tu-a-ka-bang-a 'we will [go] make'	Indicative
c.	ndé ka-sumb-e 'go and buy'	Imperative

(85) Kimatuumbi P.13 (Odden 1996)

    Distal and future -KA-

  a. ni̧-ka-tuúmbuk-e   Subjunctive
       'I should go fall'

  b. ni̧-ka-túumbuk-a   Indicative
       'I will go fall'

In sum, comparison of distal and future -KA- has pointed towards different initial uses in the grammars of Bantu languages. Subsequently, either distal or future use, or both, has spread to other constructions, eventually leading in some languages to complete overlap of the two forms.

7. Summary and directions for future work

It has been my intent in this paper to provide a general overview of the distribution and use of the form -KA- in two of its various functions, as distal marker and as future formative. While the histories of both are complex, the discussion has illuminated several general patterns. First, the grammatical distribution of distal -KA- suggests an origin in an imperative construction. Nevertheless, the somewhat different results in eastern Africa suggest the possibility of a subjunctive origin there. In either case, although there appear to be several potential sources of distal -KA-, -KA 'go (away)' as the first verb of a complex imperative-subjunctive serial construction or KA- as a locative clitic following a directional verb must be considered the most likely sources. The near lack of distal use in the northwest and its widespread occurrence in the south-central Bantu area suggest that it was nascent in Proto-Bantu, not yet a true verbal affix. Further insight into the origins of distal -KA- may come from a consideration and comparison of the range of distribution of languages having a set of aspectual-like markers in a distinct "limitative" category and those having distal -KA-.[4]

Second, both the geographical and grammatical distributions suggest that a future -KA- can be reconstructed for Proto-Bantu. Not only is it widespread in Bantu, but it occurs in many languages of the northwest area. The data also lead us to conlcude that it originated in a simple indicative construction. Nevertheless, some -KA- futures clearly arose from other sources at a later time. For individual languages many details not considered in this general survey remain to be examined. Some languages have two future morphemes of the form -KA-, differing usually in tone or pre-nasalization. How are these related? Does near versus remote future use indicate two original sources, or simply language internal differentiation of

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[4]I thank Larry Hyman and Jean-Marie Hombert for pointing out the potential significance of such a comparison.

one? Which is cognate with -KA- in languages that have only one future -KA- morpheme?

This overview provides a first step in mapping out the historical evolution of distal and future -KA-'s. What is needed to clarify and verify this rather coarse initial picture of -KA- is more complete and accurate data, including tonal information, from individual languages. Evidence needs to be adduced as well to determine the nature and role of borrowing in promulgating spread of these morphemes. In addition, distal -KA- needs to be compared with the distribution and use of the so-called "subsecutive" -KA-, which seems to be quite common in those areas where distal -KA- is less-commonly found.

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Appendix

Future -KA-

Zone A

A.31	Bubi	[-(k)a-]
A.34	Benga	[-ka-]
A.42	Bankon	[-ɣá-]
A.46	Nomaande	[-ká-]
A.62a	Nugunu	[-gaá-]
A.75	Fang	[-kɔ́-, -kœ́-]

Zone B

B.52	Nzebi	[-ká-]
B.85	Yansi	[-aka-]

Zone C

C.31b	Libinza	[-kV-]
C.34	Sakata	[-kɔ́-]
C.50	Likile	[-eka-]
C.83	Bushoong	[ká-]

Zone D

D.14	Enya	[-eka-]
D.25	Lega	[-ká-]
D.26	Binja-sud	[-ká-]
D.28	Holoholo	[-aka-]
D.32	Bira	[-ɽiká-]
D.33	Nyali	[-ɪka-]

Zone E

E.51	Gikuyu	[-ka-]
E.55	Kamba	[-ka-]

Zone F

F.23	Sumbwa	[-ka-]

Zone H

H.21	Kimbundu	[-ka-]

Zone J

J.25	Kwaya, Ruri	[-aka-...-e]
J.31	Masaba	[-ka-...-e]
J.32	Luhya	[-axá-...-e]
J.41	Konzo	[-ka-]
J.42	Nande	[-ka-]
J.61	Ha	[-ka-]

Zone K

K.11	Chokwe	[-ka-]
K.13	Luchazi	[-ka-]
K.14	Lwena	[-ka-]
K.19	Nganguela	[-ka-]
K.22	Lunda	[-aka-]
K.31	Luyana	[-ká-]
K.51	Mbala	[-ga-]

Zone L

L.33	Luba-Shaba	[-ká-]
L.34	Hemba	[-ka-]
L.35	Sanga	[-ka-]
L.41	Kaonde	[-ka-]
L.62	Nkoya	[-ka-]

Zone M

M.21	Ndali	[-ka-]
M.41	Taabwa	[-ka-]
M.42	Bemba	[-ká-, -kà-]
M.52	Lala	[-ka-]
M.54	Lamba	[-ka-]
M.61	Lenje	[-ka-]
M.63	Ila	[-ka-]
M.64	Tonga	[-ka-]

Zone N

N.43	Nyungwe	[-kʰa-]

Zone P

P.13	Kimatuumbi	[-ka-]
P.22	Mwera	[-ka-]

Zone R

R.11	Umbundu	[-ka-]
R.21	Kwanyama	[-ka-]
R.22	Ndonga	[-ka-]

Zone S

S.34	Lozi	[-ka-]

Future -NGA-

Zone A
| A.62a | Nugunu | [-ngà-] |
| A.72 | Ewondo | [-ngá-] |

Zone B
| B.31 | Tsogho | [-nga-] |

Distal or directional -KA-

Zone A
| A.11 | Londo |
| A.44 | Nen |

Zone C
C.30?	Ebudza-Molua
C.30?	Likata
C.30	Mabembe
C.31a	Loi
C.31s	Balobo
C.34	Sakata
C.37	Buja
C.44	Ebango (Bua)

Zone E
E.42	Gusii
E.51	Gikuyu
E.55	Kamba

Zone F
| F.21 | Sukuma |
| F.22 | Nyamwezi |

Zone G
| G.61 | Sango |
| G.64 | Pangwa |

Zone H
| H.21 | Kimbundu |

Zone K
K.11	Chokwe
K.13	Luchazi
K.14	Lwena
K.19	Nganguela
K.22	Lunda
K.31	Luyana

Future -(N)KO-

Zone C
C.35	Bolia	[-ngó-]
C.75	Kela	[-kó-]
C.61	Mongo	[-ngó-]
C.65	Ntomba	[-ngó-]
C.66	Ntomba	[-ngóó-]
C.71	Tetela	[-kó-]

Zone K (cont'd)
| K.33 | Kwangari |
| K.38 | Mbukusha |

Zone L
L.21	Kete
L.27	Bangubangu
L.31a	Luba-Kasayi
L.32	Kanyok
L.33	Luba-Shaba
L.35	Sanga
L.41	Kaonde
L.62	Nkoya

Zone M
M.21	Ndali
M.31	Ngonde
M.52	Lala
M.54	Lamba
M.64	Tonga

Zone N
N.21	Tumbuka
N.31	Chewa-Nyanja
N.41	Nsenga
N.43	Nyungwe
N.44	Sena

Zone P
P.10	Ndendeule
P.13	Kimatuumbi
P.22	Mwera
P.21	Yao

Zone R
R.11	Umbundu
R.21	Kwanyama
R.22	Ndonga
R.31	Herero

Distal -Co-

Zone C
C. 35	Bolia	[-tó-]
C.36g	Eleku	[-kó-]
C.61	Losikongo	[-yó-]
C.65	Ntomba	[-yŏ-]
C.66	Ntomba	[-to-]
C.68	Yenge (Mbole)	[-só-]
C.71	Tetela	[-to-]
C.81	Ndengese	[-ko-]

Zone D
| D.12 | Lengola | [-ko-] |
| D.14 | Enya | [-kó-] |

Zone S
| S.34 | Lozi | [-yo-] |

Languages apparently w/o future -KA-

Zone A
A.11	Londo
A.24	Duala
A.44	Tunen
A.53	Kpa (Bafia)
A.74	Bulu
A.81a	Bujeba
A.83	Makaa
A.84	Koozime
A.93	Kako

Zone B
B.11	Myene
B.43	Punu
B.51	Duma
B.61	Mbede
B.63	Ndumu
B.77b	Fumu
B.88	Lwel

Zone C
C.35	Bolia
C.36g	Eleku
C.37	Ebudja
C.45	Lebeo
C.65	Ntomba-Inongo
C.66	Ntomba-Bikoro
C.71	Tetela
C.75	Kela

Zone D
D.12	Lengola
D.13	Mituku
D.43	Nyanga

Zone E
| E.42 | Gusii |

Zone F
F.21	Sukuma
F.22	Nyamwezi
F.32	Rimi

Zone G
G.11	Gogo
G.23	Shambala
G.24	Bondei
G.42	Swahili
G.61	Sango

Zone H
| H.16k | Zoombo |

Zone J
J.11	Nyoro-Nkore-Kiga
J.15	Luganda
J.22	Haya
J.24	Kerebe
J.53	Shi
J.61	Kinyarwanda-Rundi

Zone K
K.33	Kwangari
K.38	Mbukushu
K.52	Pende
K.53	Kwezo

Zone L

L.21   Kete   L.22   Mbagani

Languages apparently w/o future -KA- (cont'd)

Zone L (cont'd)		Zone P (cont'd)	
L.23	Songye	P.31	Makua
L.31a	Luba-Kasayi	P.32	Lomwe

Zone M		Zone R	
M.14	Lungu	R.31	Herero
M.31	Ngonde		

Zone N		Zone S	
N.21	Tumbuka	S.10	Shona
N.31	Chewa-Nyanja	S.21	Venda
N.41	Nsenga	S.31	Tswana
N.44	Sena	S.32	N. Sotho
		S.33	S. Sotho
Zone P		S.34	Lozi
P.10	Ndendeule	S.41	Xhosa
P.21	Yao	S.42	Zulu
P.23	Makonde	S.43	Swati
P.25	Mawiha	S.44	Ndebele
		S.53	Tsonga

Languages apparently w/o distal -KA-

		B.52	Nzebi
Zone A			
A.24	Duala	Zone B (cont'd)	
A.31	Bubi	B.61	Mbede
A.34	Benga	B.63	Ndumu
A.42	Bankon	B.74	Boma
A.46	Nomaande	B.77b	Fumu
A.53	Kpa (Bafia)	B.85	Yansi
A.62a	Nugunu	B.86	Idzing
A.72	Ewondo	B.88	Lwel
A.74	Bulu		
A.75	Fang	Zone C	
A.81a	Bujeba	C.31r	Libinza
A.83	Makaa	C.32	Bobangi
A.84	Koozime	C.69	Ombo
A.93	Kako	C.83	Bushoong
Zone B		Zone D	
B.11	Myene	D.12	Lengola
B.31	Tsogho	D.13	Mituku
B.43	Punu	D.25	Lega
B.51	Duma	D.26	Binja-Sud

D.28	Holoholo
D.33	Nyali

Languages apparently w/o distal -KA- (cont'd)

Zone D (cont'd)			
D.43	Nyanga	Zone M	
		M.14	Lungu
Zone E		M.41	Taabwa
E.43	Kuria	M.42	Bemba
		M.61	Lenje
Zone F		M.63	Ila
F.23	Sumbwa		
F.32	Rimi	Zone P	
		P.23	Makonde
Zone G		P.25	Mawiha
G.11	Gogo	P.31	Makua
G.23	Shambala	P.32	Lomwe
G.24	Bondei		
G.36	Kami	Zone S	
G.42	Swahili	S.10	Shona
		S.21	Venda
Zone H		S.31	Tswana
H.16	Kongo	S.32	N. Sotho
H.31	Yaka	S.33	S. Sotho
		S.34	Lozi
Zone J		S.41	Xhosa
J.11	Nyoro-Nkore-Kiga	S.42	Zulu
J.15	Luganda	S.43	Swati
J.22	Haya	S.44	Ndebele
J.24	Kerebe	S.53	Tsonga
J.25	Kwaya		
J.31	Masaba		
J.32	Luyia		
J.42	Nande		
J.53	Shi		
J.61	Kinyarwanda-Rundi-Ha		

Zone K	
K.33	Kwangari
K.51	Mbala*
K.52	Pende
K.53	Kwezo

Zone L	
L.22	Mbagani
L.25	Budya
L.34	Hemba