

RELATIVE TIME REFERENCE IN THE BAMILEKE TENSE SYSTEM

Larry M. Hyman
University of Southern California

In this paper it is demonstrated that Bamileke-Dschang (Grassfields Bantu, Cameroon) has a highly developed system of multiple past and future tenses with inherently relative time reference. A tense marker in one clause may refer either *relatively* to the time reference of a preceding clause, or it may refer *absolutely* to the time of speaking. In addition, tense markers can be combined within a single clause, in which case the timing of a second tense marker is calculated relative to the first marker. It is shown that tense markers occurring in second position in a clause historically derive from main verbs which are consecutivized one after the other.

In an unpublished paper on the tense-aspect structure of the Dschang dialect of Bamileke, a Grassfields Bantu language spoken in Cameroon, Tadadjeu [1975] argues that in both past and future time reference, Dschang distinguishes five tenses.¹ These are illustrated in (1) and (2).

(1) past tenses ($P_1 - P_5$)

P_1	: àá 'tán	'he has just bargained'
P_2	: à áá òtán	'he bargained [earlier today]'
P_3	: à kè tán'ó	'he bargained [yesterday]'
P_4	: à lè tán'ó	'he bargained [before yesterday; some days ago]'
P_5	: à lè ló? 'tán	'he bargained [a long time, e.g. a year or more ago]'

¹This article is a revised version of a paper presented at the Annual Winter Meeting of the Linguistic Society of America, Boston, 1978. I am particularly indebted to Maurice Tadadjeu, who discussed these data with me and who provided the major source of information for this paper. While he may or may not agree with my reanalysis, I am grateful to him for sharing his earlier work with me. I would also like to thank Michael Silverstein for bringing certain materials on multiple tenses in Amerindian languages to my attention as well as the members of the Grassfields Bantu Working Group for their valued interaction. Research on Grassfields Bantu was supported in part by a National Science Foundation grant no. BNS76-81261 and by a Guggenheim Fellowship.

(2) future tenses (F₁ - F₅)

F ₁	: à'á tán	'he is about to bargain'
F ₂	: àà 'pìŋ'í tán	'he will bargain [later today]'
F ₃	{ àà 'lù'ú tán { àà 'šù?'é tán	'he will bargain [tomorrow]'
F ₄	: à'á l'á?é 'tán	'he will bargain [after tomorrow; some days from now]'
F ₅	: à'á fú 'tán	'he will bargain [a long time, e.g. a year or more from now]'

The time distinctions categorize actions which have occurred or will occur (1) immediately before or after the time of speaking; (2) earlier or later the same day; (3) the day before or the day after; (4) some days before or some days after; and (5) a long time before or a long time after. The symmetry of this proposed system of five past and five future tenses is matched by the presence of several time adverbials in Dschang which, as seen in (3), can also refer to either the past or the future, depending on context:

- (3) a. èzɔɔ 'yesterday; tomorrow'
 b. àl'é? zè'é 'the day before yesterday; the day after tomorrow'
 c. èfù? 'mɔ? 'this morning; this evening'

Many languages, especially in Africa, have been noted to divide up past and future time into more than one tense, e.g. today past tense, yesterday past tense, and before yesterday past tense. As in these other languages, the tenses in (1) and (2) have been defined with respect to the present time of speaking and thus have been dealt with as having *absolute* time reference, as in Tadaadjeu's analysis. Upon closer examination, however, I have found these tenses to have *relative* time reference, as seen in the tentative re-analysis in (4).

(4) <u>definition</u>	<u>time reference</u>	<u>past tenses</u>	<u>future tenses</u>
PROXIMATE	[±very short time]	P ₁ : 'á'	F ₁ : á'
SAME DAY	[±a few hours]	P ₂ : áà	F ₂ : F ₁ + pìŋ
ONE DAY AWAY	[±a day]	P ₃ : kè	F ₃ : F ₁ + lù/šù?
SOME DAYS AWAY	[±2 or more days]	P ₄ : lè	F ₄ : F ₁ + l'á?
LONG TIME AWAY	[±a year or more]	P ₅ : P ₄ + l'á?	F ₅ : F ₁ + fú

Already in Tadamjeu's earlier study there were a few hints that these tenses have a relative character, as seen in the sentences in (5) and (6), taken from his 1975 paper:

- (5) à kè 'lé ḡḡè òò 'lù'ú žžó 'mó 'he said [P₃] that you will see
 he F₃ say that you F₃ see child the child [F₃']
- (6) àà 'lù'ú 'lé éyè ò kè žžó 'mó 'he will say [F₃] that you saw
 he F₃ say that you P₃ see child the child [P₃']

These sentences have two readings. If the tense of the second clause is interpreted as referring to the present time of the discourse, (5) is read 'he said [yesterday] that you will see the child [tomorrow]' and (6) is read 'he will say [tomorrow] that you saw the child [yesterday]'. In such a case the F₃ and P₃ tenses have absolute time reference. In a second reading, however, the tense of the second clause refers to the time represented by the tense of the first clause. In this case the reading of (5) is 'he said [yesterday] that you will see the child [today]', and that of (6) is 'he will say [tomorrow] that you saw the child [today]'. In this case, the F₃ and P₃ tenses have relative time reference.

In these examples the potential relativity of time reference is seen from the interaction of two separate clauses. This is the usual context cited in descriptions of tense systems said to have relative time reference e.g. Comrie [1976] and Givón [1972]. What is particularly striking about the Dschang system is that many of the tense markers can be combined in the *same* clause and thus refer relatively to each other, as seen in (7) and (8)

- (7) àà 'lùù 'p\ŋ'ŋ táŋ 'he will bargain later tomorrow'
 he F₃ F₁ bargain
- (8) à 'lè 'láf? n'fú 'ŋtán 'he long ago bargained a long time after-
 he P₅ F₅ bargain wards' [i.e. after something else]

In (7) the F₃ tense marker establishes the time reference as being tomorrow i.e. the day after the time of the discourse. The F₁ tense marker, which is defined as meaning 'later the same day', thus now refers to later time tomorrow. In (8) the P₅ tense marker establishes that the action has taken place a long time, perhaps years, ago. The following F₅ tense marker indicates, however, that the action has, in addition, taken place a long time

after something else, whose P₅ time reference had already been established in the discourse. The result is something quite different from what would have obtained if these tense markers had absolute time reference. We see in the above examples that subsequent time references are established relative to preceding ones, with the first time reference normally being determined with respect to the time of the actual discourse.

We now turn to the question of which tenses can combine with which. A table is provided in (9).

(9)

		TENSE ₁ →									
		P ₅	P ₄	P ₃	P ₂	P ₁	F ₁	F ₂	F ₃	F ₄	F ₅
TENSE ₂	F ₁	-	-	-	-	-	-	-	-	-	-
	F ₂	+	+	+	+	-	=	≠	+	+	+
	F ₃	+	+	+	≠	-	=	+	≠	+	+
	F ₄	≠	≠	≠	≠	-	=	≠	≠	≠	≠
	F ₅	+	+	-	-	-	=	≠	≠	≠	-

In this table (+) indicates that a given tense combination is attested, while (-) indicates that the combination in question is ungrammatical. The equal sign (=) reflects the fact that the F₂, F₃, F₄, and F₅ tenses are constructed by using tense markers following the marker á', which, used alone, marks F₁. Finally, the unequal sign (≠) occurs when a given combination is attested, but with a meaning other than the one predictable from a mechanical reading of the combined tenses. One general property of the system is that none of the past tenses, nor the F₁ tense, occurs in second position. That is, only F₂, F₃, F₄, and F₅ occur in this position. The reason for this is that it is exactly these tense markers which are still morphologically verbs, with the etymologies shown in (10) (cf. Tadadjeu [1975:46]):

(10)

F ₂	pìŋ	<	lè-pìŋ	'to return'	
F ₃	{	lù	<	lè-lù	'to get up'
		ǰù?	<	lè-ǰù?	'to come'
F ₄	lá?	<	lè-'lá?	'to spend the night'	
F ₅	fú	<	lè-'fú	' ? '	

That these markers are still verbs (even if no corresponding main verb exists in the case of F_5) is seen from the sentences in (11), where the future markers take the infinitive prefix *le-*:²

- (11) à áà ò'kóŋ á |é-ṗìŋ òtáŋ 'he wanted [earlier today] to bargain
 he F_3 want to F_2 bargain [later today]'
- " " " á |é-lù òtáŋ '...to bargain [tomorrow]'
 F_3 |é-ʒù?
- " " " á |é-'lís? òtáŋ '...to bargain [after tomorrow]'
 F_4
- " " " á |é-'fú òtáŋ '...to bargain [a long time from now]'
 F_5

Since these markers are still verbs, they can be used after other tense markers in exactly the same way as main verbs. What this means is that in second position these markers occur in the consecutive construction. Thus, the sentence seen earlier in (7) actually has four different potential meanings, as seen in (12).

- (12) a. àà 'lùù 'ṗìŋ'ó táŋ 'he is about to get up and return
 he- F_1 get up &return &bargain and bargain'
- b. àà 'lùù 'ṗìŋ'ó táŋ 'he is about to get up and later to
 he- F_1 get up F_2 &bargain day bargain'
- c. àà 'lùù 'ṗìŋ'ó táŋ 'he will return tomorrow and bargain
 he- F_1 F_3 &return &bargain
- d. àà 'lùù 'ṗìŋ'ó táŋ 'he will bargain later tomorrow'
 he- F_1 F_3 F_2 &bargain

From these examples we see how in the F_1 tense a verb meaning 'to get up', i.e. the next morning, can become a "next day future". Similarly, if one returns (understood: to a certain place or state of mind) and *then* does something, this doing something necessarily takes place subsequent to the first action or state, whence the development of a "later the same day"

²These sentences appear in Tadadjeu [1975:11]. Tadadjeu has informed me [personal communication] that the verbal tense markers can be used in imperatives as well. I have also determined that they take the same consecutive markers as do main verbs, basically N- after a past tense and e- ($\rightarrow \emptyset$) after a future tense.

future.

Returning to the table in (9), we notice that progressively more future tenses are possible in second position as we move from P_1 to P_2 to P_3 and to P_4 and P_5 . The reason why this is so is largely semantic. The basic pattern is illustrated in (12).

- (13) à áà òbìŋ òtáŋ 'he earlier today bargained later [than some-
 he P_2 F_2 &bargain thing else that took place earlier today]'

In this combination the only tense which could conceivably make sense after the immediate past tense (P_1) would be the F_1 , in which case the meaning would be 'he just bargained just after something else'. However, we have already said that F_1 does not occur in second position, and specifically because the F_1 construction does not involve a tense marker which is a verb capable of occurring in the consecutive construction. As we move further into the past in the table in (9), more of the future tenses make sense in second position.

Let us now consider cases where (\neq) indicates a change of meaning. Where the same F_2 , F_3 , or F_4 marker is combined with itself, the second occurrence must necessarily be a main verb, as seen in the example in (14).

- (14) àà 'lùù 'lù'ú t'áŋ 'he will get up and bargain [tomorrow]'
 he F_3 get up &bargain

This does not apply to doubling of F_5 , which is impossible since no existing corresponding main verb has been found. In cases where the second verb is the F_4 marker, it sometimes has its main verb meaning 'to spend the night', as in (15),

- (15) àà 'lù'ú 'l'áŋ 'l'áŋ 'he will spend the night [tomorrow]
 he F_3 spend night &bargain and bargain'

or, more interestingly, gives a "definite" meaning. Thus, consider the two possible meanings of (16).

- (16) à'á fú 'l'áŋ 'l'áŋ a. 'he will spend the night [some years
 he F_5 spend night &bargain from now] and bargain'
 b. 'he will definitely bargain [some
 years from now]'

In (16a) $l\acute{a}?$ appears as the main verb 'to spend the night'. In (16b), however, $l\acute{a}?$ indicates that the action is more certain to occur and can even be interpreted as creating a future anterior tense, i.e. 'he will have bargained [some years from now]'. What one does not find is $l\acute{a}?$ occurring as an F_4 marker in second position. Thus, (16) cannot mean 'he will a long time from now bargain some days afterwards'. The reason for this is that the definite/anterior reading preempts the F_4 interpretation. It is only when it is used in isolation that $l\acute{a}?$ signifies the F_4 time span.

The relativity of time reference encoded by these tenses is thus firmly established. In addition, it can be demonstrated that the time periods covered by each tense partially overlap, which requires some modification of the analysis tentatively proposed in (4). Remaining in the F_4 tense for the moment, we observe in (17) that $l\acute{a}?$ can precede the F_5 marker $f\acute{u}$:

- (17) $\acute{a}'\acute{a} l\acute{a}?$ $f\acute{u}$ $t\acute{a}\eta$ 'he will definitely bargain [some years
 he F_4 F_5 bargain from now]'

Although (17) appears to be built on the F_4 tense, its only meaning is 'he will definitely bargain [some years from now]', i.e. exactly the same meaning as in (16b). What this indicates is that the F_5 marker $f\acute{u}$ "pushes" the time span forward into the distant future. Similarly, in (18),

- (18) $\acute{a}'\acute{a} l\acute{a}?$ $t\acute{a}\eta$ $\acute{e}'z\acute{o}$ 'he will bargain tomorrow'
 he F_4 bargain tomorrow

where the time adverbial 'tomorrow' is used with F_4 instead of the expected F_3 , we observe that F_4 can also be pushed back into the tomorrow time span. By using F_4 instead of F_3 , the speaker communicates his subjective viewpoint that tomorrow is more distant than its normal F_3 designation. Similarly, the F_3 marker $l\grave{u}$ can be extended into the F_4 time span with a time adverbial, as seen in (19).

- (19) $\acute{a}\acute{a}$ $l\grave{u}$ $t\acute{a}\eta$ $\acute{a}l\acute{e}?$ $z\grave{e}\acute{e}$ 'he will bargain the day after
 he F_3 bargain day after tomorrow tomorrow'

By using the F_3 instead of the expected F_4 tense in (19), the speaker treats the day after tomorrow as being closer to the reference point than it would be with the other tense. The same subjectivity determines which tense will be used in any given context.

Note, finally, that the same $l\acute{a}?$ marking F_4 and/or future definite/ anterior is used after P 2, 3, and 4 to indicate a past anterior, as in (20).

- (20) a. à áà òd\acute{a}? òt\acute{a}n 'he had already bargained [earlier today]'
 he P_2 bargain
- b. à k\grave{e} l\acute{a}? òt\acute{a}n 'he had already bargained [yesterday]'
 he P_3 bargain
- c. à l\grave{e} l\acute{a}? òt\acute{a}n 'he bargained [a long time ago]'
 he P_4 bargain (=P₅)

In the case of $l\acute{a}?$ following P 2 and 3, the bargaining has been completed before something else which took place earlier today and yesterday, respectively. When $l\acute{a}?$ follows P_4 , however, we obtain the P_5 tense with the meaning of a long time ago. Thus, except for its F_4 function, $l\acute{a}?$ indicates anterior, definite time reference within the period covered by the preceding tense marker.

We now come to the question of assigning exact meanings to the tenses. Ideally a tense system involves one form for each meaning and one meaning for each form. Also, as Tadadjeu had hoped, a tense system ideally recognizes the same distinctions in the past as it does in the future. One problem resulting from the above analysis is that the P_5 tense in (20c) is formally identical to $P_4 + l\acute{a}?$, and since the anterior marker $l\acute{a}?$ can be factored out as a separate parameter pervading the system, we are left with only four past tenses ($P_1 - P_4$) as opposed to the five future tenses. We will not resolve this difficulty here.³ Instead, we attempt to capture the above

³A similar problem exists in other Grassfield Bantu languages, as I found in working with Etienne Sadembouo on Bamileke-Fe'fe' and with Emmanuel Chiabi and John Watters in Kom. In Fe'fe', the verb fh\bar{u} 'to come back' has frequently been identified as becoming an "earlier today" past tense marker (cf. Ngangoum [n.d.:94]). However, it can be combined with both the "yesterday" and "general" past tense markers to indicate that the event took place in the *morning*, i.e. earlier that day. In Kom, on the other hand, there is a marker l\grave{e} which, as pointed out by Chia [1975], forms the basis for a distant past tense much like the P_5 in Dschang. However, this marker combines with the three other past tenses and has the meaning 'in the morning'. (As suggested by Emmanuel Chiabi, l\grave{e} may derive historically from the verb /l\grave{o}l/ 'to get up'.) The problem in Fe'fe' is that it would be arbitrary to recognize an earlier today tense marked by fh\bar{u} without recognizing similar 'early that day' tenses when fh\bar{u} follows the various past

insights with the binary feature analysis provided in (21).⁴

(21)	P ₁	P ₂	P ₃	P ₄	P ₅	F ₁	F ₂	F ₃	F ₄	F ₅
[SAME DAY]	+	+	-	-	-	+	+	-	-	-
[NEAR]	+	-	+	-	-	+	-	+	-	-
[ANTERIOR]	-	-	-	-	+	-	-	-	-	-
?[FAR]	-	-	-	-	+	-	-	-	-	+

The following features are utilized in (21):

- (a) [SAME DAY]: tenses refer to time periods which may or may not take place during the same day as the reference point, e.g. the time of speaking.
- (b) [NEAR]: within each feature specification for [SAME DAY], a tense may or may not refer to the portion of the time period which is nearest to the reference point; thus, for example, [+SAME DAY, +NEAR] refers only to immediate past (P₁) or immediate future (F₁).
- (c) [ANTERIOR]: pending a more detailed analysis, forms with |á? are specified [+ANTERIOR], while forms lacking |á? are [-ANTERIOR]; the one exception is F₄ which, although marked by |á?, is [-ANTERIOR].
- (d) [FAR]: because of the F₅ tense, a further feature is required to indicate time periods which are far from the reference point; this redundantly covers P₅, since although formally a past anterior, P₅ is semantically a distant past.

In addition to these features, another feature will be needed to distinguish past from future tenses.⁵

tense markers. The problem in Kom is that |è generally indicates 'earlier that day', i.e. in the morning, except in the most distant past tense, where (like Dschang |á?) it defines a remote past tense in its own right. These problems arise from the lack of agreement between formal and semantic criteria for establishing tense distinctions. They also underscore the common phenomenon whereby a tense marker in one construction or combination undergoes a semantic shift not shared by the same tense marker in other contexts.

⁴Various feature analyses have been proposed to capture tense-aspect distinctions, including Givón [1972], Friedrich [1974], Hymes [1975], and Anderson [1979], the last of whom treats Aghem, another Grassfields Bantu language.

⁵Anderson [1979] uses both [PAST] and [FUTURE] for Aghem, while in closely related Kom (and in Noni), it may be possible to capture past, present and future tenses with the single feature [FUTURE]. This is because in

The advantage of this feature analysis is that the subjectivity of time reference is accurately captured. In (18) above we saw that the so-called "after tomorrow" general future tense (F_4) could be used with the time adverbial 'tomorrow'. In (19) we saw that the so-called "tomorrow" future tense (F_3) could be used with the time adverbial 'day after tomorrow'. These facts indicate that definitions such as "tomorrow future tense" (in absolute terms) or "next day future tense" (in relative terms) are inadequate.⁶ Instead, as seen in (21), the F_3 tense is defined as [-SAME DAY, +NEAR] and is thus defined as "just after the same day". The F_4 tense, on the other hand, has the feature specifications [-SAME DAY, -NEAR] and is defined as "after the same day". Whether one chooses to refer to events as occurring "just after the same day" ($=F_3$) or not depends on one's subjective judgment. One can argue, of course, that the time period which objectively falls "just after the same day" is precisely "the next day". While this is a fact about time, a speaker can choose to treat a more distant time period as being just after (or just before) the same day.

Whether this feature analysis can provide further insights and be extended to other areas of the Dschang tense-aspect system is not known. In any case, the preceding discussion has, I hope, justified the notion that these tenses inherently denote relative time reference and that their exact use in discourse is in part subjectively controlled by the speaker.

these languages the present tense is the progressive form of the nearest past tense (both of which are treated as P_0). Tadadjeu [1975] treats other areas of the Dschang tense-aspect system, although it is not possible to arrive at any definitive feature analysis on the basis of his materials.

⁶Cf. Sharman [1956:30-31] who describes part of the ChiBemba tense system as follows: "The distinction 'recent-remote' has hitherto been formulated (if at all) as 'yesterday-before yesterday'. Very often, a 'recent' event will be discovered to have occurred yesterday, naturally enough: but the correct division is the vaguer one. The attitude of the speaker is the deciding factor, not the mechanical division of days."

REFERENCES

- Anderson, Stephen C. 1979. "Verb structure." In Larry M. Hyman (ed.), *Aghem Grammatical Structure*, pp. 73-136. Southern California Occasional Papers in Linguistics No. 7. Los Angeles: University of Southern California.
- Chia, Emmanuel. 1975. "Tense-aspect in Kom." Doctoral Dissertation, Georgetown University.
- Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press.
- Friedrich, Paul. 1974. "On aspect and homeric aspect." *International Journal of American Linguistics*, Memoir 28.
- Givón, Talmy. 1972. *Studies in ChiBemba and Bantu Grammar*. *Studies in African Linguistics*, Supplement 3.
- Hymes, Dell. 1975. "From space to time in tenses in Kikshat." *International Journal of American Linguistics* 41:313-329.
- Ngangoum, M. n.d. *Le bamileke des Fe?fe?*. Bafang, Cameroon: NUFU.
- Sharman, J.C. 1956. "The tabulation of tenses in a Bantu language (Bemba: Northern Rhodesia)." *Africa* 26:29-46.
- Tadadjeu, Maurice. 1975. "Tense-aspect in Dschang." Unpublished ms.

