**MOTION, TIME, AND TENSE:
ON THE GRAMMATICIZATION OF COME AND GO
TO FUTURE MARKERS IN BANTU**

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Many Bantu languages have grammaticized one or both types of motion verb – COME and GO – as future markers. However, they may differ in the semantics of future temporal reference, in some cases referring to a “near” future, in others to a “remote” future. This paper explores how the underlying image-schemas of such verbs in several languages – Bamileke-Dschang, Bamun, and Lamnso’ (Grassfields Bantu), Duala, Chimwera, Chindali, Kihunde, and Zulu (Narrow Bantu) – contribute to how the verbs become grammaticized in relation to the dual construals of linguistic time: ego-moving vs. moving-event.

1. Introduction.¹

So-called basic motion verbs² such as COME and GO often develop into tense and/or aspect markers, in particular, future markers (cf. Heine et al 1993, Bybee et al 1994). In some languages it may be COME that does so, in others GO, and in some, both. Though such grammaticization has been widely noted among the world’s languages, there has been little discussion of this process in Bantu languages. Mention of such grammaticization in Bantu appears only marginally in,

¹ This paper incorporates sections of a paper titled “Grammaticized futures from COME and GO: The contrasting cases of Zulu (Bantu) and Lamnso’ (Grassfields)” that was presented at the 30th ACAL held at the University of Illinois, Urbana-Champaign, July 2-5, 1999, as well as another titled “On the cognitive organization of tense/aspect systems in Bantu” presented at a conference on Bantu Grammar: Description and Theory, held at SOAS April 2006.

² The “basicness” of these motion verbs is questioned in the insightful study of COME and GO verbs by Wilkins & Hill 1995).

for example, Bybee et al. (1994) and Fleischman (1982); Emanatian's (1992) study of COME and GO in Chaga (E.62) may, in fact, be the only detailed analysis of motion verbs in a Bantu language. However, in her study, she concludes that grammaticized forms of these verbs reflect different aspect-like functions and not tense marking. Unlike these other studies, in this study I set out to compare the semantics of COME and GO future tense markers, particularly that of COME, in several Bantu languages – Zulu, Chimwera, Chindali, Duala, and the Grassfields languages Bamun, Bamileke-Dschang, and Lamnso'. The study examines to the extent possible what the inherent motion schemas are of COME and GO verbs in the language, and then correlates this with the kind of conceptual shift observed in grammaticization. Although it has not been possible to investigate in exhaustive detail the semantics of COME and GO verbs in each language due to lack of fully detailed information on each, the data available are strongly suggestive of the underlying image-schemas, providing the basic groundwork for understanding the differences in grammaticization. Two cogent questions arise: (1) why do COME verbs grammaticize in some languages as near future markers, in others as remote future markers?; (2) what difference is there between future markers derived from GO and COME, respectively?

2. Human Conceptualizations of Time vs. Linguistic Representations.

One of the most common principles underlying the mental conceptualization of time is that "time is a line", typically represented in a manner similar to that in the diagram below:

Frawley (1992: 337-8) succinctly states that "(t)he stereotypical, ideal time line is an entirely adequate model of linguistic time", events being located "on an unbounded, unidimensional extent that stretches outward from a central zero-point, the here-and-now". This vectorial view of the time line is reiterated by Cruse (2000: 274), who states that tense systems "are said to be vectorial, that is, they essentially indicate the direction along the time-line from speaking time to event time", and Chung & Timberlake (1985: 203), "(t)ense can be described in terms of a temporal dimension that is directional...". Comrie (1985: 2), like Frawley, also claims that "this diagrammatic representation of time is adequate

for an account of tense in human language”. However, he differs from the preceding view in stating that the timeline

does not directly represent the flow of time, i.e., whether the present moment is viewed as moving along a stationary time line, or whether time is viewed as flowing past a stationary present reference time point. ... they do not seem to play any role in the characterisation of grammatical oppositions cross-linguistically. [p. 7]

In contrast with Comrie’s view, I believe that different construals of the flow of time do play a significant role in the organization of tense systems and in the grammaticization of COME and GO verbs as tense markers. Hence, the view I adopt in this paper is that a unidimensional construal of time is neither adequate nor satisfactory for representing the organization and semantics of tense systems, that, in fact, it is the variable nature of the human construal of time relations – speaker moving through time vs. event (or time) moving past speaker – that is at the foundation of tense distinctions. Although these differing construals of time have been noted by many linguists over the past quarter century (Hewson et al. 2000, Lakoff & Johnson 1999, 1980, Emanatian 1992, Fleischman 1982, Traugott 1978, Fillmore 1975, Benveniste 1965), the analysis of tense systems in Bantu has, for the most part, continued to utilize “(t)he stereotypical, ideal time line (as) an entirely adequate model of linguistic time”. Emanatian (1992: 17), for example, although recognizing different construals of time, nevertheless asserts that the “moving-ego model” alone is sufficient to account for the use of COME and GO in Chaga. However, she does allow for the possibility that the different construals may, in fact, describe “different routes for ‘come’ verbs to become future markers”. I contend that, in order to obtain a fuller, richer understanding of how tense systems are conceptually organized, it is necessary to engage a model that incorporates the different potential construals of time linguistically: ego moving, in which the speaker perceives himself as moving metaphorically along a temporal path into the future, and moving event, in which events are perceived as moving past a stationary speaker. Humans may conceptualize time as a sequence of events lying along a “linear” stretch of time, as in Figure 1, but they can construe the relationship between speaker and event in two ways. In (2a) speaker construes EGO as moving (arrow) from past (on the left) to the future (on the right) along a stationary time line. On the other hand, as in (2b), speaker may construe the event, i.e., time, as moving, from the future (on the right) to the past, indicated by the arrow on the time line itself. In this view, the speaker is stationary. Following

Comrie (1985: 3), I leave open the question of whether time is conceptually bounded in either view; individual languages may conceptualize it differently.

Figure 1: Time Conceptualized as a Linear Sequence of Events (E)

Figure 2a: Time (& Event) Construed in Relation to Ego at Time of Speaking (S) – Ego Moving

Figure 2b: Time (& Event) Construed in Relation to Ego at Time of Speaking (S) – Moving Event

Traditional analyses of tense have utilized the conceptualization in Figure 2a as the basis for representing time and tense. Here, I incorporate both representations as integral to the analysis of tense systems and to the understanding of the grammaticization of COME and GO verbs. Because it is useful to be able to represent both construals of time simultaneously, they will be combined as in Figure 3, where the (a) line represents ego-moving the (b) line moving-time (rotation from horizontal is not significant, simply necessary to illustrate two lines at once).

Figure 3: Two Construals of Time Combined

Pasts or futures may be construed, and hence linguistically marked, in one view and/or the other. Although different representations of one underlying time line, each view is referred to throughout the paper with the term “time line” as well. Assuming this conceptual underpinning, I now turn to analysis of COME and GO verbs in half a dozen Bantu languages, beginning with Zulu.

3. Futures From Motion Verbs in Zulu.

In Zulu (S.42, South Africa), there are two future forms – typically realized as *-zo-* and *-yo-* – grammaticized from the motion verbs *-za* ‘come’ and *-ya* ‘go’ coalescing with the infinitival complement *ku*-ROOT. The difference between the two is not precise, but subjective; *-zo-* is generally perceived as more immediate, *-yo-* more remote.³

(1) *Grammaticized future from -za ‘come’: nearer future*

intombi i **-zo-**qeda umsebenzi wayo masinyane (Beuchat
 9.girl 9-F1-finish 3.work 3.her quickly 1966: 21)
 ‘The girl is going to finish her work quickly.’

³ The following abbreviations are used throughout the paper:

AGR	agreement	INT	intensive	PR	present
ANT	anterior	ImF	immediate future	PRT	particle
APP	applicative	IMP	imperative	PST	past
AUX	auxiliary	IMPF	imperfective	OPT	optative
CAUS	causative	INF	infinitive	Q	question marker
CON	consecutive	INTJ	interjection	R	reference time
COND	conditional	IT	itive	REC	reciprocal extension
DECL	declarative	LOC	locative	REFL	reflexive
DU	dual	MID	middle future	REL	relative
EX	excessive extension	NAR	narrative tense	RM	remote
F	future	NEG	negative	S	time of speaking
FOC	focus	NPst	near past	SP	subject prefix
FUT	future	PASS	passive	SUB	subordinator
FV	final vowel	PF	perfect	SUBJ	subjunctive
HOD	hodiernal past	PL	plural	VOC	vocative

Numbers refer to Bantu noun classes. 1S, 2S, 3S, 1P, 2P, 3P refer to person and number, singular and plural, respectively. F1, F2, F3 refer to nearer (F1) and more remote (F3) futures; P1, P2, P3 refer to nearer or more remote pasts.

u -zo-zi -funa	nini	izingubo?	(Taljaard &
2S-F1 -10 -want	when	10.blankets	Bosch 1988: 61)
'When will you want the blankets?'			

- (2) *Grammaticalized future from -ya 'go': more remote future*
ngi-yo -fika	ngalelonga	(Beuchat
1S -F2 -arrive	on that day	1966: 22)
'I will arrive on that day.'		

u -yo -li-thola	kanjani	ibhantshi?	(Taljaard &
2S-F2 -5 -obtain	how	5.jacket	Bosch 1988: 62)
'How are you going to get a jacket?'			

-zo- and -yo- appear to be fully grammaticized as future markers. Taljaard & Bosch (1988: 61) point out that they may retain their sense of physical motion, as in example (3), but this apparently is only the case in the full form with -za-ku- or -ya-ku- (Nhlanhla Thwala, p.c.).

- (3)
isalukazi	si -ya -ku -vakashela	edolobheni
9.old woman	9 -go -INF -visit	LOC.town
'The old woman is going to visit in town.'		

In order to arrive at an understanding of the semantic difference in use between the two future markers, it is necessary to investigate first the inherent cognitive structures of the underlying verbs. The examples in (4) illustrate the use of -za 'come'. The example in (4a) is appropriate when the speaker is at the market, indicating that -za is a deictic verb; hence, it inherently denotes motion to a deictic center. The sentence also indicates that a specific location – a goal – may be specified, although it is not obligatory, as shown by the sentence in (4b). Finally, (4c) demonstrates that -za does not encode as part of its meaning motion from a source; rather, the verb -suka 'come from' is required. These facts suggest that -za denotes two image-schemas, as shown in Figure 4, one that specifies the goal, one that does not.

- (4) a. **weza** emakethe (Audrey Mbeje, p.c.)
 3S.RM.come LOC.market
 ‘S/he came to the market.’
- b. uHugh Masekela **uyeza.** Kuphi? eChicago.
 Hugh Masekela 3S.PR.come where LOC.Chicago
 ‘Hugh Masekela is coming. Where? To Chicago.’
- c. **uyeza** usuka eSan Francisco.
 3S.PR.come 3S.go from LOC.San Francisco
 ‘he is coming from San Francisco’

Figure 4: **-(I)ZA ‘come’ = Motion to a DEICTIC CENTER**

The verb *-ya* ‘go to’ is not deictic; it does not indicate motion either to or from a deictic center. Rather, it requires specification of a locative goal, as in (5a), and, like *-za*, requires *-suka* ‘come from’ to specify a locative source of motion, as in (5b). Hence, we can conclude that *-ya* denotes a single image-schema, such as that in Figure 5.

- (5) a. **waya** emakethe (Audrey Mbeje, p.c.)
 3S.RM.go to LOC.market
 ‘S/he went to the market.’
- b. wasuka emakethe **waya** edolobheni
 3S.RM.go from LOC.market 3S.RM.go to LOC.town
 ‘S/he went from the market to town.’

Figure 5: **-YA ‘go to(ward)’ = Motion to a Location**

In contrast to the above two motion verbs, a third verb, *-hamba* ‘go, walk’ (6), implies motion alone, with no source or goal of motion encoded, as in Figure 6. This verb has not been grammaticized as a tense marker.

- Figure 6: -HAMBA ‘go’ = Motion Alone; No Specification of Source or Goal of Motion**

Figure 7: A Future Event E Situated “tomorrow” With Respect to Ego at S

A Zulu speaker may choose to mark this event with either of the future markers, choice depending on his or her sense of the proximity of the event. The speaker opts for use of *-yo-* to impart a sense of remoteness (Figure 8a), *-zo-* to impart a sense of nearness (Figure 8b).

Figure 8a: Construals of Future Event E in Relation to Ego – Ego-Moving

Figure 8b: Construals of Future Event E in Relation to Ego – Moving Event

The sense of remoteness attached to use of *-yo-* emerged from the image-schema embodied in the verb *-ya* ‘go’, motion to a location away from the deictic center at S, the sense of nearness from the image-schema embodied in *-za* ‘come’, motion approaching the deictic center. However, there is more to the semantics and organization of the tense marking systems such as that in Zulu. The sense of proximity, near or remote, arises not only from the difference in motion verbs, but also in the conceptual worlds they inhabit. Specifically, each location along the moving-ego time line constitutes a conceptual world – either proximal or distal, applying Traugott’s (1978) terminology – with respect to the speech event at S. That conceptual world in which the speaker perceives himself to be experientially active (i.e., cognitively proximal to the locus at S) is the privileged domain of the “here-and-now”; a world in which events are distal and subjectively excluded from the “here-and-(extended) now” is considered to be dissociated. I label these different domains the P- and D-domains, respectively, and represent them schematically by quadrangular planes, as in (9). Thus, a future event marked by *-yo-* is “remote”, even though it may actually occur relatively near the time of speaking (S), because it is situated in a conceptually dissociated world, located away from the deictic center. This interplay between motion verb and cognitive domain provides a rich model for understanding tense systems and grammaticization of motion verbs.

Traugott (1978) and Fleischman (1982) each proposed that COME verbs correlate with the moving-event time line and GO verbs with the ego-moving time line. The two Zulu motion verbs – *-za* and *-ya* – have grammaticized in a manner commensurate with their proposal. In becoming future markers, *-zo-* and *-yo-* no longer denote motion, either physical or temporal, of the formal subject of the verb, but rather, as Emanatian (1992: fn. 17) suggests, they relate to the semantics

of the verb within the clause as a whole, that is, their deixis is understood with respect to the speaker as reference anchor. Two motion verbs, then, can both denote futurity, but do so in quite different ways.

Figure 9: -yo- and -zo- as Futures in P- and D-Domains

4. Futures in Duala.

At the opposite end of the Bantu range from Zulu, both geographically and genetically, Duala (A.24, Cameroon) also exhibits futures derived from both COME and GO verbs. Although there are some differences from the underlying image-schemas of the motion verbs discussed above in Zulu, the data suggest that the situation in Duala is very similar.

There are (at least) three ways in which future reference may be expressed in Duala: (1) use of a present verb form, typically marked with *ma-* (Pr/F); (2) use of the auxiliary form *maya* to indicate an immediate future (FIm); and (3) use of the auxiliary form *mendé* (F3). Examples of each are presented in (7a)-(7c), respectively.

- (7) a. *Pr/F* na m'ándá mál póndá nípépé (Elessa & Diboussi
 I Pr/F-buy them time another 1977: 176)
 'I will buy them another time.'

- b. *ImF* a mayă nanga wăse (Ittmann 1939: 95)
 3S ImF lie down
 'Er will sich gerade niederlegen.'
 ('He will lie down' (imminent).)

c. FUT	a	mendé	sélé	wámse	wala	janda	(Ibid. 93)
	3S	FUT	do.first	hurry	INF.go	INF.buy	
		dā	ō	do			
		food	LOC	market			

‘Er wird schnell auf den Markt gehen, um Nahrungsmittel zu kaufen.’ (‘He will go quickly to the market to buy food.’)

Kuo	a	mende	nde	pɔ	kiele	(Epée 1976: 225)
Kuo	3S	FUT	FOC	come	tomorrow	

‘Kuo will come tomorrow.’

The imminent future (ImF) marker *maya* derives from the present tense form (prefix *ma-*) of the verb *ya* ‘come’, which, according to Ittmann (1939: 95), “drückt die unmittelbar bevorstehende Handlung aus (“expresses imminent action”)), illustrated by the example in (7b). In contrast, the (non-imminent) FUT form *mende* (7c) derived from the present tense form of an obsolete GO verb,⁴ *ende* (Ittmann 1939: 93), common throughout Bantu.

Although limitations on data have precluded an examination in exhaustive detail of the semantics of the motion verbs COME and GO in Duala, the data available do provide the basis for determining underlying image-schemas. There are three verbs for COME in Duala, *wa*, *ya*, and *pɔ*. All indicate motion toward a deictic center; they differ in whether or not they permit specification of the source or goal of the motion.

The verb *wa* means ‘come (away) from’ a source of motion, as in the examples in (8). It does not co-occur with a specified goal of the motion. Hence, one can conclude that it has an image-schema as in Figure 10, requiring specification of a source location, with the deictic center understood from context.

(8)	na	ma-wá	ndé	ó	bonendálé	(Elessa & Diboussi
	1S	PR -come from	FOC	LOC	Bonedale	1977: 104)

‘Je viens de Bonendale.’ (‘I come from Bonendale’)

	na	ma-wa	ó	mundi	(Helmlinger 1972: 505)
	1S	PR -come from	LOC	village	

‘Je viens du village.’ (‘I (have) come from the village.’)

⁴ Dinkelacker (1914) and Helmlinger (1972) both indicate that it still exists as a verb in the Pongo dialect of Duala.

d. mó ná papá ngando á ye ebiámu (Elessa & Diboussi
3S that Father Ngando 3S come.SUBJ evening 1977: 42)
'He said that Father Ngando should come this evening.'
(*'Lui (il dit) que papa Ngando vienne (à la maison) le soir.'*)

- e. we té momé, yă wón (Ittmann 1939: 182)
 2S.be if man come there
 ‘Bist du ein Kerl, so komm daher.’ (Der Sprecher ist nicht in seinem Gehöft)
 (‘Since you’re a chap, come along there (to my place).’ (The speaker is not at his farm.))

What differs between *ya* and *pɔ* is the potential with *pɔ* to express overtly a location other than deictic ‘me’, ‘here’, or ‘home’. Thus, we see in the first three examples of (11) sentences equivalent to those observed for *ya* in which the deictic center is understood as the location of the speaker of the utterance. However, in (11e, f) we have two examples expressing a location as a deictic center – the class and the shore, something that *ya*, apparently, does not permit.

- (11) a. nja a poi (Epée 1976: 217)
 who 3S come.PF
 ‘Who came?’
- b. Kuo a baise Njo nga a mende pɔ (Ibid. 174)
 Kuo 3S ask.PF Njo SUB 3S FUT come
 ‘Kuo asked Njo if he was going to come.’
- c. a mende pɔ wón (Ittmann 1939: 181)
 3S FUT come here
 ‘Er wird hierherkommen (wo der Redende und andere Leute sind).’
 (‘He will come here’ (where the speaker and other people are).)
- d. ó táta tilea mbā, kó o pói ó mboa (Ibid. 95)
 2S OPT write to me when 2S come.PF LOC home
 ‘Schreib mir (bitte), wenn du zuhause bist.’
 (‘Please write me when you have arrived home.’)
- e. tɔnja nu sukanɛ pɔ o klassi a makokisabe (Epale
 whoever this one be last come LOC class 3S PR.punish.PASS 1973: 51)
 ‘Anyone who comes late to class will be punished.’

- f. son a póndá, kɛ o poi ó dibó (Helmlinger
 little of time well then 2S come.PF LOC shore 1972: 204)
 ‘Dans un peu de temps (alors) tu sera arrivé au rivage.’
 (‘In a short time, well then you will have come to the shore.’)

Assuming the above state of affairs to be the case, then the two verbs would have the following image-schemas:

ya ‘come (to)’

pɔ ‘come (to); arrive’

The verb *ya* simply indicates motion to a deictic center. The verb *pɔ* indicates not only motion to a deictic center but also contact, i.e., arrival (represented by the vertical bar in bold), at the location of the deictic center. Moreover, *pɔ* permits specification of the location of the deictic center.

The issue then is what factor was crucial in determining affinity for grammaticization of the COME verb. Duala *ya*, like Zulu *-(i)za*, encodes for an image-schema that indicates only motion to(ward) a deictic center. This suggests that it is the simplest image-schema, the one least encumbered by additional semantic features, that underlies the choice for grammaticization.

We may postulate, then, that Duala *ya*, like Zulu *-za*, has grammaticized as a marker denoting temporal motion along the moving-event time line toward the deictic center at S. Such grammaticizations acquire the sense of an immediate future, derived from the sense of an event approaching, hence near, the deictic center.

There are also two GO verbs currently in use in the language – *ala* and *dangwa* (Helmlinger 1972) – while the verb *ɛndɛ*, from which the future tense marker derives, no longer exists as an independent verb (except in the Pongo dialect). Although it has not been possible to determine now what the underlying image-schema was for *ɛndɛ*, a comparison of the current verbs is suggestive. The verb *ala*, according to Dinkelacker (1914: 1), means ‘go (away); depart; leave’, suggesting motion away from a deictic center, a common presumption about GO verbs. As Wilkins & Hill (1995) and Botne (2005) have demonstrated, however, GO verbs do not necessarily encode for a deictic center. Rather, as I propose for the case here as well, the deictic center may act as a default source if none is ap-

parent from the context. As the examples in (12a-c) illustrate, the goal of the motion may be specified, but the motion need not have begun necessarily at the deictic center, although that may be the default interpretation.

- (12) a. ba ma-pula wala o nkongsamba wenge (Epale 1973: 75)
 3P PR.want INF.go LOC Nkongsamba today
 ‘They want to go to Nkongsamba today.’

- b. alá nenge dibato wáne (Ittmann 1939: 182)
 go put cloth there
 ‘Geh und lege das Tuch dorthin (wohin der Finger zeigt).’
 (‘Go and put the cloth there’ (where the finger is pointing).)

- c. alá ó wúma kílo nyé n̄ (Elessa & Diboussi 1977: 168)
 go LOC place scales 3S.be PRT⁵
 ‘Va là où la bascule se trouve.’
 (‘Go over there where the scales are.’)

- d. mbá na m’ála (Ibid. 66)
 me 1S PR-go away
 ‘Moi, je m’en vais.’
 (‘Me, I’m going (away).’)

The verb *dangwa* (Dinkelacker 1914: 14), in contrast, means ‘go; travel; walk’, suggesting that motion alone is salient, supported by the examples shown in (13).

- (13) na dango lambo ka kilometa itanu (Epale 1973: 68)
 1S go.PF about kilometer five
 ‘I trekked about 5 kilometers.’

- dangwa na yɔ (Epale 1973: 73)
 walk.IMP with quiet
 ‘Walk gently.’

⁵ The particle *nɔ* typically follows the verb when there is a relative or interrogative pronominal complement (Elessa & Diboussi 1977: 82). No other contexts are described.

These observations lend themselves to the following image-schemas for the two verbs (parentheses around the bullet indicating the default interpretation of deictic center):

ala 'go to/away'

dangwa 'go; walk; travel'

So, how does *ende* fit in? Both *ala* and *dangwa* are innovations,⁶ apparently replacing *ende*. We may presume that *ende* was the sole GO verb at one time. Undoubtedly, *ende* derives from Proto-Bantu *-gènd- 'walk, travel; go (away)' (Guthrie 1971: 127), common across the entire Bantu domain. In many languages, and several discussed later in this paper, the reflex of *-gènd- appears to denote either simple motion alone, with no specified source or goal of motion, as with *dangwa*, or motion to a specifiable location, as with *ala*. Given these circumstances, it seems reasonable to assume, then, that *ende* would have had the following underlying image-schemas:

As the sole GO verb, *ende* would have been available for metaphorical extension, couched in the image-schema of moving to a (temporal) goal away from the (default) deictic center at S. In contrast to *ya*, this use can be projected onto the ego-moving time line, i.e., ego moving away from the temporal deictic center toward another domain, a more remote future. Hence, the temporal roles of *ende* and *ya* can be schematized as in Figure 11.

⁶ The verb *ala* likely comes from Proto-Bantu *-gàd- 'go/come back', which has clearly shifted its image-schemas from its original meaning. Compare, for example, PB *-gàb- 'divide', which has as a reflex in Duala *aba* 'share, divide'. The verb *dangwa* is either an innovation or a borrowing, not generally found in Bantu.

Figure 11: *endé* and *ya* Futures in the P- and D-Domains

I have proposed here that *mendé* projects the named event into a remote future domain along the ego-moving time line. Further support for this claim comes from the use of the *mendé* future in contrast with the PrF marked with *ma-*. In (14) we see several examples of the present form used with future reference; in (15) comparable sentences with the *mendé* future. What stands out here is that the *ma-* future often occurs when there is a sense of definitive or certain action, which one would expect for marking in the P-domain; the *mendé* future occurs when the interpretation is less definite, less certain, as expected for events situated in the D-domain. The proposal that the *mendé* future projects an event into another domain is reinforced, in particular, by the example in (15d) in which a new state of affairs will begin at some point before three days are up.

- (14) a. na **ma** -timbisele yen ebale modi mo (Etia
 1S PR -return sth. this borrowed money month one 1962: 53)
 'Je vous la rendrai dans un moi.'
 ('I will repay (you) the money in one month.')
- b. bwambo bo nanga; na **ma** -bele sango a muto (Etia
 case AGR sleep 1S PR -summon father of woman 1962: 50)
 'L'affaire est ajournée; je ferai convoquer le père de cette femme.'
 ('The case is adjourned; I will summon the father of that woman.')
- c. o si ben moni, o **m** -andane Kuo nje? (Epée
 2S NEG have money 2S PR -buy from Kuo what 1976: 86)
 'You have no money; what will you buy from Kuo?'

- d. 6ê makwási ké di sí **ma**-pɔ éŋge (Elessa & Diboussi
 be prompt otherwise 1P NEG PR -come today 1977: 182)
 ‘Sois rapide sinon nous n’arrivons pas aujourd’hui.’
 (‘Be quick, otherwise we won’t arrive today.’)

- (15) a. nje e ma-bolɛ mba na dubɛ na o (Etia 1962: 53)
 what it PR -give me 1S believe that 2S
mendɛ timbisɛɛ mba mun moni o mbusa modɪ mɔ?
 F3 return sth. me the money LOC back month one
 ‘What would lead me to believe that you will repay my money in a
 month?’

- b. na si bi nga a **mendɛ** pɔ (Epée 1976: 161)
 1S NEG know SUB 3S F3 come
 ‘I don’t know if he’ll come’

- c. na mendɛ tɛ bɛnɛ moni, na **mendɛ** pɔ (Ibid. 271)
 1S F3 if have money 1S F3 come
 ‘If I have money, I will come.’

- d. bíáná mínyá míláló, a **mendɛ** ɓotea (Elessa & Diboussi
 before days three 3S F3 begin 1977: 154)
 ó senga ɓoam
 INF feel good
 ‘D’ici (avant) trois jours, il commencera à bien se sentir.’
 (‘Before three days (are up), he will begin to feel better.’)

This difference between the two futures can also be noted in use in conversation. In the following dialogue, for example, Kiki plans to have her hair braided in the afternoon at a friend’s house. The activity is perceived as “definite” and is narrated in the *ma*-future. However, Ekedì proposes that she will do it instead, a different state of affairs, and so uses *mendɛ* (Elessa & Diboussi 1977: 134).

- (16) *Ekedì*: A Kikî, njé ó **mā**-ɓola nó mûn muésé ē?
 VOC Kiki what 2S PR -do this afternoon Q
 ‘Kiki, que fais-tu cet après-midi?’
 (‘Kiki, what are you doing this afternoon?’)

Kiki: Mûn muésé, na m'alá ó mbó'á dikóm lâm
 this afternoon 1S PR-go LOC house friend my
 ná á pende mbá
 that 3S braid hair me
 'Cet après-midi, j'irai chez mon amie (pour) qu'elle me tresse.'
 ('This afternoon, I'm going to my friend's house to braid my hair.')

Ekeḍi: O engēle mbá, na mēndé pō ó penda oă
 2S wait me 1S F3 come INF braid hair you
 'Attends-moi, je viendrai te tresser.'
 ('Please wait for me; I will come braid your hair.')

These data from Duala provide support for the analysis developed here, i.e., that there are different domains realizing different conceptualizations of the future. Hence, the Duala futures and domains can be schematized as in Figure 12.

Figure 12: Duala Futures in the P- and D-Domains

5. Bamun.

Bamun (Grassfields Bantu, Cameroon), also called Shəpamən, is a Grassfields Bantu language classified in the Momo branch. Like the narrow Bantu languages Duala and Zulu, it too has two future tense markings derived from COME and GO verbs. And like Duala and Zulu, as well, the COME verb has grammaticized as a near future, the GO verb as a more remote future. The examples in (17) illustrate the near future (F1), marked by *na* (*n*)*tuɔ* (note that *na* may not appear at all (17a) or has coalesced with the first singular marker *ma* (17b)).

- (17) a. mǎ ntúá fǎ̀tə́ mú pónə kǎ̀? (Matateyou 2002: 88)
 1S F1 light fire with what
 ‘Avec quoi vais-je allumer le feu?’
 (‘What am I going to light the fire with?’)
- b. maa ntúá wuɔn ɲkúfá? fǒmnjə (Ibid. 97)
 1S.F1 F1 go LOC.Bafoussam tomorrow
 ‘J’irais à Bafoussam demain.’
 (‘I am going to go to Bafoussam tomorrow.’)
- c. puá na ntúá ɲkuát ngǎn ɲgûrè fǒmnjə (Ibid. 101)
 1P F1 receive guest important tomorrow
 ‘Nous allons recevoir un grand hôte demain.’
 (‘We are going to receive an important guest tomorrow.’)
- d. mə nā nzie mǎngáka ləm na ntua pə kité ... (Ibid. 75)
 1S PR say because brushfire F1 RFLX put out
 ‘Je dis ceci parce que lorsque le feu de brousse va s’eteindre,...’
 (‘I say this because, when the brushfire dies out,...’)

The *na* in this construction derives from the present tense marker combined with the verb *tuə* ‘come’. That *tuə* has grammaticized is evident from its co-occurrence with verbs of motion, as in (18b, c), and its occurrence without *na*, as in (18d).

- (18) a. maa ntúá (Matateyou 2002: 179)
 1S.PR come
 ‘Je suis en train de venir.’ (‘I’m coming.’)
- b. mə ná ntúá ntúá (Ibid. 92)
 1S F1 come
 ‘Je viendrai.’ (‘I’ll come.’)
- c. maa ntúá wuɔn ɲkúfá? fǒmnjú (Ibid. 97)
 1S.PR F1 go LOC.Bafoussam tomorrow
 ‘J’irais à Bafoussam demain.’
 (‘I am going to go to Bafoussam tomorrow.’)

- d. mǎ túǎ líghet kǎǎ? (Matateyou 2002: 174)
 1S F1 place.do what
 ‘Que vais-je faire (là)?’ (‘What am I going to do (there)?’)

The verb *tuǎ* ‘come’ denotes motion toward the deictic center, whose location may, as in (19), or may not be specified. It appears that it does not permit specification of some location as the source of the motion; this meaning can be conveyed with the verb *lǎǎ* ‘come or go away from’, as in (20).

- (19) a pí ghet yi kǎǎ ntúǎ ma nsié? (Matateyou 2002: 73)
 it.is ?? make this one what come LOC ground
 ‘Qu’est-ce qui me fera venir à terre?’
 (‘What will make me come to the ground?’)

- (20) món úǎ íṅkǎ ndǎ lí? ná lǎ? na má duǎlá
 child who be difficult begin poison PR come from FOC LOC Duala
 ‘Le fils belliqueux qui crée tout ce désordre vient de Douala.’
 (‘The difficult child who created this mess comes from Duala.’)

These observations lead to the conclusion that *tuǎ* encodes for two underlying image-schemas, as in Figure 13, one that identifies specifically the location of the deictic center, i.e., the goal, one that does not. As in the cases of Zulu and Duala, it is the simpler image-schema of motion to a deictic center that underlies the grammaticization of *tuǎ* as a near future marker, again from the metaphoric sense of an event drawing nearer in time.

Figure 13: *tuǎ* ‘come’ Image-Schemas

The more remote future (F2) is marked by (*na*) *ndǎǎ*? or its variant *lǎǎ*?⁷ several examples of which are provided in (21). This morpheme clearly derives from the present marker *na* plus the verb *ndǎǎ*?, which means ‘come from; go away’

⁷ The *na* is also transcribed as *naa* by Westermann & Bryan (1970: 132), as *na?* by Schmitt (1963: 94).

(Matateyou 2002).⁸ The sense of ‘come from’ can be observed in (20) above and (22), the sense of ‘go away’ in (21a & 23)).

- (21) a. mə lɔʔ ghet ná kā mə ndɔʔ tɹ mǔʔ (Matateyou
1S F2 do how 1S go away LOC fire 2002: 75)

‘Comment ferai-je pour échapper à ce feu?’

(‘How will I escape from this fire?’)

- b. ŋkamə mə ndɔʔ ghet ná kā mə ntəm tɹ mǔʔ (Ibid.)
me also 1S F2 do how 1S exit LOC fire

‘Comment ferai-je moi aussi pour m’en sortir de ce feu?’

(‘Me too, how will I get out of this fire?’)

- c. mə lɔʔ pə mēē ŋā yʉə njínjí nguon nsəbî (Ibid.)
1S F2 PF? arrive there where smoke go ??

ŋku tutú, na ndɔʔ ŋget nā nəʔ

LOC ear? F2 do what

‘Lorsque je serai arrivée là où la fumée est épaisse, que ferai-je?’

(‘When I arrive there where the smoke is thick, what will I do?’)

- (22) á lɔʔ yaʔ (Ibid. 86)
3P come from where

‘Elles (tomates) viennent d’où?’

(‘Where do they (tomatoes) come from?’)

- (23) a. lǔ puə lɔʔ (Ibid. 176)
move forward 3P go away

‘Avance, que nous partions.’

(‘Proceed so that we (may) leave (go off).’)

- b. tə lóʔ (Ibid. 175)
1DU go away

‘Allons.’ (‘Let’s go (off).’)

⁸ Matateyou (2002) is seemingly inconsistent in transcribing the vowel sometimes as [o], sometimes as [ɔ]. Both Schmitt (1963) and Westermann & Bryan (1970) transcribe it as [ɔ]. I have left it as [o] when Matateyou has done so in the examples.

The sense of motion away noted here finds support in two areas outside of Bamum. First, in another Grassfields Bantu language of the Momo branch – Mundani – we find a cognate verb *-lɔʔɔ* ‘leave’ (Parker & Durrant 1990), which has also grammaticized as a future marker. Second, Mukarovsky (1977: 258) reconstructs for what he calls Proto-Western Nigritic a root **lù-* ‘go out’ (as in Yoruba *lɔ* ‘go, leave, depart’) which has a cognate counterpart in Benue-Congo **ru*. The Bamum and Mundani verbs would appear to be reflexes of this etymon.

Although the sense of motion away is prominent in this verb, especially significant seems to be the sense of “breaking contact” associated with it. Both Matateyou (2002) and Ward (1937-39) also indicate that it has the sense of ‘get up’, as in (24), which further suggests separation and break in contact.

- (24) *loʔɔ* *tutú* (Matateyou 2002: 175)
 get up standing
 ‘Lève-toi.’ (‘Stand up.’)

Note, in addition, that the Bamum verb can also be used to mean ‘go (away) to’, that is, a goal of the motion may be specified, as in (25).

- (25) *puə* *lóʔ* *ŋkúndum* *tén* (Matateyou 2002: 175)
 1P go away LOC market
 ‘Allons au marché.’ (‘Let’s go (off) to the market.’)

These data and observations suggest three underlying image-schemas for the verb *lɔʔ*:

Each image-schema encodes contact with (bold bar) and motion away from an implicit source, which must be made explicit if the motion is toward a deictic center. The goal of the motion may be explicitly specified (bold circle representing source) when motion is not toward the deictic center.

There is a second and very similar GO verb in Bamum, *wuón*. It differs from *lɔʔ* in that it can refer to simple motion with no source or goal implied, as in (26), or it may specify the goal of the motion, as in (27). It appears that it cannot specify a source of the motion.

- (26) a. í pí wuɔn má kwɔp ε (Matateyou 2002: 102)
 3S PF? go LOC lands INTJ
 ‘Il avait voyagé dans les pays du Sud.’
 (‘He traveled in the lands to the south.’)
- b. á pɔ́nâ ú ŋguɔ nyi nâ? (Ibid. 88)
 it is what 2S go voyage how
 ‘Qu’est-ce qu’il y a? Vas-tu voyager?’
 (‘What’s up? Are you going on a trip?’)
- c. i mfo i nə mɔŋgɔp mbiʔi ŋgwɔn nɔabi ŋko ndɛɛ (Ward 1937-39: 438)
 it thinks it chicken take go put in nest
 ‘It (vulture) thinks it (toad) is a chicken (and) takes (it and) goes (and) puts (it) in the nest.’
- (27) a. î wuɔ́n tʰɔ́tú ε (Matateyou 2002: 102)
 3S go prayers INTJ
 ‘Il est allé à la prière.’ (‘He went to prayers.’)
- b. ǔ ná ntúɔ́ wuɔn kú didango (Ibid. 164)
 2S F1 go LOC Didango
 ‘Tu iras à Didango.’ (‘You will go to Didango.’)

These findings suggest, then, two underlying image-schemas for *wuɔ́n*, which are the non-deictic equivalents of those postulated for *tuɔ́* ‘come’ above.

The relevant difference between the two GO verbs appears to be in the feature “break contact” in conjunction with motion away. This meaning was metaphorically applied to temporal relations, specifically to ego moving to a future domain with respect to time. We have, consequently, the mapping of the two motion verbs to the two time lines as in Figure 14.

Figure 14: Bamun Futures in the P- and D-Domains

6. COME as Crastinal Future in Bamileke-Dschang.

In Bamileke-Dschang (Grassfields Bantu, Cameroon), like Bamun a Grassfields language of the Mbam-Nkam sub-group, the verb *lè-šɛʔ* ‘to come’ has grammaticized as a “near” future marker, as shown by the example in (28), but significantly it is a crastinal,⁹ or tomorrow, future. It occurs in conjunction with the simple proximate future marker *á* as do all futures in the language. Unlike the other languages examined so far, the verb for GO has not grammaticized as a tense marker. Although there is no data available to determine precisely the underlying image-schema of *šɛʔ*, it is clear that it indicates motion to a deictic center. However, the “here” of a deictic center can be interpreted very narrowly – this very spot where the speaker is located – or more broadly – for example, “this town”, “this state”, “this country”. Temporally, as well, a language may interpret the “now” of the deictic center narrowly, as in Zulu, Duala, and Bamun, where it is the “temporal location” of the speaker – the time of speaking – that acts as the deictic center, or it may be a more expansive time unit. In Bamileke-Dschang, it is TODAY which acts as the deictic center, not the speech locus at S; hence, the time associated with the motion to the deictic center is the comparable, relevant time unit, in this case “tomorrow”, the crastinal interpretation, as in Figure 15.

⁹ From Latin *crastinus* ‘of tomorrow’, analogous to hesternal < Latin *hesternus* ‘of yesterday’.

- (28) àà 'šù?é tánj
 he-F1 F3 bargain
 'He will bargain (tomorrow).'

(Hyman 1980: 228)

Figure 15: šù? as a Crastinal Future

In Bamileke-Dschang, šù? is not an absolute tense marker denoting reference solely with respect to the deictic center. Rather, as Hyman (1980: 229) demonstrates, it is relative, and may be interpreted with respect to a different reference locus. Thus, the sentence in (29) may be interpreted in two ways.

- (29) *Absolute reference vs. relative reference*
 à kè 'lé ńǵé òò 'šù?é žǻ'ó 'mó
 he P3 say that you.F1 F3 see child

Figure 16a: Absolute Reference

'He said (yesterday) that you will see the child (tomorrow).'

Figure 16b: Relative Reference

‘He said (yesterday) that you will see the child (today).’

First, it may have absolute time reference as its default reading, in which the event SEE is situated in the time unit of tomorrow, as noted above and illustrated in Figure 16a. On the other hand, it may be interpreted relative to the reference locus (R) established by ‘said’, which occurred yesterday, as in Figure 16b. In this case, the reference anchor is the time of speaking yesterday, and the event is, consequently, understood to be situated in the adjacent time unit, which would be today.

That the grammaticized form $\acute{s}\acute{u}?$ should refer to tomorrow is not odd. First, today is treated as the temporal deictic locus, and the grammaticized verb has come to refer to the immediately adjacent time unit. Second, we find that a comparable kind of grammaticization has occurred in other languages with the motion verb GO. Such a situation exists in Mbili, also a member of the Mbam-Nkam sub-group of the Grassfields Bantu languages like Bamileke. Like Bamileke, as well, it has numerous tense distinctions – four pasts, a present, and four futures. The hesternal past is marked by *gé*, derived from the verb ‘go’. Schematically, this would appear as in (30). Though not apparent in modern Bamileke-Dschang, the hesternal past marker *-ke-* most likely derived from an original Proto-Niger-Congo GO verb **ka*.¹⁰ If so, then it would constitute the hesternal temporal counterpart to the crastinal $\acute{s}\acute{u}?$.

¹⁰Mukarovsky (1976: 167) lists reconstructions of **ka* and **kya* for Proto Benue-Congo, citing Williamson & Shimizu (1968). Although there appears to be no extant reflex of this etymon meaning ‘go’ in modern Bamileke, it seems quite plausible that **kya* (or **ka*) grammaticalized as hesternal past *kè*. Compare, for example, PB **-kúéd-* ‘go up’ becoming Bamileke-Fefe *n-kó?* (Williamson & Shimizu 1968: 246, 248).

- (30) *mɪ gə ləgə (ɪ)m bvɛ ndəgə* (Ayuninjam 1998: 269)
 1S P2 DECL LNK build house
 ‘I (yesterday) built a house.’

Figure 17: Schema of Mbili *gé* Grammaticized as a Hesternal Past

In Bamileke-Dschang, then, a COME verb has grammaticized as a crastinal tense marker lying along the moving-event time line in the P-domain; possibly, as well, a GO verb grammaticized as a hesternal past. However, COME verbs do not always grammaticize this way. We turn now to consider two cases in which COME grammaticizes as a remote tense along the ego-moving time line, those of Lamnso' and Chimwera.

7. COME in Lamnso'.

Lamnso' (Grassfields Bantu, Cameroon), like Bamileke-Dschang, is a Grassfields Bantu language, but part of the Ring sub-group. Here, too, the verb COME has grammaticized as a future tense, as shown in examples (31)-(34) illustrating future uses of *wiy* 'come' (data from author's notes when not cited otherwise).

- (31) a wòsò kù rəsi dzə kesò kirə? kimò?ón bèn,
 ? you&I must? constantly stay our place one ?like-this
 à wíy lò, e yèe le?
 we COME go away and do what?
 ‘Now that we must always be at one place, what will we do?’¹¹
- (32) wun kù wíy yen a mo wù wíy dzəə wan, e lìy
 3S INT COME see ? how 3S COME give birth child and raise
 ‘She will see how she will give birth and raise a child.’¹²
- (33) wùn wun sà wíy yèe sho a?
 with one one ? COME do what with it?
 ‘How shall one deal with it?’¹³
- (34) àà ta? fó yuyri kífá ... á wíy yii, á sən
 ?2S want ? kill thing 2S COME do 2S strain
 kisən, e sáy njám é yì njím kijun
 water passed through ashes and sharpen axe ? ? sharp good
 ‘If you want to kill (the) thing... you will have to make potash
 and sharpen (your) axe well.’¹⁴

This use of *wíy* as future tense marker contrasts with the simple future tense marked by *yî*. The contrast between the two sentences in (35) and (36) suggests that *yî* represents a subjectively more immediate future, *wíy* a more distant, and hence, uncertain, future.

¹¹Example from the story *Kingàn ké jwi wùn kibév ki* ‘The visit of the dog and the billy goat’ by Marius Shadzəka [Dzəm] (*How to Read and Write Lam Nso*, Karl Grebe, SIL 1989, p. 59).

¹²Example taken from the story *Wànyèètó wùn à Jwi, à mboò* ‘The anteater, the dog, and the porcupine’ by Marius Shaadzəka [Dzəm] (*Vimfêr ve Wànyèètó*, Karl Grebe (ed.), SIL 1989, p. 6).

¹³Example from the story *Lìywàn sə nta’ Wànyèètó* ‘The babysitter who took Anteater’s chair’ by Bernard Dor [Taaba’] (*Vimfêr ve Wànyèètó*, Karl Grebe (ed.), SIL 1989, p. 8).

¹⁴Example taken from the story *Wán woo ngaà kây* ‘The child who owned a rat’ by Angelica Shee [Nsa’me] (*Metùitiy I*, Karl Grebe (ed.), SIL 1989, p. 29).

- (35) m **yĩ** dũ fẽẽ lɛn? ‘Where will I go now?’
 1S FUT go where now
- (36) m **wiy** dũ fẽẽ? ‘Where will I go?’ (uncertainty)
 1S COME go where

As with the previously discussed languages, it is instructive to consider the image-schemas associated with *wiy*. The examples in (37) demonstrate that, unlike Zulu *-za*, for example, *wiy* ‘come’ may encode not only a goal (37a), but also the source of motion (37b), or neither (37c).

- (37) a. wukì **wiy** way
 3S HOD come market
 ‘S/he came to the market (earlier in the day).’
- b. wu kì **wiy** fò way
 3S HOD come from market
 ‘S/he came from the market (earlier in the day).’
- c. á dzə m **wiy** wòsò á
 can 1S come 1S&2S Q
 ‘Can I come visit you?’

These data suggest, then, that *wiy* represents potentially three different image-schemas, as in Figure 18. In each case, the verb encodes a deictic center. Additionally, either the goal or the source may be identified, but apparently not both at the same time. Hence, the bare verb with a locative complement indicates the goal of the motion, whereas the addition of *fò* ‘from’ indicates that the location is to be understood as the source of the motion.

Figure 18: **WIY ‘come’ = Motion To a DEICTIC CENTER, To (and Potentially, From) a Specified Location**

Although the deictic center may be the location of either of the discourse participants, as illustrated by the examples in (37), it more typically appears to be the most salient locus of activity, as shown by the sentence in (38) and suggested by that in (39). In (38), it is the chief's location that is treated as the deictic center; in (39), which appears ambiguous between a physical and temporal reading, CUTTING THE BUSH is more salient than the location of the speaker and, again, acts as the deictic center.¹⁵ While the location of salient characters or activities may serve as the deictic center in narrative contexts in many languages, Lamnso' does this in contexts in which neither Zulu nor English would typically do so. For example, the counterpart in Zulu to the Lamnso' examples, illustrated in (40), shows that it is *-ya* 'go' that would be used in the same context. Significantly, then, Zulu appears to accord more salience to the location of participants (i.e., speaker and/or hearer) in terms of choice of deictic center, Lamnso' more to the location of focal activities.

- (38) mo wú ba' tin bey, e nèn wìy fo mbìy,
 as 3S gather like this ? then come LOC front,
 wùn fòn shíy
 3S.with chief stay the night
 'When he had gathered them like this, he went ahead to visit the chief.'

- (39) wú nèn sùúy jii, wùn baá wìy tìn á kighin
 3S and then say that 3S-& leopard COME cut ? bush
 'He then said that he and leopard would (go) cut the bush.'¹⁶

¹⁵One reviewer criticized the discussion of deixis here in stating the following: "It is self-evident that the 'locus of CUTTING THE BRUSH' functions as deictic center. The question is why." Why a language permits something to behave as a deictic center is an interesting question, but not one that is pertinent to the issue addressed here; it is simply a convention of Lamnso' discourse.

¹⁶Example taken from the story *Wànyeètó wùn Baá tìn Kighin* 'The anteater and the leopard make a bush fire' by Patrick Siiyatan [Taakiwuv] (*Vimfêr ve Wànyeètó*, Karl Grebe (ed.), SIL 1989, p. 21).

(40) *Zulu*

waqhubeka waya nkosini (Audrey Mbeje, p.c.)
 3S-RM-go.ahead 3S-RM-go.to LOC-king-LOC
 ‘He went ahead to the king.’

→ O

The “remote” meaning associated with the use of *wiy* (compare (36)) and analysis of the image-schemas underlying *wiy* suggest that the *wiy* future situates the event along the ego-moving time line and, specifically, in the future D-domain, as in Figure 19. The reason for this is the following: *wiy* shifts the deictic center to a locus situated in the future toward which the speaker, located at the temporal source of motion, metaphorically moves. The simple future *yĩĩ* situates the event in the future of the P-domain. Note that *yĩĩ*, itself, does not derive from a motion verb. In the domain model we are considering, conceptualization of time as moving or static provides motivation for understanding how motion verbs grammaticize, but does not require that each expanse of the time line be marked by a motion verb. Hence, *yii* marks that expanse of futurity in the P-domain even though it apparently does not derive from a motion verb.

Figure 19: Lamnso’ Futures

As with Zulu, there are two GO verbs in Lamnso’, *ghán* ‘walk, go’ and *dú* ‘go to’. *Ghán* seems to have what Fleischman (1982) and Emanatian (1992) label a prospective aspectual function – that is, it is that temporal stance which views the event as developing out of a “present world state” (Fleischman 1982: 96) and, as Emanatian (1992: 14) suggests, encompasses nuances such as imminence, intentionality, and inception. This is comparable to how Emanatian depicts Chaga *-enda* ‘go’, as illustrated by the Lamnso’ example in (41) compared with the

Chaga example in (42). Lamnso' *dú*, however, has not grammaticized as did its semantic counterpart in Zulu, *-ya*. Why might this be?

(41) *ḿ ghán yē lé?*

1S GO do how

'What am I going to do?'

(42) *na -í -ndé-sómá úláya*

FOC -3S-GO -study Europe

'She's going to study in Europe.'

(Chaga (Emanatian 1992: 15))

In order to address the question, it is necessary first to examine the underlying image-schemas of the Lamnso' GO verbs. The two sentences in (43) show that the verb *ghán* is the semantic counterpart of Zulu *-hamba*, meaning both 'walk' and 'go'. Moreover, like *-hamba*, it specifies only motion and not either source or goal of the motion (Figure 20). Emanatian (1992) does not provide a detailed analysis of the possible image-schemas of Chaga *-enda* 'go'; however, she makes it clear that *-enda* does incorporate motion to a goal ($\rightarrow\bigcirc$) as one possible schema. Given the similar aspectual function that it and *ghán* have come to have, it seems probable that the relevant image-schema underlying this particular grammaticization is simple motion, not motion to a goal.

(43) *ghán* 'go; walk'

wù nèn a ghan lèn a dzó e kiwuú kí

he then ? go now ? be by 7-foot 7

'And so he had to go again on foot.'

kí kú ghan kìjúŋ a

it ? go 7-good QUES

'Did it go well?'

Figure 20: GHAN 'go' = Motion Alone; No Specification of Source or Goal

The verb *dú*, like Zulu *-ya*, must specify the goal of the motion (44a) and (44c), but may not specify the source (44b). Hence, it encodes the image-schema

in Figure 21. Given that it has the same image-schema as Zulu *-ya*, why did it not grammaticize as a ‘remote’ future as did *-ya*? The answer would appear to be that its schema was usurped by the deictic verb *wiy* ‘come’ ($\bigcirc \rightarrow \bullet$), which blocked it from being grammaticized.

(44) *du* ‘go to’

a. wù kì **dú** way
 s/he HOD go.to market
 ‘S/he went to the market (earlier in the day).’

b. *wu ki **du** fo way
 s/he HOD go.to from market
 ‘S/he is going from the market.’

c. *wu ki **du**

Figure 21: *du* ‘go to’ = Motion to a Location

In Lamnso’ we have seen the grammaticization of a COME verb as a remote future, unlike the other languages discussed. A second example of COME grammaticizing as a remote future comes from Chimwera, an Eastern Bantu language that has two COME verbs.

8. COME Remote Future in Chimwera.

Chimwera (P. 22, Tanzania), spoken in southern Tanzania, has three future tenses, which Harries (1950) labels “immediate” future, “middle” future, and “remote” future, as exemplified by the sample sentences in (45)-(47), respectively. All three have an initial prefix *ci-*; the immediate and middle have a final *-e*, the remote a final *-a*. The *-e*, however, shows up in the remote on the tense formative *-jie*, derived from the auxiliary verb *-jia* ‘come’ (ci-SP-ji-e-ku-R-a). The future formative *-ka-* occurs only in the so-called “middle” future.

- (45) *ImF* **ci** -ny' -end -e malaβi (Harries 1950: 98)
 FUT -1S -go -FUT tomorrow
 'I will go tomorrow.'
- (46) *MidF* gw-ika -ga **ci** -k(a) -u -jigal -e majela
 2S -come-IMPF FUT -MID -2S -carry -FUT 6.hoes
 'When you come, you will carry the hoes.'
- (47) *RmF* paana ula **ci** -ji-jie -ny -a (Ibid. 99)
 perhaps 9.rain FUT -9 -RM -fall -FV
 'Perhaps rain will fall.'
- many'any'i **ci** -ga-jie -w -a
 6.grass FUT -6 -RM -die -FV
 'The grass will die.'

The immediate future, according to Harries, typically situates events later today or tomorrow, though Harries notes that it may also be used for more remote events. The "middle" future situates events after tomorrow or some little time thereafter. The remote future situates events at a more remote time, though Harries notes again that it is "not confined" to remote events. The remarks on the range of use of each of these forms suggests that the semantics are not as simple as Harries' linear labels would suggest. Before addressing their semantics, it is appropriate to consider the semantics of *-jia* 'come'.

Chimwera, like Duala, is rather atypical of Bantu languages in that it has two verbs for 'come', *-jia* and *-ika*. However, although one verb form – *-ika* – appears to mean both 'come' and 'arrive', as in Duala, it represents two homophonous verbs in Chimwera. This can be seen in the fact that *-ika* 'come' may take a locative complement (48a), while *-ika* 'arrive' can do so only by addition of the locative verbal extension *-il-* (48b). Moreover, the two appear to have derived from different sources, *-ika* 'come' from Proto-Bantu of **-yìk-* 'come/go down', *-ika* 'arrive' from Proto-Bantu **-pìk-* 'arrive' (see reconstructed forms in Meeussen 1980).

- (48) a. ni -tu -**yik** -a kuṅamboluci (Harries 1950: 97)
 and-1P-come-FV 17.river.side
 ‘And we came to the riverside.’

b. -ik-a ‘arrive’ → -ic-il-a ‘reach a place’ (Ibid. 70)

What is of interest for the present discussion is how the two COME verbs differ in image-schemas and how this difference may have motivated the grammaticization of one, *-jia*, over the other. The examples in (49)-(50) show that *-jia* and *-ika*, though deictic in nature, do not require explicit identification of the location of the deictic center. On the other hand, the examples in (51)-(52) show that the goal location may be explicitly named.

- (49) a. βa -**ji** -e nayo (Harries 1950: 89)
 3P -come-SUBJ with.them
 ‘Bring them.’ (LIT let them come with them)

b. ci -ny’i -e naβeneβa (Ibid. 44)
 FUT -I.come -FUT with.these
 ‘I will come with these.’

c. ninne n.n -i -(i)le (Ibid. 42)
 it.is.I 1SREL.1S -come-PF
 ‘It is I who have come.’

- (50) a. ŋ-**ic** -e malaβi (Ibid. 88)
 ‘Come tomorrow.’

b. maṅgany’a mwaacemilwe niṅkukananga (Ibid. 97)
 ?? 2P.RM.call.APP.PASS.PF NAR.INF.deny.IMPF
 kw -**ika**
 INF -come
 ‘You were called and refused to come.’

c. βa -**iice** ŋgalya wala ŋgaṅwa (Ibid. 86)
 3P -come.PF NEG.eat or NEG.drink
 ‘They came without eating or drinking.’

- d. p -a **-ice** twaatendalimaga (Ibid. 96)
 when-3S-come.PF 3P.RM.do.hoe.IMPF
 ‘When he came, we were hoeing.’

- (51) u **-ji** -a apano (Ibid. 88)
 ‘(You) come here.’

- (52) a. a -naa **-ik** -a apa (Ibid. 92)
 3S-PR -come-FV here
 ‘He is coming here.’

- b. twaapite kwatalika ni -tu **-yik** -a kuṇamboluci (Ibid. 97)
 1P.RM.go.PF INF.be far and-1P-come-FV 17.river.side
 ‘We went far and came to the river-side.’

There are no examples of either COME verb co-occurring with a source location, nor any discussion by Harries. Nevertheless, while it is not possible to discern from the scant description and data whether either verb encodes for a source-location, we can otherwise propose with some confidence that the image-schemas of the two verbs are identical in representing motion toward a deictic center, one with an optional specification of a goal other than the deictic center.

Assuming this to be the case, then what differentiates the verbs? From the data in (53)-(54), we can infer that it is the end result or goal that is most salient in *-jia*. That is, in (53) *-jia* occurs when there is a purpose intended or expressed – specifically an event to perform – whereas *-ika* (50 & 54) appears not to involve such an implication. Note especially (54b) in which the motion is simply part of a series of events, and (50b, c) above in which it is the motion that is most salient (note that [k] becomes [č] before a front vowel).

- (53) **jia** ku -u -taβ -e (Harries 1950: 88)
 come 17 -2S-bind-SUBJ
 ‘Come and bind (it).’ (LIT come ‘that’ you bind)

- ji** -angana -ni ku -ŋ -ugal -e (Ibid.)
 come-EX.REC -PL 17 -2P-fasten -SUBJ
 ‘Come (PL) and fasten.’

- (54) a. mtende u -ka -ice (Ibid.)
 3.do.SUBJ 2S-CON -come.SUBJ
 ‘Do it and come.’
- b. ci -βa -ic -e nakwaβona nakuβeleta (Ibid. 85)
 FUT -3P -come -FUT and.INF.3P.see and.INF.3P.talk
 ‘They will come and see them and talk with them.’

These observations suggest that the two COME verbs, although sharing a common image-schema, differ in which part of the schema is most salient, for *-jia* it is salience of the goal (the purpose of movement to the deictic center), for *-ika* salience of the motion itself. *-ika* also differs in that it can specify explicitly the location of the deictic center (other than ‘here’). These differences are represented in the image-schemas in Figure 22, salient goal represented by the bullet in bold, salient motion by the arrow in bold.

Figure 22a: -jia ‘come (to)’: Salient Goal

Figure 22b: -ika ‘come (to)’: Salient Motion

The underlying image-schema for *-jia* is analogous, in certain respects, to that proposed for ‘come’ in Lamnso’. The locus-centered nature of Lamnso’ *wiy* ‘come’ places focus on the goal, comparable to the salience of the goal in Chimwera *-jia*. Given the salience of the goal and the “remote” meaning described by Harries, we can posit that the *-jie-* future situates an event along the ego-moving time line, with the salient event (goal) lying in a future D-domain, as in Figure 23.

The diagram shows two parallel planes representing different domains. The lower plane is labeled 'P-domain' and contains a node 'S' and a morph 'ci-...-e'. The upper plane is labeled 'D-domain: Future' and contains a morph 'ci-...-jie-...-a'. Arrows indicate the flow from 'S' to 'ci-...-e' and from 'ci-...-e' to 'ci-...-jie-...-a'. The axes are labeled 'Past' and 'Future'.

But why did *-jia* and not a GO verb grammaticize? There are two GO verbs in Cimwera, *-jenda* and *-jawûla*. They differ in that the former may denote either simple motion or motion to a location, the latter motion away from a location, as illustrated by the examples in (55)-(56), respectively

- ku -tw -aa -jend -aga ku -Mikindani (Ibid. 96)
 LOC -1P -Rm-go -IMPF LOC -Mikindani
 'We were going to Mikindani.'

n -ga -jend -aa -ko (Ibid. 102)
 1S -NEG -go -FV -LOC
 'I will not go there.'

(56) tw -aa -ci tu -jaŵul -e (Ibid. 111)
 1P -Rm -AUX 1P -go away -SUBJ
 'We were about to go (away).'

ya -ngali -ik -a, ya-ka -jabw -ile -je (Ibid. 108)
 3S -COND -come -FV 3S -NEG -go away -PF -NEGCOND
 'If he had not come, she would not have gone away.'

The two verbs differ, then, in that *-jenda* can denote motion toward a location, while *-jaŵula* denotes motion away from a location:

Comparison with other languages discussed above leads us to expect *-jenda*, rather than *-jia* 'come', to grammaticize as a remote future marker. *-jia* may have prevailed in Cimwera because, as noted above, it places salience on the deictic center, whereas *-jenda*, with its two possible image-schemas, appears to make motion more salient.

Assuming the analysis of the immediate and remote futures to be correct, where does the "middle" future fit in? This future, too, is distal, in that it typically denotes events two to several days away. This range of meaning suggests that the *-ka-* future is not "middle", but rather that it situates events in an adjacent time unit along the moving-event time line, as shown in Figure 24. This adjacent time unit is commonly marked in many Bantu languages, referring either to tomorrow, or to a few days into the future.

Figure 24: Adjacent Time Unit in P-Domain With -ka-

We now turn to Chindali, in which we find again a morpheme *-ka-* and grammaticized ‘come’ as futures. In this language, however, their range of use differs from that noted so far.

9. “Parallel” Futures in Chindali.

Chindali (M.301; Tanzania and Malawi) is spoken in southern Tanzania and northern Malawi. The dialects in the two areas – which I label Chindali-TNZ and Chindali-MAL, respectively – are different in certain aspects of tense marking, future marking in particular. In both dialect areas, COME has been grammaticized as a future marker. The way in which COME has grammaticized in Chindali differs from that observed in the languages discussed previously. Although differing in their details, the two dialects share a similar mapping of form to domains.

Chindali-TNZ expresses futurity in three ways (Swilla 1998: 104): (1) via use of the “present” marker *-ku-*;¹⁷ (2) via use of the auxiliary *gwiise* in a construction with the Ø-marked subjunctive or (3) with auxiliary plus the future subjunctive form marked with the prefix *-ka-*. Examples are shown in (57).

¹⁷Swilla also lists a periphrastic construction with *-ja* ‘go’ as a future construction type, as in *n-gú-ja pa-kú-bal-a* ‘I am going to count’. However, it would appear that the sense of futurity derives from use of the prefix *-ku-* in this case, as it does with any verb. Nevertheless, *-ja* is likely to be in the process of grammaticizing. As Swilla provides no further data, I do not discuss it further here.

- (57) n -gú -bal -a ningéélo (Swilla 1992: 104)
 1S-PR -count-FV tomorrow
 'I will count tomorrow.'

gwiise m -bál -e
 FUT 1S-count-FV
 'I will count' (sometime today).

gwiise n -gá -bál -e
 FUT 1S-RM -count-FV
 'I will count' (tomorrow or later).

Gwiise is a grammaticized auxiliary derived from the verb *-iisa* 'come'. As in the other languages, *-iisa* 'come' denotes an image-schema of motion to a deictic center, $\rightarrow \bullet$ (see Botne 2005 for detailed analysis of motion verbs in Chindali). What is interesting here, and what differs from what we have observed in other languages, is that the grammaticized auxiliary is used for both the hodiernal and non-hodiernal futures, the difference being determined by the presence or absence of the prefix *-ka-* on the main lexical verb. Its use with the hodiernal future is comparable to that found in Zulu, Duala, and Bamun, that is, it denoted an event approaching the deictic center at S. This *gwiise* construction competes with the *-ku-* construction which situates an event at some moment along the P-domain time line from the speech event S into the near future, the *gwiise* construction being more restricted in future range and hence, more specific temporally. These can be mapped into the domain model as in Figure 25.

Figure 25: Chindali-TNZ Proximate Futures

There are two potential ways the remote future can be incorporated into the domain model: (1) as denoting an adjacent time unit to the P-domain, or (2) as denoting an event in the D-domain. These two options are illustrated in Figure 26.

Figure 26a: Chindali-TNZ “Remote” Future – Situating the Event in a Time Unit Adjacent to the P-Domain

Figure 26b: Chindali-TNZ “Remote” Future – Situating the Event in the Future D-Domain

There are two reasons to believe that the “remote” future situates events in the D-domain. First, the most remote past (P4), as illustrated by the example in (58b), is marked by *-ka-* (*-ga-* following a nasal consonant) as well and is appro-

priately analyzed as situating the event in the past D-domain. Such an analysis of the remote future *-ka-* would unify the semantics of the two *-ka-* forms to mean “situate event in D-domain”, whether past or future dependent on the presence or absence of the auxiliary *gwiise* and the final vowel of the verb.

- (58) a. n -aa -bál -ite mmásuba (Swilla 1998: 101)
 1S-RM -count-PF yesterday
 ‘I counted the day before yesterday’
- b. n -gá -bal -a ulutááshi
 1S-RM -count-FV day before yesterday
 ‘I counted the day before yesterday’

Second, the image-schema associated with the use of *gwiise*, i.e., as an event approaching a deictic center, is “paralleled” in the D-domain if we assume the function of *-ka-* is simply to situate the proposition in the D-domain. That is, *gwiise* in the D-domain represents the same image-schema as it does in the P-domain, motion along the moving-event time line to the relevant center, as shown in (58b). Further support for this analysis comes from a similar phenomenon of “mediated” futures in Chindali-MAL.

Chindali-MAL presents an interesting case because it differs from Chindali-TNZ in distinguishing four future tenses and using different prefixes. Two of the constructions incorporate a grammaticized form of *-isa* ‘come’ (Botne, in press). The simple future tense consists of an initial prefix *ti-* and a final suffix *-e*, as illustrated in (59). It is used to situate events in a relatively near future.

- (59) a. tí -tu -chi-póot -e
 FUT -1P-7 -defeat -FUT
 ‘We will defeat it.’
- b. umútu gwáá bubili tí -gu -kwaafány’ -e n’ishaa
 3.topic 3.of second FUT -3 -relate -FUT with-10.of
 múumwo abáandu bakufyaagila ífyaakúlya
 how 2.people 2.PR.8.find.FV 8.food
 ‘The second topic will relate to how people find food.’

Addition of the morpheme *-ka-* makes the tense remote, as in (60). In the domain model, this marker situates the event in a future D-domain. It is useful to

note here that future, whether along the ego-moving time line or along the moving-event time line, is marked with *ti-...-e*. The difference in perspective on the time line is indicated by the use of *-ka-*. The near/remote distinction implicit in these two tenses can be schematized as in Figure 27. These two constructions mirror the contrast between the forms of the main verb in Chindali-TNZ.

- (60) a. *ńí -n -ga -fwiil-e pánu pánu* 'I will die right here.'
 FUT -1S-RM -die -FUT here here
- b. *ńí -tu -ká -ku -tummy-e* 'We will send for you.'
 FUT -1P-RM -2S -send -FUT

Figure 27: “Near” vs. “Remote” Futures
 (♦ = location of event according to the tense marking)

Parallel counterparts with grammaticized COME exist for each of these two tenses. Sample sentences illustrating the “near” COME-future are provided in (61), the “remote” COME-future in (62). As one can observe in these sentences, realization of the event marked by a *tise* auxiliary depends on some other event occurring first. In effect, the auxiliary *tise* indexes a second locus of orientation or reference (R2), denoting futurity of the event with respect to this locus. Consider in detail the remote case given in (62).

- The morpheme *-ka-*, as noted above, situates the event ‘look’ in a future D-domain. But the construction with auxiliary *tise* denotes that ‘look’ is future with respect to some secondary reference locus, in this example ‘not keep properly’. This new reference locus (R2) functions just like the main reference locus S in that the speaker still has two perspectives on time at R2, moving-ego or moving-event. Grammaticalized *-ise* denotes an event moving toward R2. This relationship is illustrated in Figure 28.

Figure 28: Relationship of Remote Future Event to R2 in the D-Domain

The same type of analysis applies to the *tise* construction in the P-domain. ‘Celebrate’ (61a) is situated in a future with respect to some future locus of orientation, here ‘be born’, as in Figure 29. Note that the new R2 effectively establishes a new temporal locus from which the speaker now views events.

Although the COME futures in Chindali-TNZ and Chindali-MAL differ in the specific of their semantics, the close parallels between forms and functions suggest that originated in the same type of construction, synchronically most transparent in Chindali-MAL. Chindali-TNZ apparently has reanalyzed the *gwiise -ka*-construction as a simple, and not “mediated”, remote future. In this use, *gwiise* has lost any connection to temporal motion and simply indicates the location of the event in the D-domain.

Figure 29: Relationship of Future Event to R2 in the P-Domain

In sum, Chindali *-isa* ‘come’, like COME in Zulu, Duala, and Bamun, grammaticized as a future marker lying along a moving-event time line, indicating temporal motion toward a deictic center. In both Chndali varieties, its use was extended to the D-domain. At this stage, however, the two varieties diverge, with Chindali-TNZ apparently losing any sense of a “mediated” future, while Chindali-MAL retained this sense. consequently, the semantics differ from what was observed in the other languages in that the COME form denotes a future with respect to an R2, not to R1 (i.e., the speech event S).

10. GO Futures in Kihunde and Kigiryama.

The languages investigated to this point have all grammaticized a COME verb as a future tense marker, either in conjunction with a GO verb or alone. In this section we look briefly at two languages in which a GO verb alone has grammaticized as a

future tense marker. Of particular interest with these two cases is that the relationship of Ego to time differs from that noted in the preceding cases. Specifically, it is Ego embedded in time moving forward (i.e., into the future) through the P-domain rather than the event moving toward Ego. This reversed figure and ground time line will be referred to as moving-Ego. This will become clearer in the discussion that follows.

Kihunde (D.51; Democratic Republic of Congo) has an extensive tense system with three future and four past tenses. In the future these denote hodiernal, crastinal, and remote; in the past, immediate, hodiernal, hesternal, and remote. Of primary interest here is that *-enda* 'go' has grammaticized as a future marker, a COME verb has not. However, the hodiernal past prefix *fa-* undoubtedly derived from now obsolete *-isha* 'come', which is still extant in closely related and neighboring Mashi (D.53).

Unlike other languages we observed previously, the *-ende-* future denotes a crastinal, or tomorrow, future, as in (63). However, those in (64) suggest more than just a crastinal use.¹⁸

- (63) tw -eéndé -birangir -a mukátsi (Mateene 1992: 25)
 1P -F2 -call -FV woman
 'Nous appellerons demain une femme.'
 ('We will call a woman (tomorrow).')

- (64) hé ende -tu -kónol -a ni mwáwe (Mateene 1970: 38)
 but 3S.F2 -1P-strangle -FV (je te jure)
 eénde -tu -shénd -y -á ná kwóbwá jéshé bójá nca
 3S.F2 -1P-drown -CAUS -FV ? LOC.terrible lake

'En effet elle nous étranglera, je te jure; et elle nous fera noyer sur ce terrible lac.'

('In fact, she will strangle us, I swear to you; and she will have us drowned in this terrible lake')

¹⁸Although Mateene (1992) states that it is a "futur de demain", it is likely that this is the most common, but not sole, interpretation. More likely is an underlying sense of relevant contiguous time unit, e.g., tomorrow, next week, next year, and so on, found in most Bantu languages.

Contrasting with this *-ende-* future is a hodiernal future (65), marked with either *-ka-* or *-e-*, and a remote future derived from the verb *-ba* ‘become’, several examples of which are given in (66) and (67), respectively.

- (65) *tù-è-fúluk -a mumwífi* (Mateene 1992: 23)
 1P-F1-go back -FV LOC.day
 ‘Aujourd’hui nous rentrerons pendant le jour.’
 (‘Today we will go back during the day.’)
- (66) *tú-ba-fúlukir -a hófi* (Mateene 1992: 24)
 1P-F3-return -FV near
 ‘Un jour nous rentrerons tout près.’ (‘One day we will return very near.’)
- (67) *m-bá-kónol -w -a, m-ba-pfir -a mumietsi* (Mateene 1970: 42)
 1S-F3-strangle -PASS -FV 1S-F3-die -FV in.gutters
 ‘Je serai étranglée, je mourrai dans les gouttières de pluie.’
 (‘I will be strangled; I will die in the rain gutters.’)

One final piece of the tense system is crucial to understanding how it is organized, a hodiernal past (P2), illustrated in (68). This marker, *ša-*, emerged from a periphrastic construction with *-isha* ‘come’ as an auxiliary verb.

- (68) *ša-tú-pfùla j-a líko* (Mateene 1992: 19)
 P2-1P-poke -FV hearth
 ‘Nous avons attisé un foyer aujourd’hui.’
 (‘We poked up a fire (hearth) today.’)

The two motion verbs, *-isha* ‘come’ and *-enda* ‘go’, have grammaticized in a manner counter to that outlined for the verbs in the other Bantu languages discussed above. *-isha*, instead of becoming a near (hodiernal) future, has become a near (hodiernal) past. That is, rather than denoting motion from the future toward the deictic center at S, it was construed as denoting motion from the past to the deictic center as shown in Figure 30. The sense of “approaching” has led in this case, as well, to an interpretation as a time near S, albeit in the past rather than the future. *-enda* has been construed as motion away, but at one temporal remove from the deictic center, hence, the adjoining relevant time unit, i.e., tomorrow.

Figure 30a: **Construal of time line (through P-domain) as Ego embedded in flow of time**

Figure 30b: **Construal of time line (across domains) as Ego traveling across stationary temporal landscape**

The Kihunde motion-derived tense markers indicate a reversed figure and ground from that observed in the other languages. That is, whereas in those languages the timeline through the P-domain was construed in terms of an event embedded in the flow of time toward S, in Kihunde that timeline is construed in terms of Ego embedded in the flow of time relative to a stationary event. These alternate construals presume, then, an underlying TIME IS A STREAM metaphor in which either Ego or Event may be construed as moving relative to the other in the flow of time. This is in opposition to the TIME IS A PATH metaphor (i.e., Ego traveling over a static temporal landscape) underlying the Ego-moving time line connecting domains.

The organization of temporal marking found in Kihunde can be plotted in the dimensional model, as shown in Figure 31.

Figure 31: The Kihunde Tense System

A similar situation is found in Kigiryama (E72a), spoken along the Kenyan coast. Kigiryama has a relatively simple tense system for a Bantu language, including one future tense, a present tense, and two past tenses, near and remote. The future tense, *-nda-*, shown in (69), emerged from a periphrastic construction with *-enda* ‘go’, much like its cognate in Kihunde. However, where Kihunde *-ende-* denotes a crastinal future, *-nda-* in Kigiryama denotes any future.

(69) ni -nda -git -a vivi rero goŋa (Lax 1996: 261)
 1S -FUT-cook -FV today and then

ni -nda -rim -a mačero
 1S -FUT-cultivate tomorrow
 ‘Today I will cook and tomorrow I will cultivate.’

ni -nda -git -a kila siku wiki idzayo (Ibid. 254)
 1S -FUT-cook -FV every day week it.come.REL
 ‘Next week I will cook every day.’

The verb *-dza* ‘come’ grammaticized as a tense marker as well, but, like its cognate in Kihunde, as a near past marker rather than as a future, as shown in (70). This contrasts with a remote past (i.e., pre-hodiernal) construction in (71).

- (70) ni -dza -goŋ -a kugita vikara vženye (Lax 1996: 263)
 1S -NPst -finish-FV INF.cook just now
 ‘I have just finished cooking’

ma-dza -git -a maizu vivi madzacha (Ibid. 283)
 3P -NPst -cook -FV bananas this morning
 ‘They cooked bananas this morning.’

- (71) dzana w -a -rim -a (Ibid. 255)
 yesterday 2S -P2-cultivate -FV
 ‘Yesterday you cultivated.’

As with Kihunde, the data are not sufficient to determine the underlying image-schemas for the motion verbs. Nevertheless, it seems appropriate to presume that *-dza* ‘come’ indicated motion to a deictic center and that at least one image-schema encoded by *-enda* denoted motion to a location away from the deictic center. We can reasonably conclude, then, that the tense marking system in Kigiryama is organized as in Figure 32, i.e., in a manner similar to that established for Kihunde.

Figure 32: Tense Marking and Motion Verbs as Grammaticized in Kigiryama

11. Summary and Conclusion.

Comparison of the various grammaticizations outlined in this paper reveals several patterns in the type of future use the different motion verbs have acquired.

Table 1: Synopsis of Motion Verb Grammaticizations

	"Near" future = P-Domain	"Remote" future = D-Domain
Zulu	 -za 'come' > -zo-	 -ya 'go' > -yo-
Duala	vs ya 'come' > maya pɔ 'come to'	 endɛ 'go' > mɛndɛ
Bamun	 tuə 'come' > tuə	vs lɔʔɔ 'go (away)' wuɔn 'go' > lɔʔ
Bamileke (Dschang)	 š̃hɪʔ 'come'	
Lamnso'		vs wiy 'come' > du 'go to' wiy
Cimwera		vs -jia 'come' > -ika 'come' -jie- -jenda 'go'
Chindali-T	 -isa 'come' > gwiise ($\emptyset$)	 -isa 'come' > gwiise (-ka-)

Future at R2	
Chindali-M	<div> </div> <div> <i>-isa</i> 'come' > <i>tise</i> (-Ø) </div>
	<div> </div> <div> <i>-isa</i> 'come' > <i>tise</i> (-ka-) </div>
<div> "General" Future (moving-ego time line) </div> <div> "Crastinal" Future (moving-ego time line) </div>	
Kihunde	<div> </div> <div> <i>-enda</i> 'go' > <i>-énde-</i> </div>
Kigiryama	<div> </div> <div> <i>-enda</i> 'go' > <i>-nda</i> </div>

Two general patterns can be discerned from the analysis. First, when two motion verbs grammaticized, the COME verb acquired a “near” future role, construed as moving-event, the GO verb a “remote” future role, construed as moving-ego (Figure 33a). Second, when only one verb grammaticized as a future marker, the two motion verbs did so in quite different ways. COME verbs grammaticized in a variety of ways – near or crastinal futures construed as moving-event, or as a remote future marker, construed as moving-ego (Figure 33b). Hence, COME verbs depended on what was construed as the deictic center, typically the temporal locus of the speaker (either the particular time or the day), but also the time of the event (E).

Figure 33a: Future Construals of Grammaticized Motion Verbs – Both COME and GO

Figure 33b: Future Construals of Grammaticalized Motion Verbs – COME alone

near

“crastinal”

“remote”

Figure 33c: Future Construals of Grammaticalized Motion Verbs – GO alone

“general”

“crastinal”

Although the data from the languages examined in this paper suggest that the near future function correlates with a remote future grammaticized from GO, the correlation is an artifact of the data. At least two languages in East Africa – Ciruri (E253) (data from Massamba 1977) and Chigogo (G11) (data from Cordell 1941), both in Tanzania – have grammaticized COME as an impending near future with no concomitant grammaticization of GO as a remote future (Table 2). For lack of any substantive data beyond the forms of the tense markers they were not incorporated into the general discussion.

Table 2: Grammaticized COME as Imminent Future F1

	"Imminent" future F1	Other futures	
Ciruri	-: <i>ja</i> 'come' > -: <i>jo-</i>	- <i>laa-</i>	F2 Hodiernal
		- <i>aka-</i>	F3 Near
		- <i>li-</i>	F4 Remote
Chigogo	-(<i>i</i>) <i>za</i> 'come' > - <i>eza-</i>	- <i>o-</i>	F2 Near
		- <i>olo-</i>	F3 Far
		- <i>la-</i>	F4 Remote

GO verbs, in contrast to their "remote" future use when both COME and GO verbs grammaticized as futures, emerged as either "general" or "crastinal" futures when they were the sole motion verb to grammaticize (Figure 33c). Moreover, they occurred as futures correlated with the P-domain, itself associated with the moving-ego time line.

It is not surprising that, when both verbs undergo grammaticization, COME verbs have come to denote closer temporal proximity than GO verbs. Their original sense is motion toward a deictic center, while GO verbs denote motion to a goal away from the deictic center. Nor is it really surprising that the motion denoted by the motion verb would correlate typically with the comparable moving-ego or moving-event time lines.

The typical, or perhaps "unmarked", case for COME verbs appears to be grammaticization as a "near" future in the P-domain, most commonly with the time of the speech event acting as the deictic center. In some languages, the deictic center may be a larger temporal unit, today, and the future marker is then interpreted as a "crastinal" future. In the two cases where COME has grammaticized as a "remote" D-domain future, the relevant motivating factor appears to have to do with salience of the agent, actor, or activity – as opposed to either of the discourse participants, speaker or listener – as the deictic center. In the case of Lamnso', the apparent preference is to treat the location of the central agent or actor as the deictic center, which has led to the use of *wiy* 'come' over *du* 'go', while in Cimwera it appears to be the salience of the goal as deictic center that has motivated the choice of *-jia* 'come' over either *-ika* 'come' or *-jenda* 'go'.

The case of Chindali differs from the others in that futurity is denoted with respect to a second deictic locus (R2), whether in the P- or D-domain. Nevertheless, it is semantically similar to the other cases in that *tise* denotes a future along the moving-event time line.

The motion verbs COME and GO differ in subtle but significant ways from one language to another. These differences, represented in image-schemas, affect which motion verb may grammaticize and what kind of future marking it will take on. The analysis in this paper has shown that several differences are particularly relevant:

- (1) whether the verb encodes motion toward or at a distance from a deictic center;
- (2) whether the motion or the goal of the motion is the most salient element of meaning;
- (3) whether “deictic center” is participant-centered or centered on the location of a focal agent or activity;
- (4) whether one or both verbs grammaticize;
- (5) whether the direction of time flow in the P-domain is toward the past or toward the future.

The metaphorical shift from spatial to temporal motion maps spatial image-schemas onto time lines that correlate with temporal domains; hence, the key to understanding grammaticization of a new temporal function lies in understanding adequately the cognitive schemas that underlie the motion verbs involved. Since the spatial mapping of motion is different in crucial respects in different languages, the temporal mapping is as well, resulting in cognitive differences in the nature and potential use of future markers.

In sum, while further study and refinement are, of course, necessary, the model and analysis I am proposing appear to provide a working conceptual framework for exploring a number of processes and issues involving the grammaticization of the motion verbs COME and GO.

REFERENCES

- Ayuninjam, Funwi F. 1998. *A Reference Grammar of Mbili*. Lanham, MD: University Press of America.
- Benveniste, Emile. 1965. "Language and Human Experience." *Diogenes* 51: 1-12.
- Beuchat, P.-D. 1966. *The Verb in Zulu*. Johannesburg: Witwatersrand University Press.
- Botne, Robert. In press. *A Grammatical Sketch of Chindali (Malawian variety)*. Philadelphia: The American Philosophical Society.
- Botne, Robert. 1999. "Future and Distal -ka-'s: Proto-Bantu or Nascent Form(s)?" In Jean-Marie Hombert & Larry M. Hyman (eds.), *Bantu Historical Linguistics*. Stanford: CSLI Publications. Pp. 473-515.
- Botne, Robert. 2005. "Cognitive Schemas and Motion Verbs: COMING and GOING in Chindali." *Cognitive Linguistics* 16,1: 43-80.
- Bybee, Joan, Revere Perkins, & William Pagliuca. 1994. *The Evolution of Grammar; Tense, aspect, and modality in the languages of the world*. Chicago & London: The University of Chicago Press.
- Chung, Sandra & Alan Timberlake. 1985. "Tense, Aspect, and Mood". In Timothy Shopen (ed.), *Language Typology and Syntactic Description: Volume III Grammatical categories and the Lexicon*. Cambridge: Cambridge University Press. Pp. 202-258.
- Comrie, Bernard. 1985. *Tense*. Cambridge: Cambridge University Press.
- Cordell, O. T. 1941. *Gogo Grammar*. Mpwapwa, Tanzania: Self.
- Cruse, Alan. 2000. *Meaning in Language: An Introduction to Semantics and Pragmatics*. Oxford: Oxford University Press.

- Dinkelacker, E. 1914. *Wörterbuch der Duala-Sprache*. Hamburg: L. Friederichsen & Co.
- Elessa, André Mbassi & Paul Elokan Diboussi. 1977. *Na Ma-Təpə Dualla* (2nd edition). Douala: Collège Libermann.
- Emanation, Michelle. 1992. "Chagga 'come' and 'go': Metaphor and the Development of Tense-Aspect." *Studies in Language* 16,1: 1-33.
- Epée, Roger. 1976. *Generative Syntactic Studies in Duala*. Ph.D. dissertation, Cornell University.
- Epale, S. J. 1973. *Essentials of Duala Grammar*. C.D.C.: Bota, Victoria, Cameroon.
- Etia, Isaac Moumé. 1962. *La langue de douala – Cameroun – par vous-même*. Clermont-Ferrand: Imprimerie G. d Bussac.
- Fillmore, Charles J. 1975. *Santa Cruz Lectures on Deixis*, 1971. Bloomington: Indiana University Linguistics Club.
- Fleisch, Axel. 2000. *Lucazi Grammar*. Köln: Rüdiger Köppe Verlag.
- Fleischman, Suzanne. 1982. "The Past and the Future: Are They *coming* or *going*?" *Proceedings of the Berkeley Linguistic Society* 8: 322-334.
- Frawley, William. 1992. *Linguistic Semantics*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Guthrie, Malcolm. 1971. *Comparative Bantu*, vol. 2. Farnborough, England: Gregg International Publishers Ltd.
- Harries, Lyndon. 1950. *A Grammar of Mwera*. Johannesburg: Witwatersrand University Press.
- Heepe, M. 1926. *Yaunde Wörterbuch*. Hamburg: Kommissionsverlag L. Friederichsen & Co.

- Heine, Bernd, Tom Güldemann, Christa Kilian-Hatz, Donald A. Lessau, Heinz Roberg, Mathias Schladt & Thomas Stolz. 1993. "Conceptual Shift: A Lexicon of Grammaticalization Processes in African Languages." *Afrikanistische Arbeitspapiere* 34/35.
- Helmlinger, Paul. 1972. *Dictionnaire Duala-Français*. Paris: Éditions Klincksieck.
- Hewson, John, Derek Nurse & Henry Muzale. 2000. "Chronogenetic Staging of Tense in Ruhaya." *Studies in African Linguistics* 29(2): 33-56.
- Hyman, Larry M. 1980. "Relative time reference in the Bamileke tense system." *Studies in African Linguistics* 11(2): 227-237.
- Ittmann, Johannes. 1939. *Grammatik des Duala*. Berlin: Deitrich Reimer Verlag. (Reprinted in 1969 by Kraus Reprint, Nendeln, Liechtenstein)
- Lakoff, George & Mark Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lakoff, George & Mark Johnson. 1999. *Philosophy in the Flesh*. New York: Basic books.
- Lax, Beverle M. 1996. *The Verbal System of Kigiryama*. University of Wisconsin, PhD. dissertation.
- Massamba, David. 1977. *A Comparative Study of the Ruri, Jita, and Kwaya "Languages" of the Eastern Shores of Lake Nyanza*. University of Dar-es-Salaam, M.A. thesis.
- Matateyou, Emmanuel. 2002. *Parlons Bamoun*. Paris: L'Harmattan.
- Mateene, Kahombo. 1992. *Essai de Grammaire du Kihunde*. Hamburg: Lit Verlag.
- Meeussen, A. E. 1980. *Bantu Lexical Reconstructions*. Tervuren: Musée Royal de l'Afrique Centrale.

- Mukarovsky, H. 1977. *A Study of Western Nigritic* (2 volumes). Wien: Institut für Ägyptologie und Afrikanistik der Universität Wien.
- Parker, Elizabeth & Christine Durrant. 1990. *Mundani-English Lexicon*. Yaounde, Cameroon: Société Internationale de Linguistique.
- Schmitt, Alfred. 1963. *Die Bamum-Schrift*. Wiesbaden: Otto Harrassowitz.
- Swilla, Imani N. 1998. "Tenses in Chindali." *Afrikanistische Arbeitspapiere* 54: 95-125.
- Taljaard, P. C. & S. E. Bosch. 1988. *Handbook of Isizulu*. Pretoria: J. L. van Schaik.
- Traugott, Elizabeth Closs. 1978. "On the Expression of Spatio-Temporal Relations in Language." In Joseph H. Greenberg (ed.), *Universals of Human Language: Word Structure* (Vol. 3). Stanford: Stanford University Press. Pp. 369-400.
- Ward, Ida C. 1937-39. "The Phonetic Structure of Bamum." *Bulletin of the School of Oriental Studies* 9: 423-438.
- Westermann, Diedrich & M. A. Bryan. 1970. *The Languages of West Africa*. Folkestone & London: Dawsons of Pall Mall (International African Institute).
- Wilkins, David P. & Deborah Hill. 1995. "When 'go' Means 'come': Questioning the Basicness of Basic Motion Verbs". *Cognitive Linguistics* 6: 209-259.
- Williamson, Kay & Kiyoshi Shimizu. 1968. *Benue-Congo Wordlist, volume II*. Ibadan, Nigeria: West African Linguistic Society.